

The Merovingian cemeteries of Sittard-Kemperkoul, Obbicht-Oude Molen and Stein-Groote Bongerd

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Preface

Merovingian cemeteries in the Netherlands

This book is the third in a series of publications on Merovingian cemeteries in the southern and central Netherlands. The first two publications came about in the context of the ANASTASIS-project, which was part of the larger ODYSSEE program, a backlog program financed by the National Science Foundation (NWO) of which the main goals are explained in the preface to the publication of the Bergeijk cemetery (the first in this series). Some preliminary work for the current publication of the cemeteries of Sittard-Kemperkoul, Obbicht-Oude Molen and Stein-Groote Bongerd was already done under the ANASTASIS project. Half of the object collections were photographed by Anneke Dekker of the University of Amsterdam. The nearly complete object collection of Sittard-Kemperkoul was drawn by Bob Donker of the University of Amsterdam, and parts of the object collections of Obbicht-Oude Molen and Stein-Groote Bongerd were also drawn by him. Frans Theuws digitized the Sittard-Kemperkoul field drawings and analysed the majority of the finds from this cemetery with practicum students from the University of Leiden, during which the analysis of the weaponry from the Sittard-Kemperkoul graves by student Carlijn Hageraats of the University of Amsterdam was also reviewed and completed.

When the term of the ANASTASIS project came to an end in 2013, the analysis of the three cemeteries was not yet finished. Therefore, it was decided that alternative resources would be sought in order to realise their completion. Since the three cemeteries are located in close proximity to each other and form an imaginary triangle in the northern fringe of South Limburg, it was thought that publishing the three cemeteries in one volume would be favourable. Their publication provides a nearly all-inclusive

overview of the archaeological burial remains of the Merovingian period known to us at this moment from this area in the Dutch Province of Limburg.

The funding of the project

The first substantial funding was provided by the Province of Limburg for the analysis and publication of the cemetery of Sittard-Kemperkoul. When the project was well on its way, it was decided that alternative funding should be secured in order to include the cemeteries of Obbicht-Oude Molen and Stein-Groote Bongerd in the project for the reason mentioned above. A research proposal was prepared for a grant from the Mondriaanfonds in the context of ‘mediator of cultural heritage’, which was positively evaluated. The funding of the project concerned with the three cemeteries was with this financial support for its greatest part achieved. Additional funding was provided by the municipalities of Stein and Sittard-Geleen (both in the province of Limburg), the archaeological foundation SNMAP and the University of Leiden.

The three cemeteries

The cemetery of Sittard Kemperkoul was excavated in 1982 by the Rijksdienst voor het Oudheidkundig Bodemonderzoek (ROB), now Rijksdienst voor het Cultureel Erfgoed (RCE) (State Service of Cultural Heritage). Shortly thereafter, Paul Zoetbrood wrote his Master’s thesis on this cemetery. The quality of the excavation and documentation was of a high standard, but some documentation went missing after excavation.¹ Nonetheless, enough was left to accomplish a detailed overview of the cemetery. The quality of the documentation for the cemeteries of Obbicht-Oude Molen en Stein-Groote Bongerd was completely different. The two cemeteries were excavated in the 1930s by H.J. Beckers Sr.,

a local general practitioner, G.A.J. Beckers Jr. and their team. For non-professionals, the two cemeteries are admirably published shortly after the excavations in a volume presenting the archaeology of South Limburg. This publication is in fact the single source of documentation; field drawings, excavation reports and finds lists are no longer available.² The finds from these two cemeteries have a post-excavation history of themselves, and parts of the finds collections are still not yet restored. The X-ray photographs, however, revealed most of the characteristics of these finds, but of course we may still be surprised after the final restoration of these finds is realised.³ The post-excavation conditions of the finds and documentation of the two cemeteries are thus rather different from that of the cemetery of Sittard-Kemperkoul, which resulted in less detailed results. Nonetheless, the current publication of the Obbicht and Stein cemeteries according to the recent scientific standards, provides a good image of these interesting burial grounds and certainly contributes to the overview of Merovingian cemeteries in the province of Limburg, the Netherlands, as well as within the wider context of Merovingian Europe.

Acknowledgements

This publication was accomplished with the help of a number of persons and institutions. Financial means were provided by The Province of Limburg for the analysis and publication of the Sittard-Kemperkoul cemetery. Sjeng Kusters of the Provincial Depot for Archaeological finds in Limburg shared the ambition to finalise the Sittard-Kemperkoul project and made a great effort, with success, to obtain financial support from the Province of Limburg. For the analysis of the cemeteries of Obbicht and Stein, but also for the completion of the analysis of the Sittard-Kemperkoul cemetery, funding was granted by the Mondriaan Foundation, the Municipality of Stein city council, the Municipality of Sittard-Geleen city council (with special thanks to Marion Aarts, the City archaeologist, and Noël Lebens, the City Council Member for culture, who supported the project), and the Stichting Nederlands Museum voor Anthropologie en Praehistorie (SNMAP), an archaeological foundation providing financial support for archaeological research. The Nederlandse Organisatie voor Wetenschappelijk Onderzoek (now the National Science Foundation) financed the larger ODYSSEE program during which some preliminary work for the three cemeteries was already accomplished in the context of the ANASTASIS-project.

The finds and documentation of the Sittard-Kemperkoul cemetery were made available for analysis by Sjeng Kusters of the Provincial Depot for Archaeological finds in Limburg and the RCE gave permissions for the publication of the cemetery. After the collection had been drawn by Bob Donker at the University of Amsterdam, it was studied by students of the University of Leiden after which it was returned to Limburg and photographed there by Paulien Gemmeke. A small part of the Sittard-Kemperkoul collection is on display in the Museum De Domeinen in Sittard (before the museum Het Domein). Curator Kitty Jansen-Rompen

made it possible for us to study, photograph and draw these objects.

The finds collections of Obbicht-Oude Molen and Stein-Groote Bongerd are stored and on display in the Museum Stichting Erfgoed Stein (Heritage Foundation Stein; before the Archaeological Museum Stein). The board of the museum (W. Poeth, B. Deuss-Meekels, W. Janssen, J. Drubers, P. Mennens, Chr. Pepels, J. Hollanders-Driessen, W. Reichrath and A. van de Rest) and curator Jan Nijsten supported the project and made it possible for the finds to be studied, photographed and drawn in the museum. The two cemeteries were excavated and published by Beckers Sr. and Beckers Jr. in the 1930s. Their documentation, available as a publication in *Voorgeschiedenis van Zuid-Limburg*, was used for the current publication of the cemeteries following the scientific standards of today. After this publication, the history of the finds collections remains somewhat obscure. Wim Hendrix invested a great deal in the maintenance of the collections. He made a great effort to store the finds correctly and created lists of the finds and their original find numbers; this documentation was very helpful for the eventual analysis of the finds.

The grave finds of Obbicht and Stein, especially the pottery vessels, were restored not long after the excavations in the 1930s. A second round of restoration was carried out in the 1990s by the restoration laboratory Restaura, under the direction of Jo Kempkens and Ton Lupak. They provided the restoration reports for all of the restored finds on the basis of which their condition before the first restoration round could be reconstructed. Some parts of the Obbicht and Stein collections were, however, never restored due to financial shortcomings. These finds were stored in their corroded condition in the restoration laboratory Restaura, but Jo Kempkens and Ton Lupak made it possible to study these not yet restored parts of the collections. They also took photographs and x-rays of the boxes in which the finds were stored, which made it possible to incorporate these last unrestored parts of the collections in this publication and realise fairly complete overviews of the cemeteries. Har Heijmans of Restaura took photographs of some complete objects also stored at the restoration laboratory. Additional finances are required to complete the last restoration round, after which the final overview of the collections will become available.

This volume was realised with a team of co-workers: the photographs of the Sittard-Kemperkoul objects and half of the Obbicht and Stein object collections were photographed by Paulien Gemmeke (Artefact) with the assistance of Sjoerd Aarts (Municipality of Maastricht). The other half of the Obbicht and Stein object collections were photographed by Anneke Dekker (University of Amsterdam). The Sittard-Kemperkoul objects and half of the Obbicht and Stein object collections were drawn by Bob Donker (University of Amsterdam) and Alicia de Zwart made the object drawings of the other half of the Obbicht and Stein object collections. The objects of Sittard-Kemperkoul on display in the Museum De Domeinen were drawn by Maaike de Haas.

(1) Or it is stored somewhere unknown to us. (2) We tried to contact relatives of Beckers Sr. and Jr. in order to see whether any documentation was left in the family but we were not successful in this. (3) We decided to go ahead with this publication and not wait for a possible future restoration because it is not foreseen in the near future.

Some preliminary analyses of the cemeteries were already available. The Master’s thesis of Paul Zoetbrood on the cemetery of Sittard-Kemperkoul was of much use. The graves and finds were, among other more interpretative topics, meticulously recorded and formed a well-documented basis for the current analysis of the cemetery. Paul Zoetbrood was also part of the excavation team that excavated the cemetery in 1982. He was generous in giving up his ‘claim’ to this cemetery. He was very dedicated and involved in all aspects of the cemetery’s investigation, but unfortunately cannot witness the outcome of this follow-up of his work due to his untimely passing in 2015.

Jaap Ypey restored and published the claw beaker from Obbicht and the rare set of belt fittings from Stein. Especially, the thoroughly described construction of the belt fittings was indispensable since the current condition of the restored belt set conceals some of the features which gave it its special appearance.

Contributions, both written and in the form of advice and suggestions, were provided by Martine van Haperen (University of Leiden), Joep Hendriks (ACASA (Amsterdam Centre for Ancient Studies and Archaeology, University of Amsterdam) and the Municipality of Nijmegen, Bureau for Environmental Quality / Archaeology), Inge van der Jagt (State Service of Cultural Heritage), Line Vanwersch (University of Louvain-la Neuve) and Liesbeth Smits (University of Amsterdam). Historian Guus Janssen and Peter Schulpen (archivist for the Municipality of Sittard-Geleen) provided useful comments regarding the place name history of Sittard, Obbicht and Buchten. Curator Wim Dijkman of Centre Céramique (Maastricht) provided information on some additional finds discovered in 2007 on the terrain of the Obbicht cemetery by H. Moonen.

PART 1
DATA

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1 The environmental and societal context of the Sittard, Obbicht and Stein cemeteries

Sittard-Kemperkoul, Obbicht-Oude Molen and Stein-Groote Bongerd are three Merovingian cemeteries, not far apart, in the south of the Dutch province of Limburg (fig. 1.1 and 1.2). They are situated in the area of the ‘Westelijke Mijnstreek’, the so-called (former) western mining district, which is enclosed by two national borders: the Belgian border to the west and the German border to the east. The Sittard-Kemperkoul cemetery was excavated in 1982 by the State Archaeological Service [Rijksdienst voor het Oudheidkundig Bodemonderzoek (ROB); now Rijksdienst voor het Cultureel Erfgoed (RCE, or Cultural Heritage Agency)] at the present quarter of Kemperkoul.¹ This new housing estate was built as an eastern expansion of the old city of Sittard, currently part of the Sittard-Geleen municipality.² The Obbicht-Oude Molen and Stein-Groote Bongerd cemeteries were both published by Beckers Sr. and Beckers Jr. in 1940 and excavated in the decade before by a crew under the direction of Beckers Sr. (1862-1950). The Obbicht cemetery currently also belongs to the Sittard-Geleen municipality; it is located c. 9 km to the north-west of Sittard-Kemperkoul between the villages of Obbicht, Grevenbicht and Born and not far from the present course of the Meuse River. The Stein cemetery was located to the south of the village of Stein, belonging to the Stein municipality,³ on an elevation in the landscape opposite the medieval castle ruins of Stein and close to the Meuse, c. 10 km to the southwest of Sittard-Kemperkoul and c. 8 km to the south of Obbicht.

These three cemeteries show similarities and differences which will all become apparent in this volume. Their characteristics are discussed in the following chapters, but first their environmental and (Early Medieval) societal contexts will be presented.

(1) Development plan Kemperkoul, sub-plan 1; consisting of the neighbourhoods *Europapark*, *Haagsittardpark*, *Lahrhof* and *Kempehof*. The cemetery was located in the present neighbourhood of *Lahrhof*. (2) This municipality also comprises the villages Born, Broeksittard, Buchten, Einighausen, Grevenbicht, Guttecoven, Holtum, Limbricht, Munstergeleen, Obbicht and Papenhoven. (3) This municipality also comprises the villages Berg aan de Maas, Catsop, Elsloo, Maasband, Meers, Nattenhoven, Stein and Urmond. (4) Van Wijk 2012, 15-18; Van der Gaauw 2015. (5) Renes 1988, 63-65.

Fig. 1.1
The location of Sittard, Obbicht and Stein in the Netherlands.



Fig. 1.2
The location of Sittard, Obbicht and Stein in the region (scale 1:100.000).



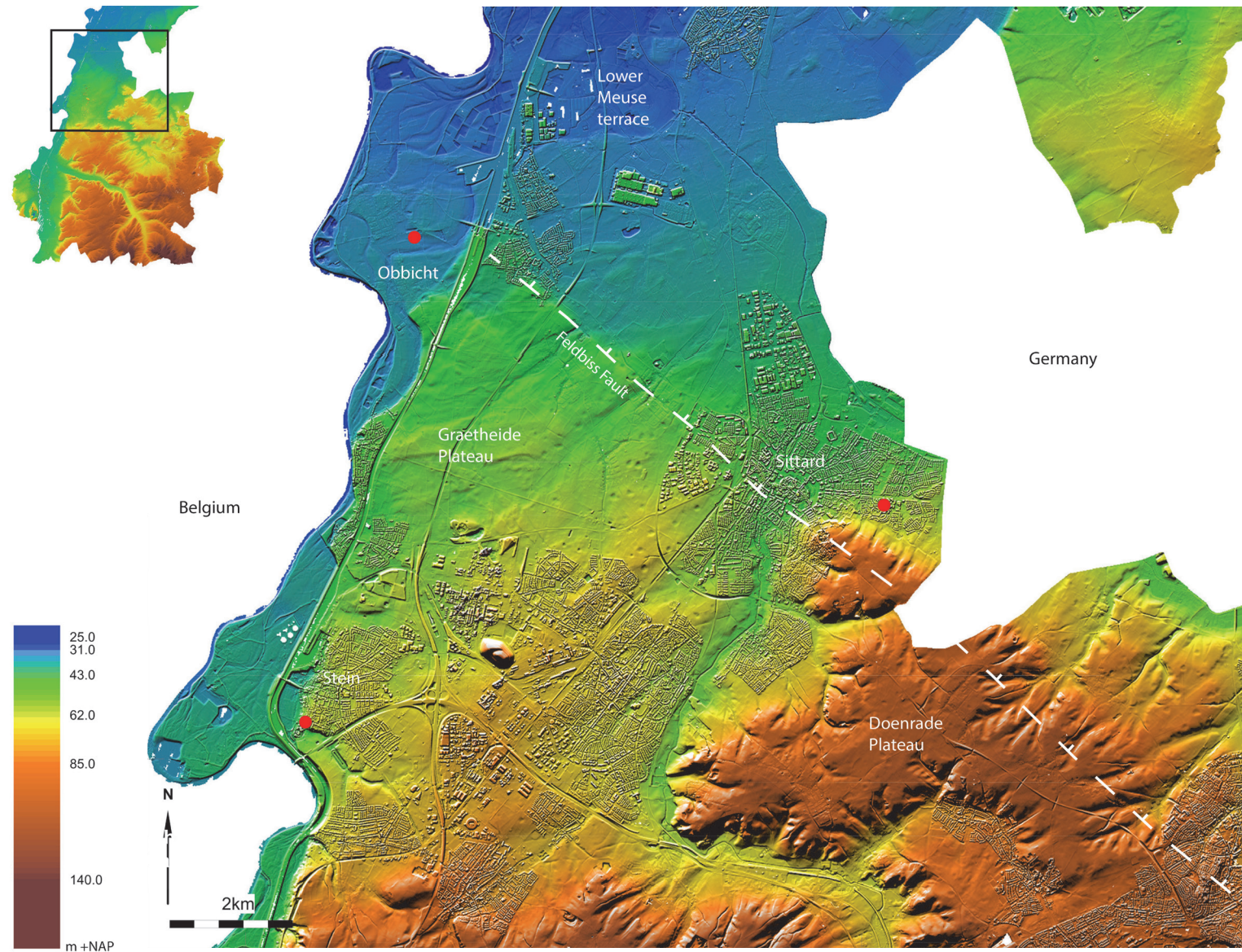
Sittard, Obbicht and Stein in the regional context

The environmental context of the Westelijke Mijnstreek is that of a transitional landscape, shaped by several geological factors such as tectonics, river streams and eolian sediments. In the west this area is delineated by the Meuse, a meandering river whose broad river bed was sectioned irregularly during the Pleistocene, when the region of South Limburg rose. Several river terraces were created during this process, of which three levels, the lower terrace, the middle terrace and the high terrace, now form the landscape of South Limburg (fig. 1.3).⁴ This southern hilly landscape is also characterised by the deposition of fertile loess during the last two ice ages, the Saalian and Weichselian, which can be found in particular as thick deposits on the higher terraces, as the vegetation was

denser here and trapped the fine silt particles transported by the wind. Smaller rivers and brooks cut the higher grounds or plateaus and left several valleys throughout the hilly landscape of Southern Limburg. The area inside the imaginary triangle formed by the three cemeteries can be considered the northernmost part of the loess landscape of the south of Limburg which changes gradually into the lower sandy landscape of the north. It is characterised by a central plateau, the Graetheide Plateau, in which several brook valleys can be found (fig. 1.3).⁵

Sittard is located right at the base of the Doenrade Plateau, directly on the northern edge of the middle terrace, where the hilly loess landscape transits to the lower terraces of Central Limburg. This transition is still visible in the landscape due to the Feldbiss fault, which transects the Westelijke Mijnstreek from Sittard in

Fig. 1.3
Relief map of the region of Sittard, Obbicht and Stein and its location on the relief map of South Limburg (scale 1:100,000). AHN by W. Laan (ArchOL Leiden bv).



the southeast to Born in the northwest (fig. 1.3).⁶ North of the Feldbiss fault the lower terrace is covered with sandy loess and farther north with sand, and clay deposits from the Meuse and its tributaries. Obbicht and Stein are located close to the current bed of the Meuse, which greatly influenced the formation of the local landscape. Just like Sittard, Stein is located on the middle terrace, directly on the western edge of a fertile loess plateau, i.e. the Graetheide Plateau. Obbicht on the other hand is located on a lower terrace, characterised by Holocene clay and gravel deposits from Meuse meanders.

Most of the Merovingian cemeteries in South and Central Limburg were located in the proximity of either the Meuse or the Rur

River (fig. 1.4).⁷ The Sittard-Kemperkoul cemetery is an exception to this rule: it is situated at a distance of c. 10 km from the present Meuse and c. 17 km from the present Rur. Small streams such as the Geleenbeek and the Roode Beek can be found in the proximity of the cemetery, but these rivulets, assuming that they were at approximately the same location in the Early Medieval period, were not wide or deep enough to transport goods and people over considerable distances as was the case with the Meuse and the Roer. In the case of Sittard other features than the proximity of rivers must have prompted the establishment of a burial ground and associated habitation in the area.

The environmental setting of the landscape plays an important

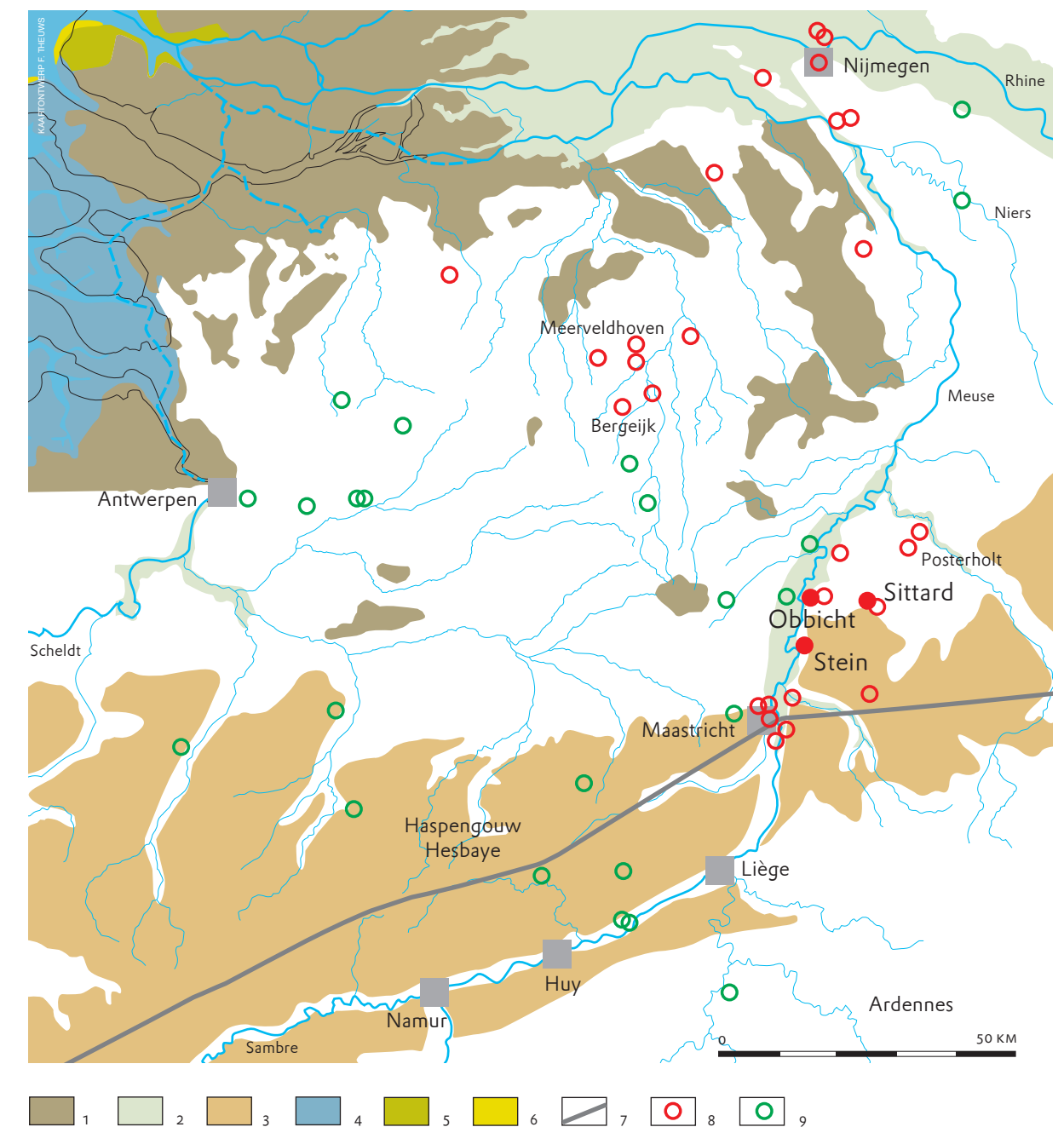
(6) Rijks Geologische Dienst/Staring Centrum 1989. (7) The exact courses of the Meuse and the Roer in the Early Medieval period are not known and it is therefore not certain that the cemeteries now located in the proximity of the Maas for example, would also have been located in the surroundings of the by then current course of this river. (8) Hendriks in prep. (9) Panhuysen 2015, 91-93; Van Enckevort/Hendriks 2015, 117. (10) Cf. Habermehl 2011; Jeneson 2013.

role in understanding the location of the Merovingian cemeteries and their – hitherto undiscovered – corresponding settlements, as does the evidence of the previous Roman occupation. The inhabitants associated with the Sittard, Obbicht and Stein burial grounds found themselves in a landscape with many remnants of the Roman occupation,⁸ of which the network of roads must have been one of the most prominent features (fig. 1.5 and 1.6).⁹ For example, the presence of the main Roman road from Heerlen (*Coriovallum*) to Xanten (*Colonia Ulpia Traiana*) must have been an important feature that spurred the occupation of the area at the time the Sittard-Kemperkoul burial ground came into use (c. 575 AD), as this road was in all probability still visible and in use around this time. The Obbicht and Stein cemeteries were, apart from their proximity to the Meuse, also associated with a Roman road in their vicinity: the supposed (secondary) road from Maastricht to Nijmegen (*Noviomagus*) along the right bank of the Meuse, but also with other secondary roads passing these places (see below). One of these

secondary roads probably ran from the *vicus* of Dilsen (*Feresne?*) on the west bank of the Meuse in Belgium to the supposed *vicus* of Grevenbicht on the east bank towards Tüddern (*Theudurum*) just across the border in the German Selfkant. The Obbicht-Oude Molen burial ground was located very close to this road.

In Roman times the landscape transition of the Westelijke Mijnstreek appeared to be of major significance for the rural habitation pattern as well. In fact the fertile loess and loam landscapes of Northern Gaul, dominated by villa settlements and functioning as a granary for troops stationed at the Rhine frontier, end more or less north of the Feldbiss fault. The loess plateaus and stream valleys of South Limburg are characterised by several features belonging to the so-called villa landscape, such as stone villas, tumuli and monumental graves.¹⁰ On the much flatter and sandier terraces of Central Limburg villas were hardly present.¹¹ They mostly concentrated in the Meuse Valley, while the less fertile sandy soils were occupied by rural settlements that consisted of byre houses.

Fig. 1.4
The location of Sittard, Obbicht and Stein in the sandy and loess regions of the southern Netherlands and northern Belgium. 1. peat, 2. river clay, 3. loess, 4. tidal flat, 5. marsch, 6. beach barriers, 7. Roman road Bavay-Cologne, 8. most important excavated Merovingian cemeteries, 9. a selection of excavated Merovingian cemeteries in Belgium and Germany.



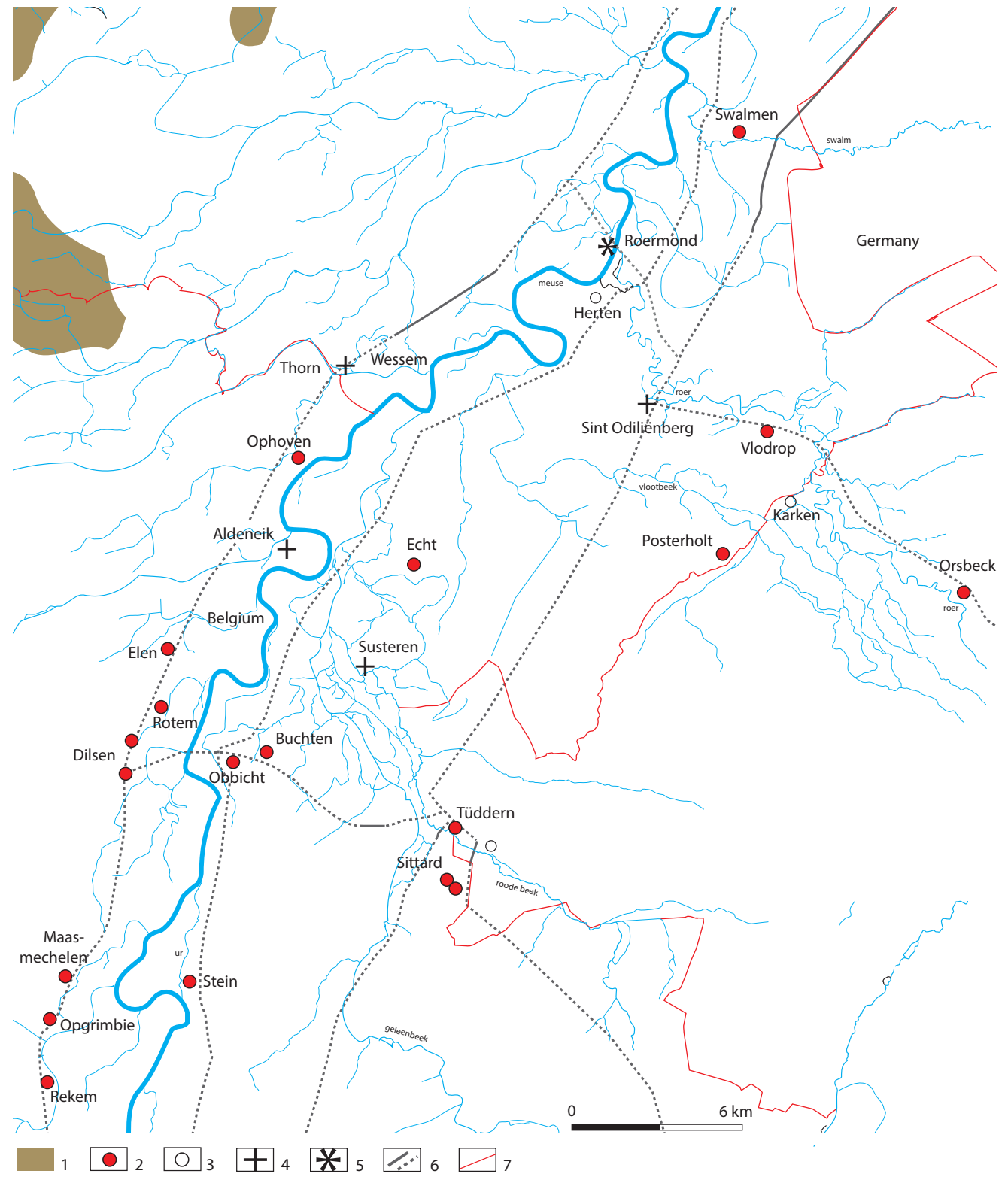
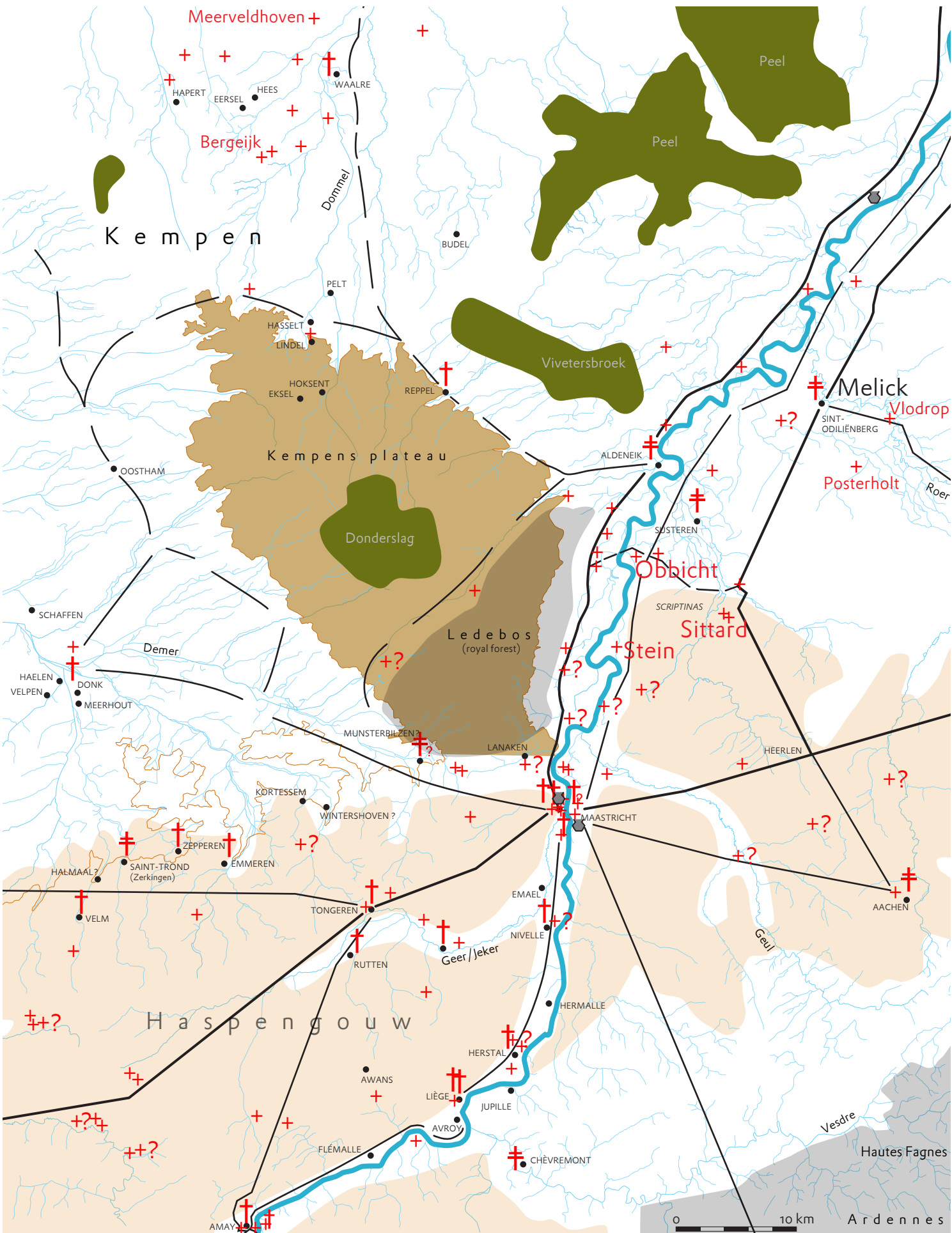


Fig. 1.5
The hinterland of Maastricht consisting of the sandy regions to the northwest, the fertile loess regions to the east and west, the Ardenne forest to the southeast and the Meuse valley. Part of the infrastructure was inherited from the Roman period and centred on Maastricht because of the presence of a bridge there. 1. loess, 2. the Kempens Plateau (contour line 50 m. above sea level), 3. moors, 4. large forests, 5. places mentioned in the eighth century, 6. early medieval churches (provisional), 7. Merovingian cemeteries (provisional), 8. Merovingian pottery production, 9. roads and routes.

Fig. 1.6
The Ruhr-Meuse region in the Early Middle Ages. 1. peat, 2. Merovingian cemeteries, 3. probable Merovingian cemeteries, 4. early medieval monastery, 5. Carolingian silver hoard, 6. Roman roads, observed and hypothetical, 7. modern Dutch border.

Analogous with the rest of Northern Gaul a major decline in the habitation of South Limburg and the Meuse Valley can be observed from the mid-third century. Only a few *vici* and villa settlements, which thrived during the Principate, survived into the fourth century.¹² The *vicus* of Tüddern and the villa sites of Obbicht-Steenakker and most probably that of Stein-Haven as well – all in the vicinity of the cemeteries – belong to the few settlements in the Westelijke Mijnstreek with habitation during the period of Late Antiquity (see below). Newly established settlements are even scarcer; there is only the recently discovered settlement of Holtum-Noord, dating to the late fourth and early fifth centuries, apparently established by Germanic immigrants.¹³

It is difficult to determine to what extent the Late Antiquity settlements in the area of the cemeteries still existed during the late fifth and sixth centuries. Most probably the landscape of the Westelijke Mijnstreek largely regained its forest, not only on the centrally situated Graetheide Plateau but also in the valleys and the lower terrace north of the Feldbiss fault. Of the Roman occupation in the area between the three cemeteries only a ruinous landscape should have remained. It appears that not until the late sixth century did new settlements arise in the Meuse Valley and in the stream valleys of the loess landscape.¹⁴

The Early Medieval societal context of the three cemeteries matches on a regional scale with the context described for the Posterholt cemetery, c. 18 km as the crow flies to the north of Sittard, 20 km to the northeast of Obbicht and 25 km to the northeast of Stein (fig. 1.4 and 1.5).¹⁵

The Sittard-Kemperkoul, Obbicht-Oude Molen and Stein-Groote Bongerd cemeteries and their surroundings are part of the Early Medieval *pagus* referred to as Masao, Mosavo, Maso etc., after both the group of people (Masuarinse) and the geographic unit (masagouwi) and mentioned in texts predating 1000 AD.¹⁶ The important Early Medieval sites identified in the surroundings of Posterholt are also not far from Sittard, Obbicht and Stein. These are the *mansionile* Susteren,¹⁷ the Aldeneik monastery (on the opposite bank of the Meuse), which was created in the second quarter of the eighth century,¹⁸ and the Sint Odiliënberg monastery (which may date back to the eighth century although this is not certain) (fig. 1.5).¹⁹ This evidence of religious sites dates however to the period just after the cemeteries became unused; the incorporation of Christianity at all levels of society would, among other incentives, have contributed to the gradual abandonment of the cemeteries and the selection of alternative burial locations.

Evidence of occupation and burial in the surroundings of Sittard, Obbicht and Stein is only barely available (fig. 1.4, 1.5 and 1.6). Regarding the cemeteries known from the southern Netherlands and adjacent areas in present Belgium and Germany,

it appears that the imaginary triangle formed by Sittard, Obbicht and Stein is situated between the Posterholt²⁰ and Vlodrop²¹ cemeteries to the north, the Ophoven²² cemetery to the west (in contemporary Belgium on the opposite bank of the Meuse) and the cemeteries excavated in present-day Maastricht²³ and Borgharen²⁴ to the south. To the east in contemporary Germany, there are hardly any cemeteries and finds from Kreis Heinsberg, which may be explained by the absence of Roman roads and villa settlements.²⁵ The recently published Buchten cemetery is located just to the north of this imaginary triangle²⁶; it is situated c. 2 km to the northeast of Obbicht. In the same area, thus also close to Obbicht, some traces of Early Medieval habitation have been found.²⁷ The most recent find of a possible cemetery is located only 4 km to the west from Obbicht on the western bank of the Meuse, just south of Dilsen, Belgium.²⁸

Apart from the larger picture of Sittard, Obbicht and Stein and their surroundings in the Early Medieval period, some details about the local environmental and cultural conditions permits the description of the local context in which these cemeteries were established.

Sittard-Kemperkoul in its local context

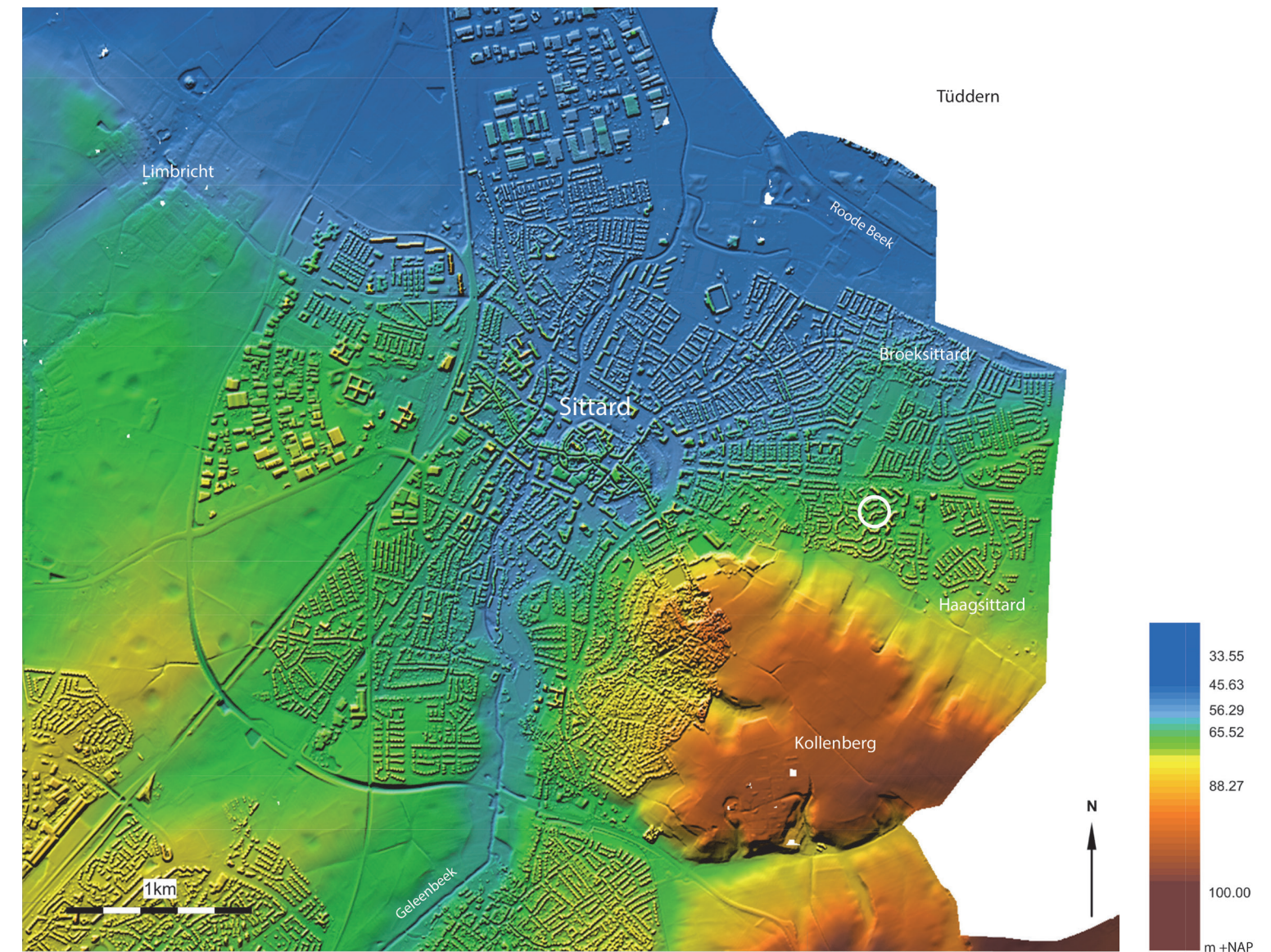
Environmental context

The Sittard-Kemperkoul cemetery is located some distance from the Meuse (currently c. 10 km), and other rivers closer to the cemetery cannot be found either (fig. 1.3, 2.1 and 1.7). This is unusual, as the majority of Merovingian cemeteries known from the Meuse region are situated in the proximity of rivers or river branches. Other features must therefore have been attractive for the location, choice of habitation and burial in the area of present-day Sittard-Kemperkoul.²⁹

The cemetery is located on terrain that slopes down from c. 65 m +NAP (Amsterdam Ordnance Datum) in the south to c. 55 m +NAP in the north (fig. 2.1 and 1.7). The site also slopes slightly down from the southwest (57.50 m +NAP) to the northeast (56.60 m +NAP) where an erosion gully intersects the terrain. Remarks about the soil conditions are absent on the field drawings, but it is known that the location of the cemetery is characterised by loess soils.

Sittard is situated in the valley of the Geleenbeek. To its southwest is a hill that dominates the landscape: the Kollenberg, located between the Geleenbeek and the Roode Beek. The hill is a feature of the landscape transition (a forerunner of the Doenrade Plateau) between the hilly countryside in the south with loess soils and the flatter, sandy regions to the north and is thus the ‘mountain slope’ from which the name Sittard developed (see below and fig. 1.7 and 1.8).

Fig. 1.7
Relief map of the surroundings of Sittard.
AHN by W. Laan (ArchOL Leiden bv).



Roman context

At a distance of c. 1 km the Roman road from Aachen (*Aquae Grannis*) and Heerlen (Coriovallum) to Melick (*Mederiacum*) and Xanten runs along the site of Sittard-Kemperkoul (fig. 1.8:1). Abundant evidence for habitation in the proximity of the cemetery is absent, although in the fields north of the burial ground and just south of the marshes of the Roode Beek several concentrations of Roman pottery and brick material have been found, suggesting the possible presence of a settlement near the village of Broeksittard (fig. 1.8:2).³⁰ During the excavation of the medieval hamlet of Haagsittard near the cemetery, only some pottery

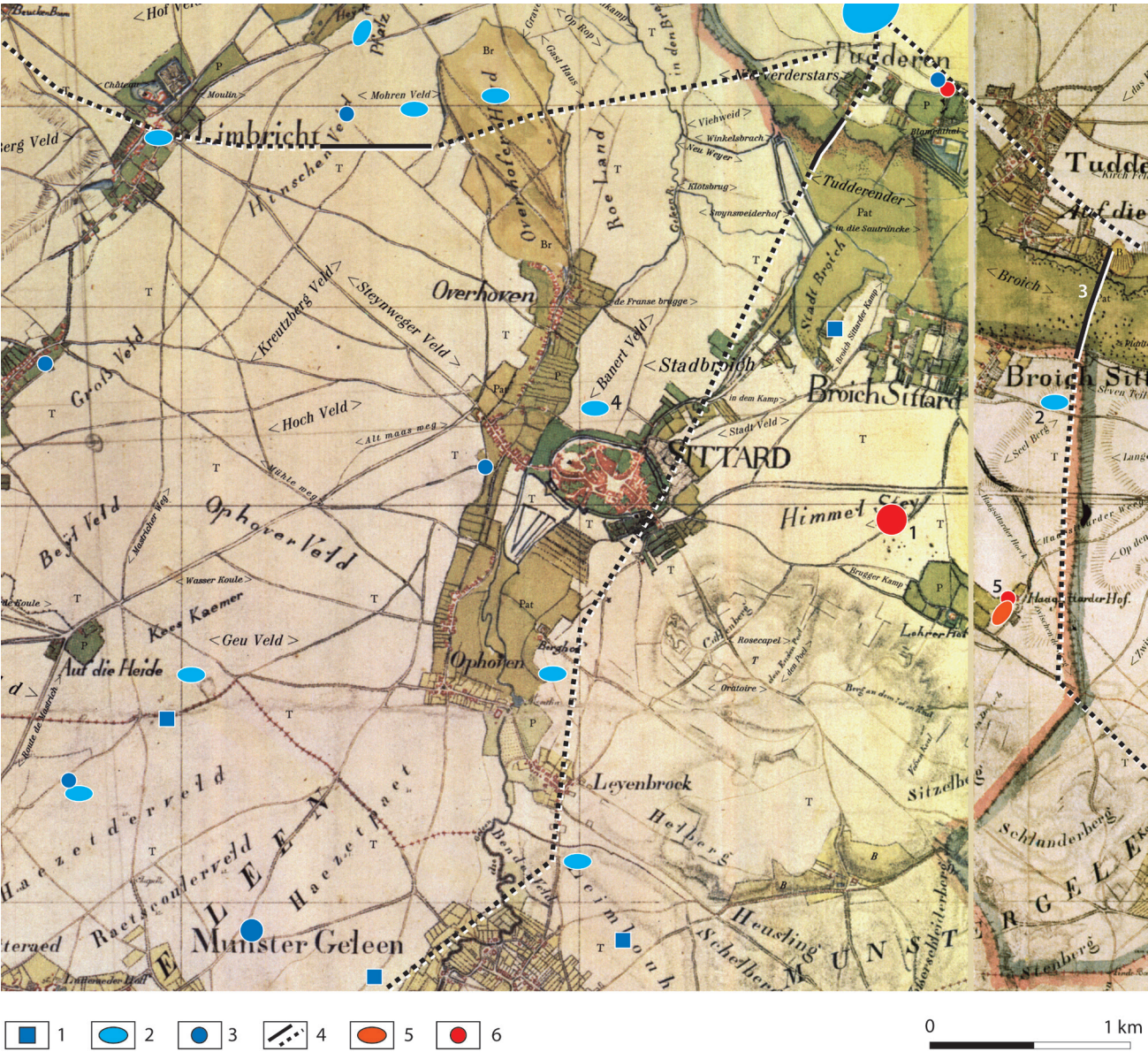
shards and a Roman capital were found.³¹ It is however likely that this piece of sculpture was obtained during the medieval period from a nearby villa or the *vicus* of Tüddern (*vicus Theudurum*).

Van Hontem discusses the Roman road in relation to Sittard and the *vicus Theudurum* at length.³² An interesting discovery is that of a peat ‘bridge’ in 1842, which connected southeast Tüddern and Broeksittard through a marshy area (fig. 1.8:3). This wooden construction had a maximum length of 250 m and remnants of the Roman road were identified to the south of the ‘bridge’. Farther to the south just across the German border, this road is identified as a linear structure consisting of gravel with a north–south orien-

(11) Van Enckevort/Hendriks 2105, 130-134. (12) Van Ossel/Ouzoulis 2000; Lenz 2001; Van Enckevort/Hendriks 2015, 144-146. (13) Wagner/Van der Ham 2010; Tichelman 2012; Aarts 2013. (14) Theuws 2015, 182-183. (15) De Haas/Theuws 2013, 10-14. (16) De Haas/Theuws 2013, 10; Theuws 2015. (17) De Haas/Theuws 2013, 10. (18) Dierkens 1979. (19) Theuws 2007; Linssen 2008. (20) De Haas/Theuws 2013. (21) Unpublished, excavated in 1982 by the HVR. (22) Roossens 1976a; 1977b; 1987b. (23) Panhuysen 2005; Kars 2011; Theuws/Kars in prep. (24) Dijkman 2003; Lauwerier *et al.* 2011; Lauwerier *et al.* 2014. (25) Piepers 1989, Beilage 4-5;

Siegmund 1998, Beilage 1. (26) Derks/De Fraiture 2015. (27) Tichelman 2004; Stoepker 2007, 32. (28) De Winter/Wesemael 2014. (29) The only Early Medieval habitation known in the proximity of the burial ground is the excavated settlement Haagsittard. It is not known, however, how this small settlement with farmyard burials relates to the cemetery of Sittard-Kemperkoul (Stoepker 1993, 43-44). (30) Borsboom/Van Doorn 1995; Van Doorn 1996. (31) Stoepker 1993, 42-43. (32) Van Hontem 1993.

Fig. 1.8
Tranchot map of the surroundings of Sittard (situation c. 1803-1820, sheet 64 Sittard/65 Gangelt). 1. (probable) Roman villa, 2. Roman settlement, 3. Roman grave(s), 4. Roman roads, observed and hypothetical, 5. Merovingian settlement, 6. Merovingian cemetery. Geobasisdaten der Kommunen und des Landes NRW © Geobasis NRW.



tation.³³ This road passed the village of Broeksittard (now the east of the city of Sittard) to the east and it is thought that it was part of the road from Xanten to Heerlen.

Van Hontem argues that another road was present c. 1500 m to the west of the road identified as the Xanten-Heerlen connection. Wooden fundamentals of a bridge, found in the marshy bed of the Roode Beek and ascribed to the Roman period, are thought to have been part of this Roman road and were found to the west of Broeksittard. Van Hontem (and others) suggests that it connects

Tüddern with Ravensbos/Maastricht (fig. 1.6 and 1.8). Actual remnants of a road, again consisting of a body of gravel, are only found directly on the south bank of the Roode Beek.³⁴ Another possible destination of this road could be a (villa) settlement situated near the site of Sittard-Odaparking, just north of the town centre, where multiple fragments of Roman pottery, metal and bone material were deposited on the bed of the Geleenbeek (fig. 1.8:4).³⁵

The finds of several road segments point to Tüddern being a major junction for the region of Sittard in the Roman period.³⁶ The *vi-*

cus Theudurum itself was most probably situated to the west of the present village, and judging from the dating of the nearby cemetery, it was occupied from the first to fourth century. From the *vicus Theudurum* a third (secondary) route – identified in arable fields between Sittard and Limbricht – should have run westward along the Roman settlements at Limbricht and Buchten towards Grevenbicht, thus linking the Sittard-Kemperkoul cemetery with that of Obbicht-Oude Molen (fig. 1.6).³⁷

Early Medieval context

To the southeast of the cemetery the ROB conducted excavations during the early 1990s near a farmhouse called Haagsittard, which is also the name of a medieval hamlet (fig. 2.1 and 1.8). Its earliest reference dates to 1144 AD.³⁸ The name ‘Haag’ refers to a landscape containing bushes and hedges.³⁹ The excavations showed that the area was already occupied in the Iron Age. Evidence for Early Medieval occupation dates to the seventh century and consists of the plan of a one-aisled house (14 × 7 m, 7 × 3 postholes) and several fragments of Merovingian pottery. Two farmyard graves were also found near the Merovingian house (fig. 1.8:5).⁴⁰ The excavation at Haagsittard provides the only evidence for occupation in the Early Medieval period in the surroundings of the Sittard-Kemperkoul cemetery. The nature of the relation between the settlement and the cemetery has not been established and appears rather difficult to understand. The Sittard-Kemperkoul burial ground was in use from c. 575 AD until c. 700 AD. However, the burial ground with its c. 85-100 graves does not match the small settlement of Haagsittard, which consisted of at least one or maybe a few houses. The number of graves seems to indicate that the cemetery was used by approximately five contemporary families for a period of c. 125 years (see chapter 6). The inhabitants of the Haagsittard hamlet buried some of their dead in the proximity of their houses and might have used the cemetery simultaneously in the course of the seventh and maybe early eighth century.⁴¹ The small scale of the recovered settlement indicates that it was not a nucleated settlement like those found in the Kempen region. Rather, it might have been an isolated farmstead of colonists. It is possible that other isolated farmsteads were related to the cemetery, but these have not been discovered.⁴²

In the previous section it was explained that the important Roman road from Heerlen to Xanten passed Sittard to the east. It was not unusual for early Medieval cemeteries to be located near Roman structures such as fortresses, villas, cult places, roads and bridges.⁴³ The presence of a Roman road, still in use by that time, and maybe an intersection of roads, is likely to have been one of the focal points of the Sittard-Kemperkoul burial ground and possible associated habitation. It is worth mentioning that near the

Roman cemetery in the village centre of Tüddern, but also more to the east along the Roman road to Heerlen, several Merovingian grave finds were found.⁴⁴

Altogether, the area of the Sittard-Kemperkoul cemetery must have been attractive to inhabitants, although it was somewhat isolated. However, future discoveries might change this perception. Roman road(s) cross the area and there is some evidence for habitation from the seventh century onwards near Haagsittard. As the burial ground was already in use in the late sixth century, it is plausible to expect habitation from that time on or just before. Archaeological evidence for habitation in the fifth or sixth century is absent. As stated earlier, rivers or tributaries of any importance do not run in the proximity of the cemetery location. The main incentive for late Merovingian colonisation, for now only indicated by the presence of a cemetery, is the presence of the Roman road which connected Heerlen and Xanten.

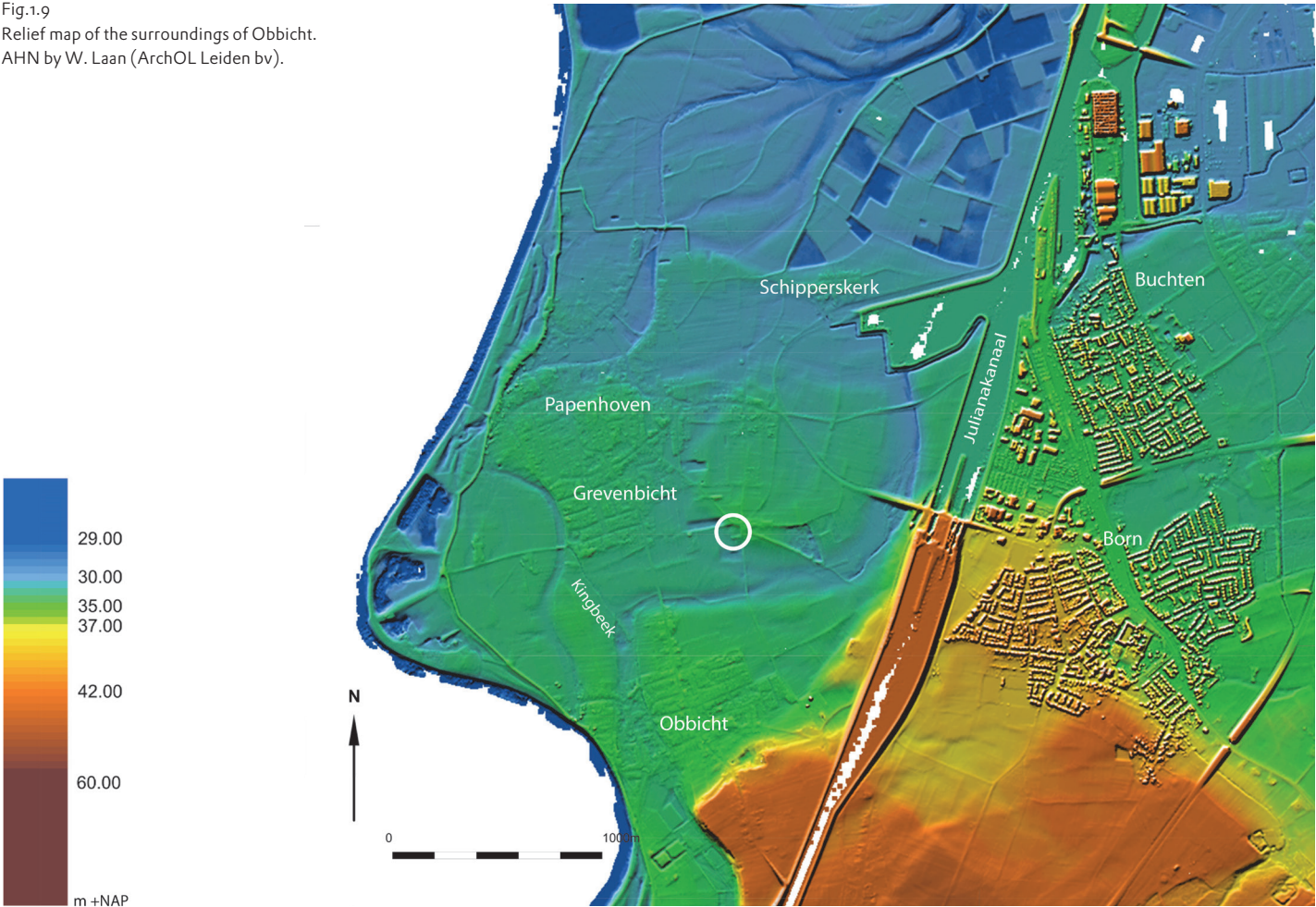
The history of the toponym

The Merovingian burial ground of Sittard-Kemperkoul was found east of the old city of Sittard where presently the new housing estate of Kemperkoul can be found (fig. 1.2 and 2.1). Sittard is one of the oldest cities of the province of Limburg and in the Netherlands; town privileges were granted in 1243, but the place had been mentioned in 1157 as *Sitter*.⁴⁵ Occupation is known to have been present around Sittard long before the beginning of the twelfth century; evidence from prehistoric and Roman times has been found.⁴⁶ Many explanations for the name ‘Sittard’ have been put forward, but the environmental context seems to offer the most convincing one.⁴⁷ It is argued that ‘Sittard’ derives from the Old or Middle High German *sīt(e)*, which refers to a mountain slope.⁴⁸ Sittard is situated in the valley of the Geleenbeek. To the southeast of the town centre is a ‘hill’ that dominates the landscape: the Kollenberg, located between the Geleenbeek running to its west from south to north, and the Roode Beek running roughly from east to west to the north of Sittard. This hill – in fact the northernmost outcrop of the Ardennes and a part of the Doenrade Plateau – is thus the ‘mountain slope’ from which the name Sittard developed (fig. 1.7 and 1.8). The Kemperkoul cemetery lies c. 850 m to the south of the hamlet Broeksittard, which is mentioned in a written source from 1144 as *Bruchstittert*. Currently it is a quarter in the city of Sittard, situated close to the German border (fig. 2.1). The old hamlet Haagsittard is now also a part of the larger city of Sittard. It was located c. 750 m to the southeast of the cemetery (fig. 2.1). The hamlet was first mentioned in 1144 as *Hagensitert*.⁴⁹ The three medieval settlement nuclei, Sittard, Broeksittard and Haagsittard, were all located close to the slope (*sîte*) of the Kollenberg. They might initially have all been referred to as Sitter

(33) Aarts/Adams 1995, 172-173. (34) Van Doorn 2002, 167-172. (35) Weiss-König/Aarts 2012. (36) Piepers 1989, 104-110, 438-448. (37) Tol 2000; Tol/Schabbink 2004. (38) Lauwers 1989, 7-15; Stoeper 1993, 40; Thissen 1993, 114. (39) Berkel/Samplonius 2006. (40) Stoeper 1991a; Stoeper 1991b; Stoeper 1992; Stoeper 1993. (41) See on the relation between farmyard burials and other burial grounds, Theuws 1999. (42) See for this model of settlement in a colonisation phase, Theuws 2008. (43) Siegmund 1998, Beilage 1; Nieveler 2006, 28, Karte 10. (44) Piepers 1989, 125 (no. 17); Siegmund 1998, 430-431 (nos. 163-164).

(45) Van Luyn 1993, 11; Thissen 1993. Schrijnemakers (2014) mentions a date as early as 1119, but there is controversy over his conclusion. (46) Bakels 1978; Stoeper 1993, 42; Scholte Lubberink 1998, 12-19; Tol 2000, 96-97; Tol/Schabbink 2004; Weiss-König/Aarts 2012. (47) Schrijnemakers 2014, 557-574. (48) Berkel/Samplonius 2006; Schrijnemakers 2014, 571-572. (49) Van Luyn 1993, 44-45; Stoeper 1993, 40; Thissen 1993, 114.

Fig.1.9
Relief map of the surroundings of Obbicht.
AHN by W. Laan (ArchOL Leiden bv).



– being part of the same villa – but had to be distinguished from one another at a certain point in time. Nowadays Sittard remained *Sitter*. The *Sitter* closest to the hill slope was distinguished from the other *Sitters* with the prefix *Hagen*, referring to ‘woodland of low wood’, which implies that the slope of the Kollenberg was originally forested. The other *Sitter* was given the prefix *Bruch* or *Broek*, referring to its lower location compared to Haagsittard in the marshlands along the Roode Beek located to its north.⁵⁰

Obbicht in its local context

Environmental context

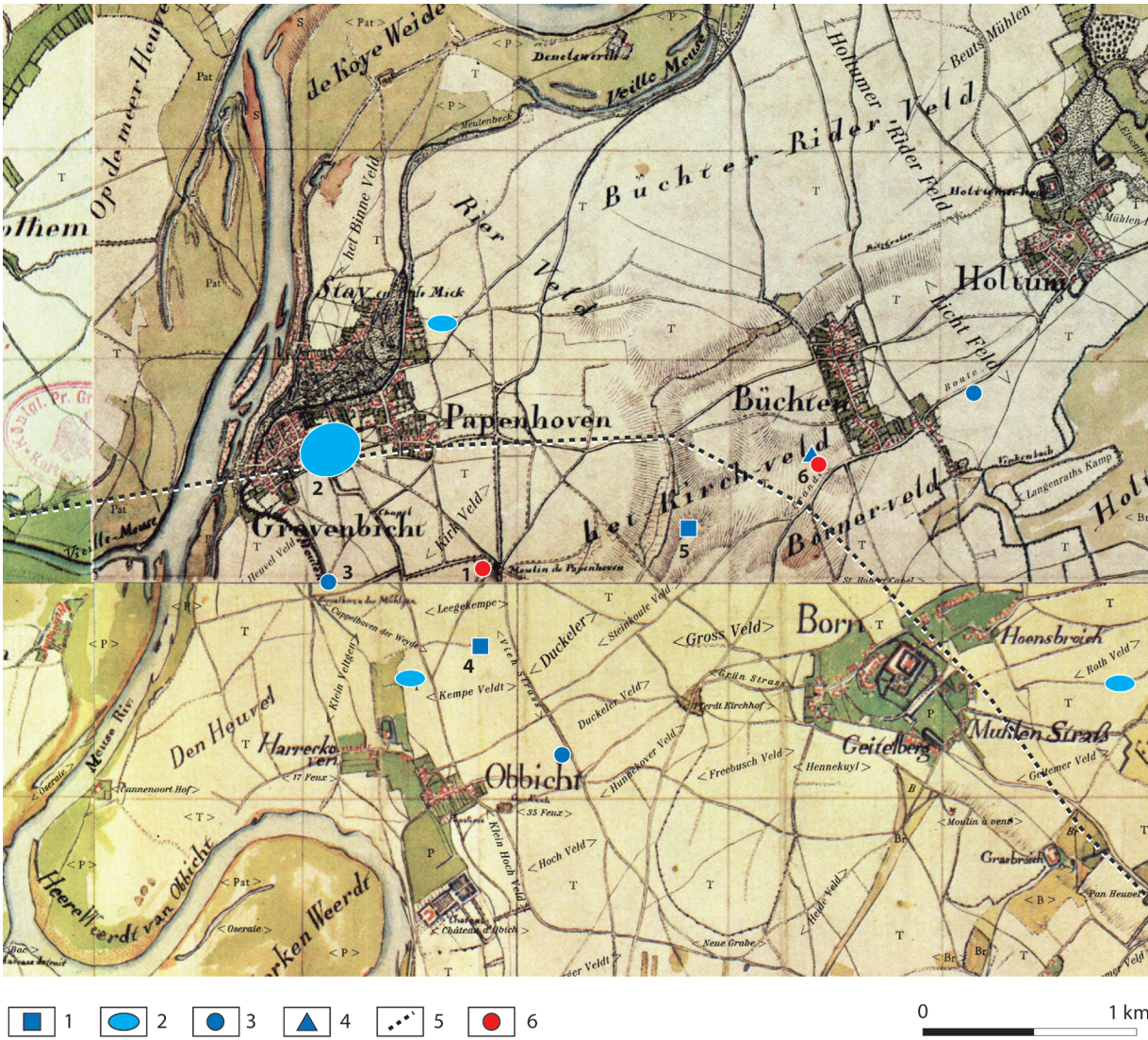
Obbicht and Grevenbicht, and the cemetery terrain between them, are located on the lower terrace formed by the Meuse during the early Holocene period and surrounded by several old Meuse meanders (fig. 1.3, 2.11 and 1.9).⁵¹ The cemetery terrain currently slopes from the northeast (c. 34 m +NAP) to the south and west (c. 33 m +NAP); the heights of the terrain were probably not established at the time of excavation as they are not stated in the publication. Beckers and Beckers mentioned that the soil conditions at the site were not favourable for excavation: the sand/clay soil contained abundant gravel, deposited there by the Meuse. It is thus

not surprising that gravel mining took place at the excavated terrain and also on a larger scale in the surroundings of Obbicht (see also chapter 2).

The cemetery terrain was close to an old cut of meander of the Meuse, which is indicated by the meandering lower levels running through the landscape and of which a section can be found to the south of the burial ground (fig. 1.9). To the northeast of the cemetery terrain a number of five (old) roads converge (fig. 1.9 and 1.10). It is the highest point in the close surroundings and indicates that it may have been used already in ancient times for occupation (fig. 1.9). This suitability for habitation may have resulted in continuity of the pathways (now roads) which led to this higher point in the landscape; this location was close to the grasslands and arable lands but not in danger of being flooded when water levels were high.

What the landscape of the cemetery and its surroundings actually looked like during the Roman and Medieval periods is hard to picture nowadays, as there have been many alterations. For example, the course of the Meuse has been greatly altered between Obbicht and Grevenbicht in the past centuries. Next to this, the gravel mining and in particular the construction of the Julianakanaal (Juliana canal) with its lock complex, c. 1 km to the east of the burial ground, have altered the landscape profoundly.

Fig. 1.10
Tranchot map of the surroundings of Obbicht (situation c. 1803-1820, sheet 53 Neeroeteren/54 Maaseik/63 Eysden/64 Sittard). 1. (probable) Roman villa, 2. Roman settlement, 3. Roman cult place, 4. Roman grave(s), 5. Roman roads, hypothetical, 6. Merovingian cemetery. Geobasisdaten der Kommunen und des Landes NRW ©. Geobasis NRW.



Roman context

The location of the burial ground southeast of Grevenbicht and north of Obbicht seems to have been directly linked to the existence of several Roman habitation sites (fig. 1.6 and 1.10:1). As already mentioned, a Roman secondary road must have been situated just a few hundred meters north of the site, running from Tüddern along Limbricht towards Grevenbicht. In the present village of Grevenbicht a segment of a road and several remains of Roman buildings were found.⁵² Among these are a monumental wellhead in sandstone and three fragments of sculptures of Jupiter. Next to this, there is the Jodenberg (fig. 1.10:2), a supposed Roman burial mound or tumulus at the southwestern edge of the village, overlooking the valley of the stream Kingbeek and the Meuse. Given the nature of these finds it seems plausible to

locate a vicus in the village centre of Grevenbicht (fig. 1.10:3). It must at least have been situated along two Roman roads: the one from Tüddern and probably crossing the Meuse towards the only recently localised *vicus* of *Feresne* (?) at c. 4 km to the east, just south of the present village of Dilsen.⁵³ The other road–of which no traces have been found to date in the vicinity of Obbicht and Grevenbicht–is the supposed route on the east bank of the Meuse from Maastricht to Venlo and Nijmegen.

Next to the probable *vicus* of Grevenbicht are several other remains of Roman settlements in the surroundings of the burial ground. After all, the fields south of the cemetery site are known as ‘De Kempen’ and are well known for the many Roman objects found.⁵⁴ Here, directly southeast of the cemetery, across the early-Holocene Meuse meander, the villa site of Obbicht-Steenakker/

(50) Berkel/Samplonius 2006; Schrijnemakers 2014, 436, 474-475. (51) Van der Gaauw 2015. (52) Beckers/Beckers 1940, 248 and 289, fig. 108; Knoors/Jaspers 2009; De Fraiture/Derks 2015, 32-33. (53) Aerts 2003; De Winter/Wesemael 2014.

Beelaertsstraat is situated on a slightly higher river terrace (fig. 1.10:4). This is one of the few sites in the Westelijke Mijnstreek that has yielded late Roman pottery as well, indicating that the occupation of the villa settlement continued during the fourth century.⁵⁵ Even more interesting is the find of an early fifth century coin hoard in a field adjacent to the actual villa site.⁵⁶ At least 15 golden *solidi* were discovered here, of which the youngest coin dates shortly after 408 AD. Although the archaeological context of this hoard has not been documented, the deposition could be seen as a *Versteckhort* that is possibly connected with the end of the villa settlement.

East of the cemetery, at the other side of the early Holocene meander in which the rivulet 'De Reidsgraaf' used to flow parallel to the Julianakanaal, are two other Roman sites near the village of Buchten. These are the former villa site of De Wielder, situated at the present location of the lock complex and at the very edge of the Graetheide Plateau (fig. 1.10:5),⁵⁷ and the cult place of 'De Apotheke', situated at a slight elevation on the lower river terrace (fig. 1.9 and 1.10:6).⁵⁸ Although both sites have been poorly excavated, they provide a clear indication of how important the physical environment must have been for the location of these sites in Roman (and Early Medieval) times.

Early Medieval context

The Meuse was an important means of contact with other centres along the river through the course of time, as was a Roman road on its east bank. Evidence for settlements that can be associated with the Obbicht cemetery has not been found in its surroundings, but the area around the cemetery must have been occupied during the period it was in use (6-7th centuries). The Susteren Abbey, founded in 714 AD, is not far from Obbicht, but by then the cemetery had been abandoned.⁵⁹

Another Merovingian cemetery was found in the proximity of present-day Buchten, c. 2 km to the northeast of the Obbicht cemetery (fig. 1.10:6).⁶⁰ It consists of 44 recorded graves and was associated with the earlier mentioned Roman cult place of De Apotheke. The graves were predominantly without grave goods. C14 analysis of the remains of three skeletons revealed that two inhumations were from the seventh and eighth centuries, and one maybe from the ninth century.⁶¹ A glass fragment of a Merovingian conical or bell beaker⁶² and the radiate head of a bow brooch dating to the mid-fifth century⁶³ were also found in this location (although not in a burial context) which may point to the existence of earlier graves on this site.

Next to these two cemetery sites, traces of Merovingian settlements were found north of the present-day hamlet of Schipperskerk, c. 1.5 km to the north of the Buchten cemetery and c. 2.5 km

to the north of the Obbicht cemetery. It is the only known evidence of a settlement from the area.⁶⁴ Pottery from the sixth and seventh century was found here, as was a well, a post hole and pits containing charcoal, pottery, stone and burnt clay. The wood used to build the well was dated to 561 (+/- 6) AD, which is contemporary with the first burial phases of Obbicht.⁶⁵

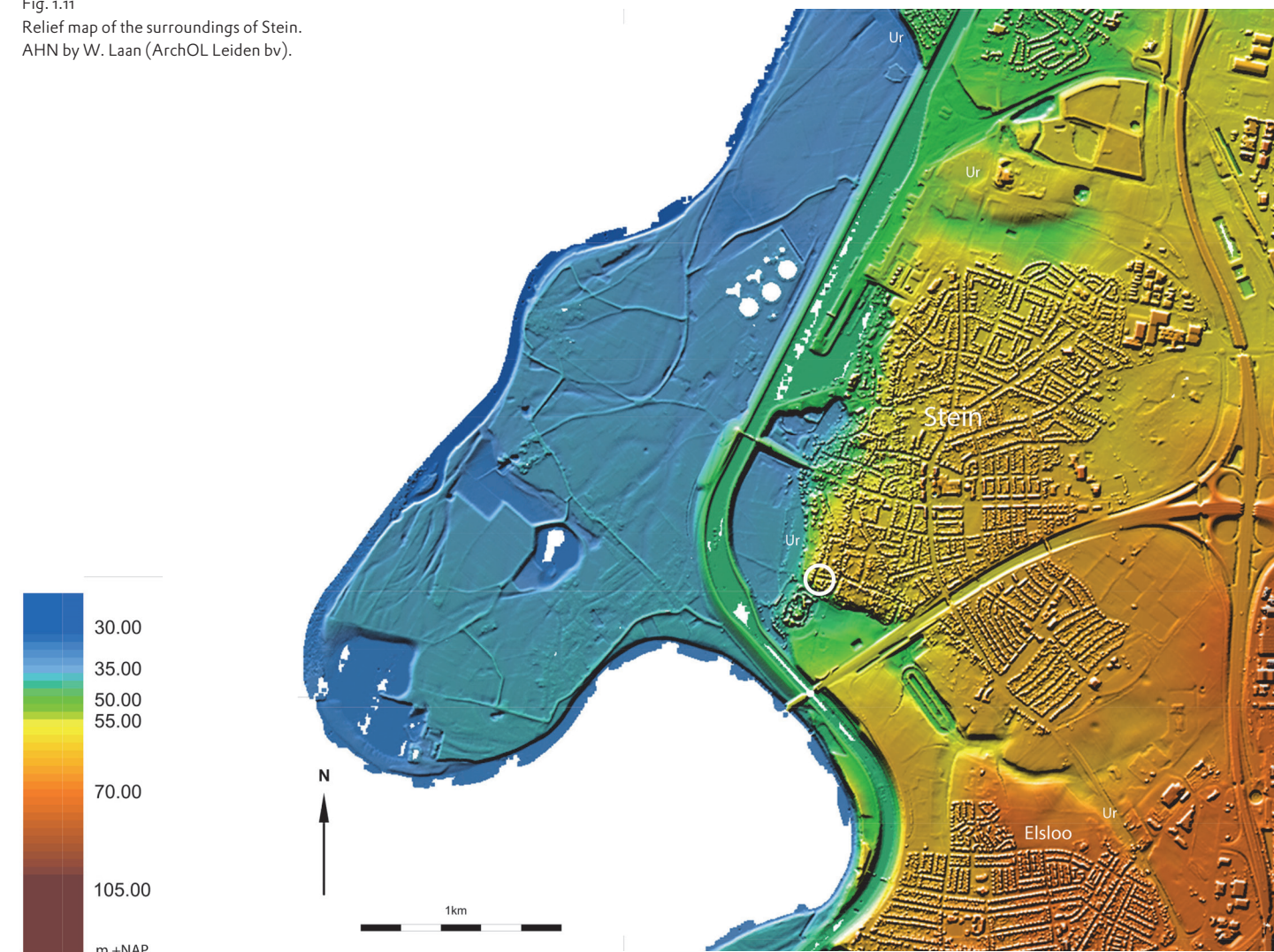
Besides the Buchten De Apotheke site, where Roman building remains were reused in Merovingian times—most probably without any continuous use of the cult place during Late Antiquity—there is an interesting but still very questionable hypothesis about the medieval reuse of the villa site of Buchten De Wielder (fig. 1.10:5).⁶⁶ Meeuwissen based his thesis on the toponymic analysis of 'Wielder' as a derivative of the Latin adjective [*ad*] *villaris*, which should refer to Early Medieval locales in the vicinity of or belonging to a (Roman) villa.⁶⁷ Although some tenth century sources mention a *villa Willere* in possible relation to *Bettinum* (Obbicht or Buchten?), it is far from clear whether these references should be associated with the villa and later village in the area of the cemeteries. Moreover, the excavation of the villa at De Wielder has not yielded any material pointing in the direction of its occupation during the Late Antiquity or Medieval periods.

The history of the toponym

The exact location of the Obbicht–Oude Molen cemetery could be reconstructed on the basis of the 1940 publication of Beckers and Beckers, which includes some accounts referring to the excavation location and a cemetery plan on which reference points are depicted (see chapter 2 for more details).⁶⁸ The cemetery was situated on a terrain where two (old) mills were subsequently built and demolished (mill = *molen*, hence the reference 'Molen' in the toponym). At the time of excavation (1936), the second mill had not existed for some years (it was demolished in 1921, thus old = *oud*, hence the prefix 'Oude' in the toponym). It is not known for which purposes the parcel was used by then, but presumably it was arable land. A chapel, still standing, is indicated on the original cemetery plan where the two roads bordering the cemetery to the north and east converge. The cemetery was located in the northeastern corner of the parcel. This parcel is located to the north of the northernmost houses of Obbicht and to the southeast of the southernmost houses of the village of Grevenbicht (fig. 1.2 and 2.11). Immediately to the south of the cemetery terrain the area is used as farmland.

Obbicht is a small village in the municipality of Sittard-Geleen with the Meuse to the west, the villages Papenhoven and Grevenbicht to the north and the village of Born to the east. Obbicht and Grevenbicht share the ground word 'Bicht', which was the original name of one village, namely the older village now named Obbicht. To the north of the older village was a *curtis* (mansion)

Fig. 1.11
Relief map of the surroundings of Stein.
AHN by W. Laan (ArchOL Leiden bv).



which eventually became known as Grevenbicht (first reference known from 1437–1466 AD) after a new owner or Grevenbicht (first named in 1438 AD).⁶⁹ To distinguish the newly developed village around this mansion from the older village, the older village was named Opbeycht to indicate its location upstream.⁷⁰ It has been suggested that *Bittinum* or *Bettinum*, as the place in which the donation of the possessions of Aengibald, or Engibald, in Waderlo to Willibrord in 703/704 AD was registered, was (Ob)Bicht,⁷¹ and this might thus be the earliest reference to (Ob)Bicht. In this respect it is interesting to note that Willibrord is the patron saint of the church of Obbicht as well and that there was a close connection to the stift of Susteren in the area of Obbicht and Born.⁷²

The ground word 'Bicht' is thought to be connected to the German *biegen* [= buigen (curving)] and the Anglo-Saxon *hyge*, *byht* and *bight* [= bocht (curve)], referring to the nearby Meuse and one of its many bends.⁷³ The original village of Obbicht was lo-

cated close to the Meuse and one of its bends and was completely washed away by the Meuse in 1673. In the nearby hamlet of Overbroek a new church was built and after that the new centre was referred to as Obbicht.⁷⁴

Stein in its local context

Environmental context

The old village of Stein is located not far from the Meuse at the west side of the middle terrace and the Graetheide Plateau. It overlooks the lower terrace towards the Belgium border, formed by the river when its course changed over time and cut in the broad river bed. The cemetery terrain is located at the very fringe of this middle terrace, at a sort of cape cut off by a former channel of the Meuse in the west and by the stream Ur in the south, continuing its course

(54) Beckers/Beckers 1940, 248–249 and 329 (fig. 1.19); Knoors/Jaspers 2009. (55) Hendrix 2007, 191. (56) Bloemers 1969; De Fraiture 2005, 34. (57) Holwerda 1928; Meeuwissen 1991. (58) Derks/De Fraiture 2015; Van der Gaauw 2015. (59) Theuvs 2015, 178. (60) Derks/De Fraiture 2015, 46–82. (61) Derks/De Fraiture 2015, 56, 179–180. (62) Derks/De Fraiture 2014, 125, Afb. 6.31. (63) Derks/De Fraiture, 2015, 113, Afb. 6.21. (64) Tichelman 2004, 44–48. (65) Tichelman 2004; Stoepker 2007, 32. (66) Meeuwissen 1984; Meeuwissen 1991. (67) Cf. Tummers 1962, 41–47, no. 49. (68) Beckers/Beckers 1940, 330, fig. 120. (69) Schrijnemakers 2014, 471–472.

(70) Schrijnemakers 2014, 469. (71) Other hypotheses connect the nearby village of Buchten to the *Bettinum*-toponym. It's however far from clear whether this place has to be sought in the surroundings of Obbicht/Buchten at all. Cf. Smeets 1978; Meeuwissen 1984, 25–31; Schrijnemakers 2000, 117–120; Schrijnemakers 2014, 439, 470. (72) Cf. Janssen/Knoors 1985, 4. (73) Schrijnemakers 2014, 471. (74) Schrijnemakers 2014, 471–472.

2 The excavation and post-excavation activities

The cemetery of Sittard-Kemperkoul

The discovery and excavation of the cemetery

In 1982, the digging of construction pits for the expansion of the city of Sittard to the east, officially referred to as ‘development plan Kemperkoul, sub plan 1’, began (fig. 2.1).¹ In an early phase of the digging activities, a number of graves and complete ceramic pots were discovered. These discoveries made the contractor decide to inform the curator of ‘Museum Den Tempel’ (which recently changed its second name ‘Museum Het Domein’ to ‘Museum De Domeinen’) in Sittard, who was A. Roebroek at that time. The curator in his turn informed the then provincial archaeologist W. Willems, who initiated an inspection of the site on the 30th of March 1982. The lower parts of fifteen burial pits in a relatively deep trench were observed during this inspection, as were the outlines of a number of other graves appearing in construction trenches dug less deep. It is not mentioned in which eventual archaeological excavation trench the then discovered graves were recorded, but it can be assumed that they formed the starting point of the excavation and were thus finally recorded in what is now known to us as excavation trench 1 (fig. 2.2).

As a result of these findings, an archaeological excavation started on the 31st of March 1982, which lasted until the 21st of April 1982. The excavation fell under the supervision of provincial archaeologist W. Willems and K. Greving, who was a field technician of the State Archaeological Service (Dutch: Rijksdienst voor het Oudheidkundig Bodemonderzoek (ROB), now Rijksdienst voor het Cultureel Erfgoed (RCE)). In less than a month, the graves now published as graves 1-62 were excavated and recorded. The excavation

could at that time not be expanded more to the south due to the presence of a tower crane. Furthermore, a tarmac road intersecting the site hindered the excavation of a strip going through the cemetery which certainly contained graves (now excavation trench 5).

The continuation of the excavation was made possible by the contracting firm Muijers and the municipality of Sittard. The excavation of the southern part of the cemetery and the part underneath the tarmac road took place from the 11th to 22nd of October and from the 8th to 12th of November in 1982. In the southern part (trench 6), the excavation activities resulted in six additional graves (graves 76, 77, 78, 86, 87 and 88), and, underneath the road (trench 5), twenty more graves were excavated: graves 63-75 and 79-85. The excavation of trench 5 was made possible only with the financial aid of the municipality of Sittard.

The measuring system on the field drawings made it possible to precisely locate the cemetery on the topographical map of Sittard and its surroundings (fig. 2.1). The coordinates of the cemetery in the Dutch national grid are 190.27/333.96. The cemetery is located in the eastern part of the municipality of Sittard and is now a residential area (Lahrhof). To the north, the research area is bordered by a road called ‘Wehrerweg’; to the south, it is bordered by a road called ‘Lahrstraat’. The roads in the residential area are named after persons known from the late Merovingian/Carolingian period (Pepijn, Clothilde, Dagobert, Brunhilde), and there is even a street named ‘street of the Merovingians’. The cemetery is located on a slightly sloping terrain. The terrain of the cemetery itself slopes from + 57.50 NAP in the southwest to + 56.60 NAP in the northeast (see the relief map in chapter 1). The ‘Kollenberg’, a well-

known hill in the city of Sittard on which the chapel of Saint Rosa (built in 1675) can be found, borders the cemetery terrain to the south.

The arrangement of the excavation trenches

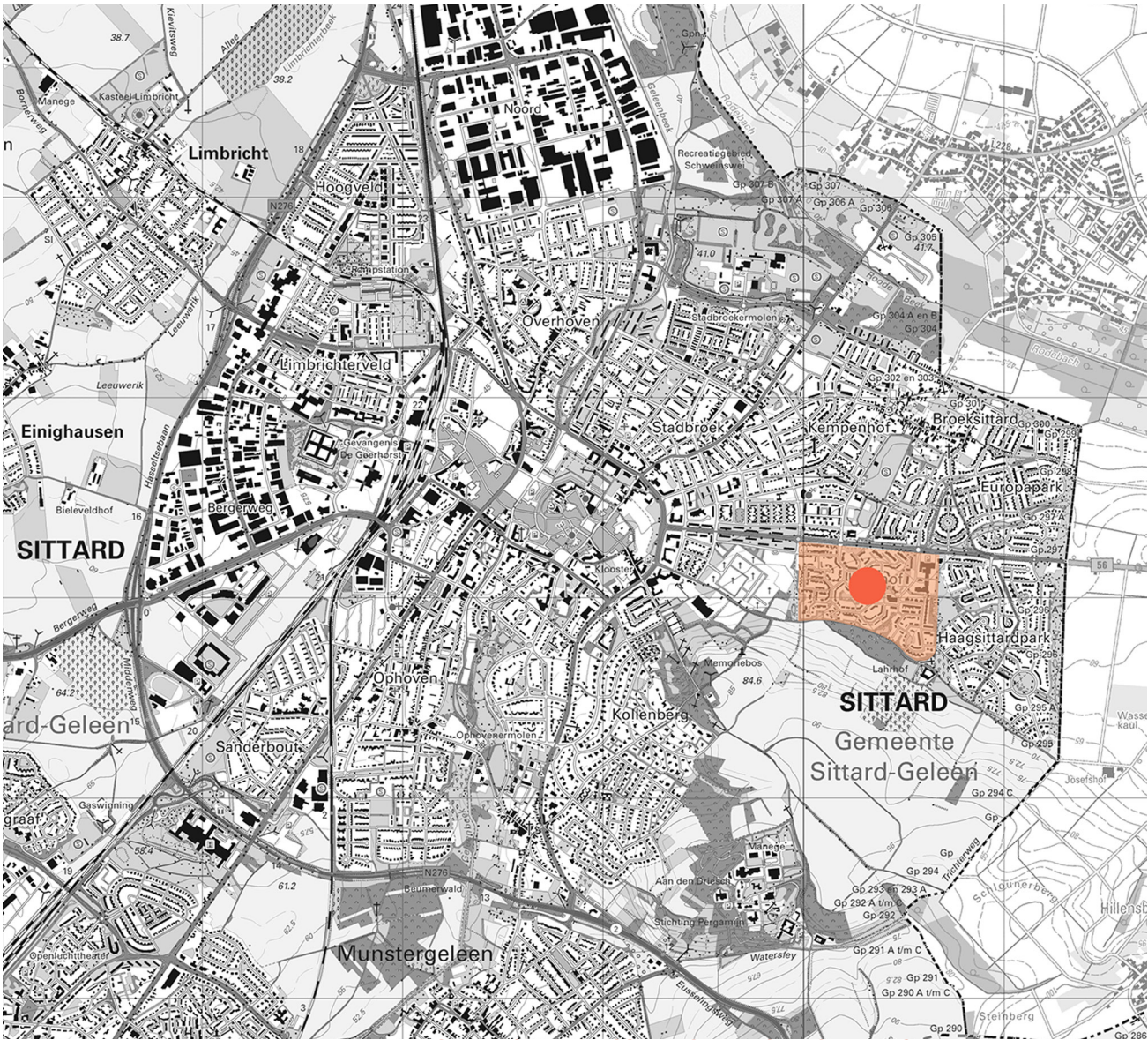
The plan of the excavation trenches and the excavated graves shows that the limits of the cemetery were established during the excavation (fig. 2.2). The site of the cemetery measures approximately 45 by 35 m and has thus a surface area of about 1600 m². A number of graves were destroyed by two west-east orientated construction trenches: one for a gas pipe to the south of excavation trench 5 and one for a sewer pipe to the north of excavation trench 5. Of a considerable number of graves, only the bottoms were available for excavation and documentation; their upper parts (which were still partly available for a number of graves) vanished over the course of time. The graves of which only the lowest part remained were located around an open space in the southern part of trench 1. It should be questioned whether this open space was intentionally created during the period in which the burial ground was in use, or whether it was a result of more recent disturbances. This question will be discussed in chapter 6. The remain-

ing depths of all graves were recorded in the catalogue of graves (chapter 8).

Trench 1 was the first and largest excavation trench. The majority of the graves were recorded in this trench, and parts of the western and eastern limits of the cemetery were established in this trench. The excavation trench extends considerably beyond the outer western line of graves 48, 42, 41 25 and 24. It can therefore be assumed that this line of graves forms the western border of the cemetery in trench 1. The same applies to the eastern limit of the cemetery: the eastern limit of the excavation trench was 3.5 meters beyond the most eastern line of graves (graves 31, 30, 29 and 6). These graves seem to form the eastern border of the cemetery in trench 1.

Trench 2 was dug to the northwest of trench 1. Since the daily excavation reports are no longer available, the motivations that brought the design of this trench about remain obscure. It was probably dug to discover in which direction the cemetery, which was at that time only known from trench 1, expanded. Graves or other archaeological features were not found in this trench. Trench 3 was dug to the south of trench 1 but left an unexcavated space between them (the later trench 6). Archaeological features

Fig. 2.1
The location of the Sittard-Kemperkoul development plan and the location of the excavated cemetery (scale 1:33.333).



(1) The following introduction to the discovery and excavation of the cemetery is based only on the introduction in the master's thesis of Paul Zoetbrood on the Merovingian cemetery of Sittard Kemperkoul (1984, 4-6), since the daily reports of the excavation became missing and other documentation mentioning the discovery and excavation history of the site is not available. The introduction in this thesis explicitly mentions the help of F. Bronnenberg, W.J. Derks, H. Jansen, A. Linckens, A.M.L. Roebroeks and A. Roebroek during the entire period of excavation and research.

were not discovered in trench 3. Trench 2 indicated that the cemetery did not expand further to the northwest and trench 3 indicated that the southern cemetery limit could be expected to the north of this trench.

It seems plausible that trench 4 was also excavated in the period between the 31th of March and the 21st of April 1982 along with trenches 1 to 3. In his master's thesis, Paul Zoetbrood mentions that the second excavation campaign in the fall of 1982 revealed graves 63-75 and 79-85 underneath the road (trench 5, north of trench 1) and graves 76-78 and 86-88 in excavation trench 6. Since graves 51 to 61 were excavated in trench 4, it can thus be assumed that this trench was excavated during the first excavation campaign. This trench shows the graves which form the northern limit of the cemetery. To the north of the east-west oriented line of graves, no graves or archaeological features were recorded in excavation trench 4. During the first excavation campaign, the north-

ern, eastern and western limits of the cemetery were established, but unexcavated areas within the borders of the cemetery were by then still present and the southern limit of the cemetery was still to be found.

Trench 5 (the former road intersecting the terrain) was dug during the second campaign in the fall of 1982. In this trench, twenty graves were discovered, some of which were already partly destroyed by the west-east orientated sewer pipe bordering the road (now trench 5) to the north and by the west-east orientated gas pipe bordering the road to the south. The sewer trench destroyed a number of graves of which parts were already discovered and excavated in trench 4.

The final research activity was the excavation of trench 6, in between trenches 1 and 3. This trench was certainly opened to discover the graves which formed the southern limit of the cemetery. The excavation of this trench revealed six additional graves and

Fig. 2.2
Plan of the Sittard-Kemperkoul excavation trenches and the excavated graves scale 1:400).

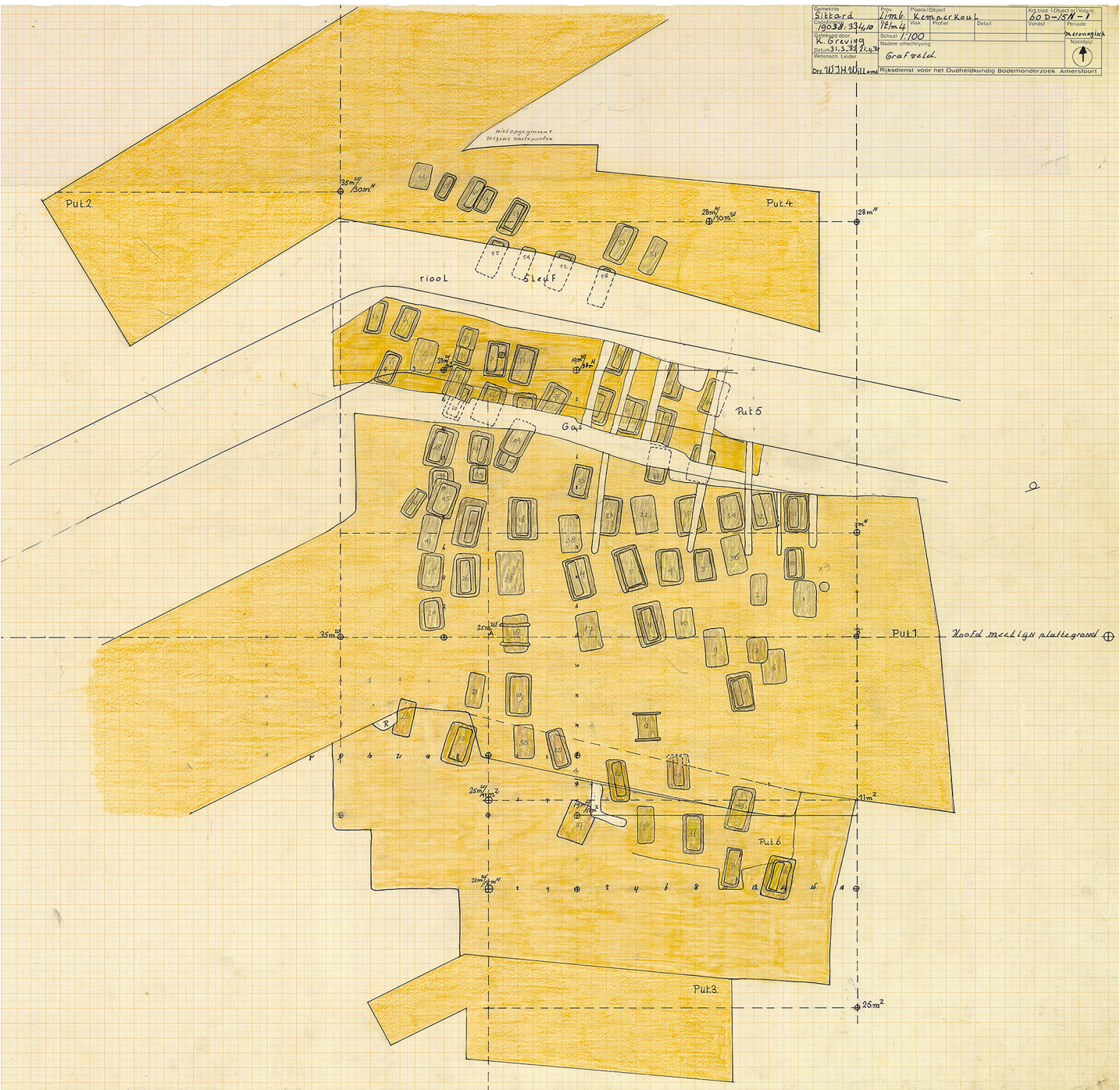


Fig. 2.3
Section of a field drawing of the Sittard-Kemperkoul excavation (scale 1:80).

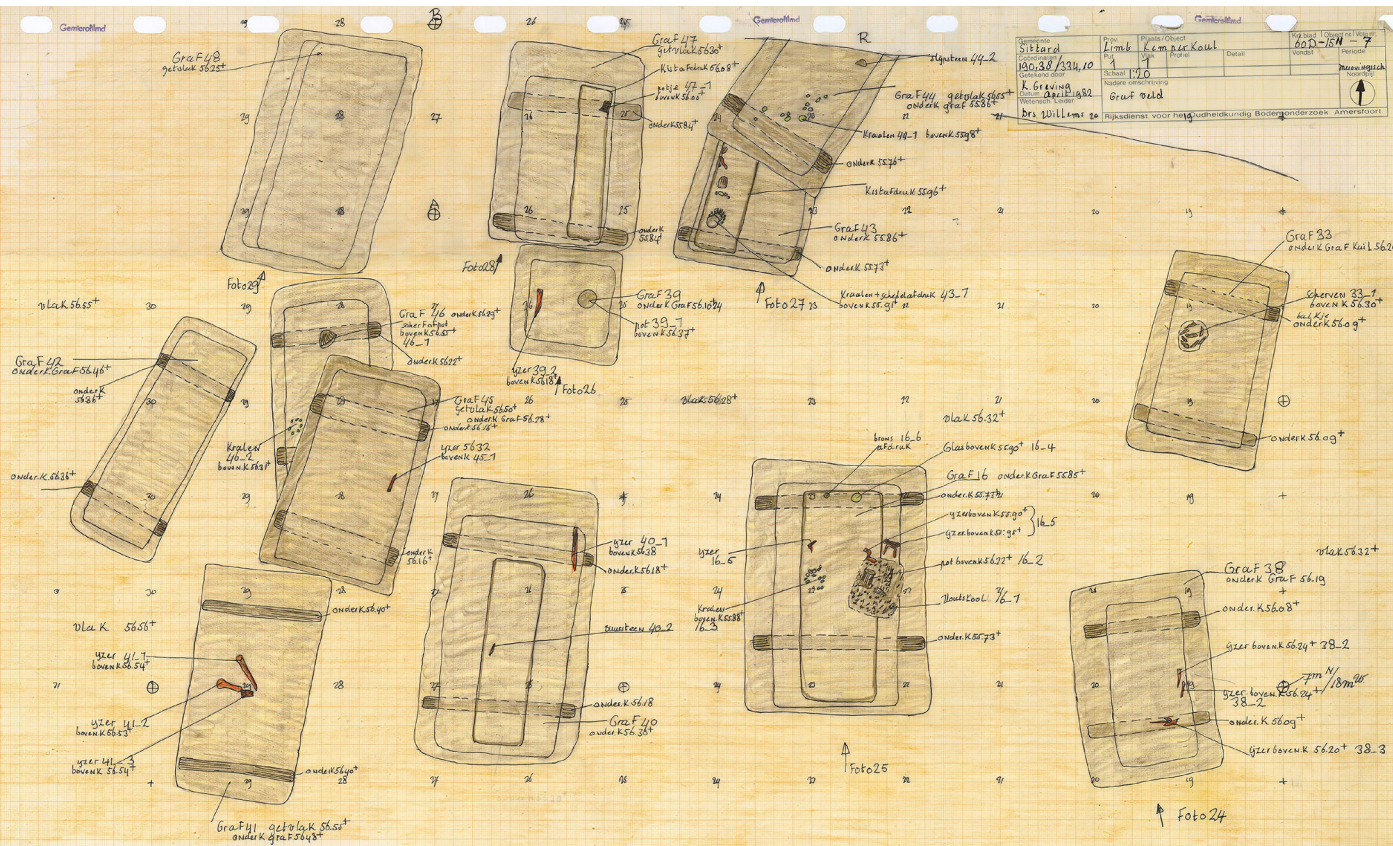
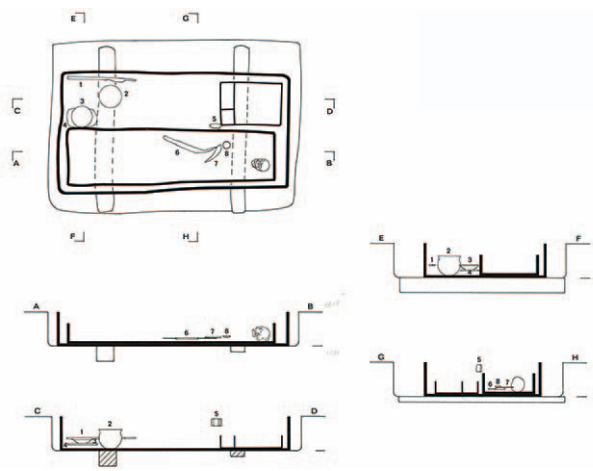


Fig. 2.4
Reconstructed sections of Sittard-Kemperkoul grave 14, drawing: A. Nijs (scale 1:80).



made it possible to complete the excavation of a few graves already discovered in the southern part of trench 1.

In view of the arrangement of the trenches and the distribution of the excavated graves, it seems plausible to consider the borders of the cemetery as known.

Some graves which were dug less deep may have been destroyed by construction pits before the cemetery was discovered. These lost graves, however, would probably not dramatically change the plan of the cemetery as we know it. The excavation activities stopped in November 1982. Shortly, thereafter the analysis of the cemetery started on the basis of all the documentation gathered.

The available documentation: Field drawings and other excavation documentation

An excavation of early medieval cemeteries ideally produces field drawings of the complete cemeteries and of individual graves and their specific features on a scale of 1:20. The excavation of the cemetery of Sittard-Kemperkoul produced 14 field drawings: one provides a complete overview of the cemetery and the excavation trenches (scale 1:100); the other drawings cover segments of the cemetery with drawings of individual graves and their features (scale 1:20).

The drawings of the graves are quite meticulous: next to a rather detailed description of the observed finds, their location within the graves and their exact height are also indicated. The find location and height of the few skeletal remains or their 'shadows' in the soil were also recorded on these drawings, as were all the other details of the graves such as wood remains or soil discolouration of the container walls and beams, as well as charcoal remnants and the exact location of disturbances such as reopening pits (fig. 2.3 shows a part of one of the field drawings). There is also a drawing that presents an overview of the trenches and the measuring system on a plan of the present town of Sittard and a drawing of an east-southeast section of the southern wall of trench 1 (see chapter 3). Unfortunately, this section is the only one recorded. One additional drawing was made; it consists of reconstructed sections of grave 14 (fig. 2.4). This drawing shows the variable heights of the finds, especially those of the vessels in the north-eastern cor-

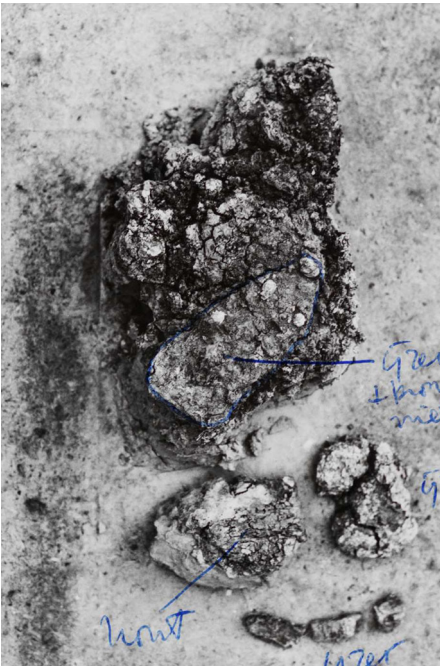
Fig. 2.5
Field photograph of details of a Sittard-Kemperkoul grave.



Fig. 2.7
Field photograph of Sittard-Kemperkoul grave 82.



Fig. 2.6
Field photograph of a cluster of finds (belt fittings) and their relative locations in a Sittard-Kemperkoul grave.



Daily reports were also made during the excavation of the cemetery, but these were also unavailable to us. Daily reports include statements with regard to the choices made during excavations (e.g. the location of the trenches, the construction of the next level, the construction and location of sections), the archaeologists/field technicians present, the weather conditions and other aspects. As mentioned above, a chronological reconstruction of the Sittard-Kemperkoul trench plan could only be made on the basis of the master's thesis of Paul Zoetbrood, written in 1984, who was also present at the excavation in 1982.

The last category of documentation of the Sittard-Kemperkoul excavation is the collection of finds. The original lists of finds, which were certainly made during the excavation, are no longer present. The majority of the find numbers assigned to the finds were recorded on the field drawing. The finds themselves were numbered: they can thus be linked to the precise location in the grave in which they were actually found.

Skeletal remains

Skeletal remains were poorly preserved in the Sittard graves; some remains (silhouettes, small fragments and one nearly complete and articulated skeleton) were preserved or could be recorded, but only from a small number of graves (fig. 2.8). The thesis of Zoetbrood mentions that the condition of these remains was so bad that they could hardly be lifted from the graves and preserved for later analysis in the laboratory. Some teeth and skeletal remains are kept in the Provincial Depot of the Province of Limburg, but they have not been analysed due to their poor condition. The age at death, the biological sex and other features such

as pathology could thus not be established for the individuals buried in the Sittard graves. Only the artefactual constructed gender could be established on the basis of gender specific finds. The graves of children were identified on the basis of the length of the containers or burial pits (see chapter 6 and the catalogue of graves and grave finds).

Finds

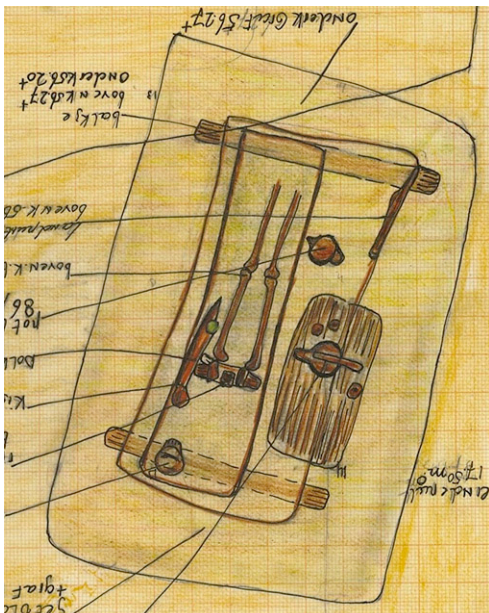
The finds were, if possible, identified and categorised in the field. The descriptions of the finds were recorded on the field drawings, as was their exact find height and their location within the grave. Some clusters of finds in graves were photographed, but, as mentioned before, the list of photographs is not available, which complicates their identification. After their removal from the grave, the finds were cleaned and, if necessary, conserved and/or restored. The find numbers assigned to them during excavation and recorded on the field drawings were also recorded on the actual objects in order to secure the link between the object and the grave. The trajectory of the finds after their removal from the graves is different from that of the excavation administration.

Zoetbrood mentions that the Sittard finds were conserved, restored, photographed and drawn shortly after their excavation, which made it possible to study the cemetery soon after the excavation was completed in 1982. The introduction in the thesis mentions that the finds were cleaned and conserved by J. F. P. Kottman, G. J. Rombout and H. F. Wijnman of the State Archaeological Service (ROB) and J. Kempkens (now Restaurara: an archaeological restoration company in Haelen, province of Limburg). The drawings of the finds were made by J. Hulst, E. Koot and J. Van Vlieden (ROB) and A. Nijs (Nijmegen). The photographs of the finds were made by S. Kuppens, A. Penders and F. Hoedeman (ROB). Unfortunately, these photographs and drawings were not available to us.

Because of all this work performed shortly after the excavation, the cemetery could be studied and the majority of the finds could be put on display in the 'Museum Den Tempel' in Sittard. The other finds were kept in the museum depot.

It is not certain what happened to the collection after 'Museum Den Tempel' closed, but most of it is now kept in the Provincial Depot for archaeological finds from the province of Limburg, which is located in the Centre Céramique in Maastricht. A small collection of precious finds was exhibited in the 'Museum Het Domein' in Sittard (now De Domeinen), a museum of urban history, archaeology and contemporary art. Curator Kitty Jansen made it possible to study the Sittard-Kemperkoul collection which was on display and housed in this museum.

Fig. 2.8
Field drawing on which the skeletal remains found in Sittard-Kemperkoul grave 86 are recorded (scale 1:40).



The publication record

Apart from the available documentation, publications on the cemetery or specific finds are also useful for a final analysis of the cemetery. For the cemetery of Sittard-Kemperkoul, only one text was available: the master's thesis of Paul Zoetbrood, written in 1984, shortly after the excavation ended.² After that, only some finds have been included in publications of specific categories of Merovingian grave goods.³

Zoetbrood attended the excavation a few times. His close connection with the excavation and the limited time between the excavation and the production of the thesis resulted in a text that can be considered a reliable source of information. It is also the single available source which provides insights in the organisation of the excavation given that the primary sources of information, the daily reports and other excavation documentation were not available to us. The thesis of Zoetbrood is an extensive document that covers many aspects of the cemetery (but on the basis of old theories and typo-chronologies) and from which the catalogue was particularly useful for the present analysis of the Sittard-Kemperkoul cemetery.

Making the archaeological data available: The reconstruction of the cemetery plan and individual graves

The field drawing (scale 1:100) with an overview of the cemetery, and the field drawings on which the graves are recorded in detail on a scale 1:20 form the basis for the reconstruction of the site plan (fig. 2.9). First, each individual grave was digitized in Adobe Illustrator.⁴ All the grave features, such as the burial pit outlines,

(2) The thesis was not published as such, but a short report was published by him (Zoetbrood 1983). (3) See, for example, the publication of bracelets by Whürer (2000).

wood remains or shadows of the container walls, locations and recorded shapes of the finds and remnants or shadows of the skeletal remains, were included in these digitized drawings. They are the final composition drawings of all the recorded features (irrespective of the height at which they were recorded) of a grave and are published in the catalogue of graves and finds. The heights of the finds and other features are indicated in the catalogue of graves and finds and in the accompanying database.⁵ Since the graves were recorded at one level only, it was not necessary to combine various levels in composite drawings of graves. A number of graves were excavated in two trenches; the drawings of the two halves had to be combined into one drawing. For some graves, this resulted in outlines which do not completely match (see, for example, graves 28 and 20); this was due to deviations in the measuring system in the different trenches.

Secondly, the digitized drawings of individual graves of sections of the cemetery were plotted in the single complete cemetery plan using the measuring grid of the excavation. The digitized individual graves are published on a scale of 1:40, and the cemetery plan on a scale of 1:250.

The measuring system made it possible to determine the exact location of the cemetery on the current topography map of Sittard and its surroundings (fig. 2.1). Features other than grave structures were not observed or not recorded during the excavation. All the recorded contexts are thus identified as graves; two contexts (10 and 21) are, however, identified as ‘possible graves’. Of these contexts, only vague outlines were recorded. It is not certain whether these outlines were originally those of graves.

The grave structures

The variety of grave structures in the Sittard cemetery consists of burial pits, wooden coffins (placed on beams), chamber graves and tree trunk graves (see also chapter 3). A database that defined a diversity of variables regarding grave structures was already developed for other projects.⁶ The variables include the features of the grave structures and their dimensions, as well as the orientation of the graves and their height compared to the excavation levels and reconstructed surface level. The output of the analysis of the grave structures from Sittard-Kemperkoul consists of all the relevant variables published in the catalogue of graves and finds and those entered into the accompanying database but not included in the catalogue. This data formed the basis for the analysis of the grave structures in chapter 3 by Maaïke de Haas.

The finds

Nearly all the finds from the cemetery were drawn by Bob Donker (University of Amsterdam); the finds kept in the ‘Museum Het

Domein’ (De Domeinen) were drawn and digitized by Maaïke de Haas. All of the finds were photographed by ‘Artefact’ (a company inclusive of photographer Paulien Gemmeke and assistant Sjoerd Aarts). The weapons and pottery vessels were described, classified, dated and entered into a database by student Carlijn Hageraats for her ‘material practice’ thesis.⁷ The remainder of the finds, except for those on display in the Museum Het Domein (De Domeinen), were studied in a work group by students of the University of Leiden under the supervision of Frans Theuws. The features of the finds were measured, described and recorded, and the majority of the finds were classified and dated. The finds on display in the Museum Het Domein (De Domeinen) were studied by Mirjam Kars.

Eventually, all the descriptions of the finds were entered into the database for grave finds, which was already developed for the Servatius project and Anastasis project.⁸ This database consists of various input fields, which are in fact the variables defined for each category of objects. It is presumed that these variables are relevant for the classification and dating of the finds, but also for reasons of comparison with other cemeteries and for research on social backgrounds of burial practices.

A selection of the variables is included in the catalogue of graves and finds in this publication, in which the photographs and drawings of the finds are also published. The input in the database formed the basis for the extended description and analysis (chapter 4) of the grave finds. It consists of the actual description of the finds, their interpretation, classification and dating, possible parallels and their location in the grave in relation to the body. This extensive description forms the basis for the further analysis of the cemetery, namely the dating of the individual graves (chapter 5), the chronological development of the cemetery and a possible history of the burying community (chapter 6) and prevalent and particular burial practices (chapter 7).

Demography

Since the majority of the graves contained very poorly preserved skeletal remains or no remains at all, it was impossible to determine the age at death and the biological sex of the individuals buried in the Sittard cemetery. It was only possible to identify the artefactually constructed gender on the basis of gender specific objects (see chapter 6). Research on other Merovingian cemeteries revealed a rather significant correlation between gender specific grave goods and the biological sex of the deceased; it can be assumed that this was also the case in the Sittard cemetery. The graves of children were identified on the basis of the length of the containers and burial pits (see chapter 6). The age at death of the adults could not be determined.

(4) F. Theuws digitized all the individual graves and made the reconstruction of the site plan. (5) All the primary and secondary data produced are made available at DANS (Data Archiving and Networked Services: <http://www.dans.knaw.nl/>). (6) The structure of this database was developed for the Servatius project and Anastasis project by D. Smal, R. Panhuysen and F. Theuws. (7) Unpublished bachelor’s thesis: ‘Materiaalpracticum Sittard-Kemperkoul’ (C. Hageraats, 2011, University of Amsterdam). (8) The structure of this database was developed for the Servatius and Anastasis projects by M. Kars, M. Van Haperen, M. De Haas and F. Theuws.

Fig. 2.9
Reconstruction of the site plan Sittard-Kemperkoul (scale 1:250). 1. inhumation grave with number, 2. recent disturbance, 3. excavated area.



The cemetery of Obbicht

The discovery and excavation of the cemetery

The cemetery of Obbicht was published in 1940 by Hendrik Joseph Beckers and his son Gabriël Beckers in ‘Voorgeschiedenis van Limburg’, a publication which deals with the archaeology of the province Limburg from prehistory to the Middle Ages. Hendrik Joseph Beckers (1862-1950) was a practising doctor in Beek (Limburg), who had a more than recreational interest in archaeology (fig. 2.10). It was the father Beckers, and some helpers, who excavated a Merovingian grave in ‘plot B 1793 of Jean Vencken’, located in between the villages Obbicht, Grevenbicht and Born in July 1936 (fig. 2.11-2.12). Some years before, pottery vessels were referenced as having been discovered in this parcel and in an adjacent one. These finds instigated a small scale dig in 1932. The discovery of a Merovingian grave warranted a thorough investigation of the terrain, but the difficult soil conditions (gravel with a top layer of loess) would have led to an expensive excavation. It was therefore decided that the archaeological excavation of the site would be postponed. When the site came in use as a gravel extraction pit in 1936, the Beckers seized the opportunity. The owner of the terrain, Jean Vencken, accorded the excavation, and the assistance of the mayor was also mentioned in the introduction to the publication (probably referring to financial aid). As expected, the excavation revealed a Merovingian cemetery, eventually consisting of 64 graves.

The site was named ‘Oude Molen’ (Old Mill) after a wooden windmill which was built on this parcel and functioned as grain mill. It was demolished in 1895 but was replaced by another mill in the same year. The first mill was a so-called ‘standerd mill’, which is

Fig. 2.12
The location of the cemetery Obbicht-Oude Molen on the Chromotopographic Map (Bonnekkaart) from c.1900 (scale 1:12.500).



Fig. 2.11
The location of the cemetery Obbicht-Oude Molen on the topographical map (scale 1:33.333).

Fig. 2.10
Hendrik Joseph Beckers and his team excavating the Stein-Groote Bongerd cemetery (reprinted from Beckers/Beckers 1940).



a mill standing on four above ground fundaments (partly dug into the ground?) of bricks. It can be assumed that these four foundations destroyed some of the graves. The rebuilt stone mill, which also functioned as a grain mill, was a ‘bergmolen’, a mill built on an artificial elevation. In the introduction to the catalogue of the cemetery, it is mentioned that the soil for this artificial hill was extracted in its vicinity and that this soil extraction destroyed another number of Merovingian graves causing the grave goods to become visible.; it is not known what happened to these finds. The hill itself would have protected the remaining graves underneath. This second mill was demolished in 1921, thus 15 years before the archaeological excavation took place.

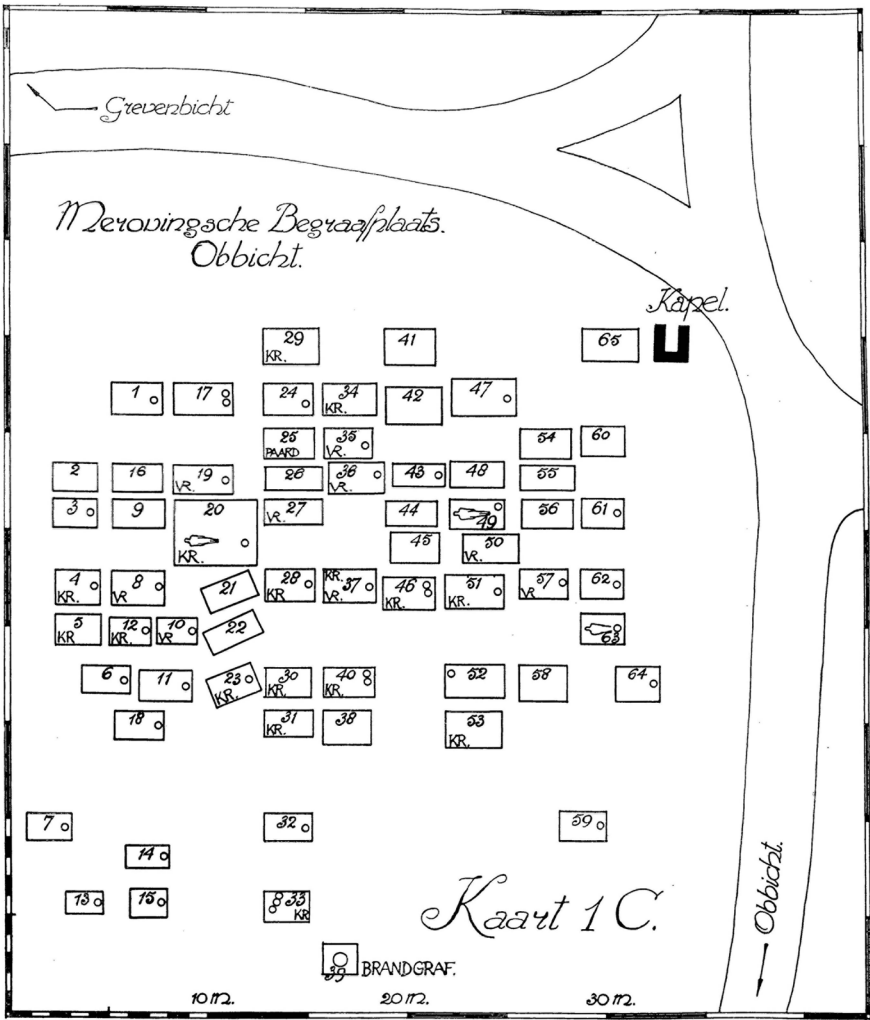


Fig. 2.13
The Obbicht-Oude Molen cemetery plan as published in Beckers and Beckers 1940 (scale 1:400).

The coordinates in the database of old and disappeared mills in the Netherlands⁹ (given coordinates: 182867, 338568) place the two consecutive mills close to a crossroads and the chapel (*kapel*) indicated on the published cemetery plan (fig. 2.13). The location of the first mill can be seen on the oldest cadastral maps of c. 1830 (figures 2.14-2.16). On the general map (fig. 2.14-2.15), the location of the mill is indicated with a circle and a red symbol in the form of a cross indicating the four foundations of the first mill. On the detailed map (fig. 2.16), it is indicated with a circle and a cross without colour (parcel nr 676). According to the related documents, parcel number 675 to the south of the mill is a house, probably of the miller.¹⁰ It is indicated with two red rectangles, possibly a house and a shed. Therefore, there were two buildings on the cemetery site, one mill and a miller's house. The distance between the north side of the miller's house and the mill hill was about 9 meters. On the map of c. 1925 (fig. 2.12), the house is indicated with a red symbol in a U-form. The chapel is indicated, too. The distance between the northern wall of the house and the chapel is c. 42 meters. So the southern limit of the hill of the second mill was about 33 meters south of the chapel. This is at the height of the lower limit of the map provided by Beckers and Beckers (fig. 2.13). The mill stood more or less in the area of graves 32, 33 and 59.

In the original catalogue of graves and finds, a number of graves were mentioned to have been (partly) affected by the mills. Their contents were recovered, but the outlines of the burials pits were not observed or recorded. The graves concerned are 13, 14, 15, 30, 31, 32, 33 and 59. To be exact, graves 13, 30, 31 and 59 were recorded as the graves destroyed by the construction of the mill, graves 14, 32 and 33 were said to have been located underneath the mill and grave 15 was mentioned to have been destroyed by foundations. Although burial pits were not observed, the locations of these graves are depicted on the cemetery plan, probably on the basis of the discovered grave finds (fig. 2.13). It can be assumed that a number of graves were originally present in the open space in between the graves destroyed by the mills (fig. 2.13), maybe c. 10 graves, considering the burial density of the remainder of the cemetery (see also chapter 6).

Fig. 2.17
Obbicht: viewpoint from the NE with chapel and burial ground.



Fig. 2.14
The location of the cemetery Obbicht-Oude Molen on the oldest cadastral map of c. 1830.



On the topographical maps of the 1930s and later, the house is still indicated. Beckers and Beckers must thus have been excavating immediately to the north of the house. A chapel was indicated along the crossroads in the north-eastern corner of the cemetery terrain, which is in accordance with the small chapel still present at this location (fig. 2.17).

Beckers and Beckers observed that the cemetery was originally much larger than the 65 excavated graves. Apart from the graves destroyed by the construction, and probably also the deconstruction of the mills, it is also mentioned that graves were destroyed by labourers, namely graves 2, 3, 4, 6, 7, 37 (partly) and 40 (partly). These graves are nonetheless depicted as intact graves on the original cemetery plan. (The plan is thus in part a reconstruction of the cemetery and in part an actual representation of the graves found.)

Fig. 2.15
A detail of the cadastral map of c. 1830.



It is not clear which work or construction activities caused these disturbances; neither can the date(s) of the disturbances be determined. Since the mentioned graves are located in the western section of the cemetery, it can be presumed that they were destroyed by the gravel exploitation known to have taken place in the western section of the terrain. Beckers and Beckers identified the graves in the western section of the cemetery as the oldest graves and those in the eastern section as the youngest because some skeletal remains were found in the eastern graves. They assumed that the older skeletons had already decayed completely and that the remains present would have decayed within the next 50 years had the excavation not taken place.

Graves were also observed underneath the road north of the cemetery. These graves were not recorded on the cemetery plan or described in the original catalogue of graves and finds. The cemetery was thus somewhat larger than the 64 excavated graves but probably not much larger than the cemetery of Sittard, originally consisting of approximately 100 graves. The cemetery of Stein would have been of approximately the same dimensions (see chapter 6).

Fig. 2.16
A detail of the cadastral map of 1811-1832.



Beckers and Beckers mentioned that the cemeteries of Obbicht and Stein (published in the same book) are rather similar, which is understandable since Merovingian cemeteries are considerably alike on a general level. Apart from resembling graves and inventories, other similarities mentioned are the poor condition of the soil and the proximity of numerous roads. The research of Merovingian cemeteries had not yet reached a high standard by that time (1930-1940). Although Merovingian cemeteries are indeed similar on a general level, their variability is nowadays also an important matter of discussion.

An excavation strategy was not discussed in the single available source of information, but the descriptions of the graves reveal some clues. The cemetery was not excavated in trenches. It can be expected that the excavation began with grave 1 and ended with grave 64 (grave 65 is in fact a grave found in another plot). The excavation most likely started in the west (near the gravel pit) and ended in the east. For now, it can be concluded that the original boundaries of the cemetery are difficult to establish. Graves were found underneath the road to the north of the cemetery, but it is not known whether the cemetery expanded beyond this road. To the west, the cemetery was partly destroyed by gravel extraction, but it remains unknown how many graves were actually destroyed. A road borders the cemetery to the east, but it is not clear whether the cemetery expanded underneath and beyond this road. It was mentioned that an additional grave was found in another parcel (found when gravel was extracted on the Hinsberg in

(9) <http://www.molendatabase.org/> (10) Oorspronkelijk Aanwijzende Tafel: <http://watwaswaar.nl/#bg-5w-6-1-1v-1-3oy8-RYO---Mba> (21-09-2015)

Fig. 2.18
Old drawings of the finds from Obbicht grave 20 (scale 1:4).

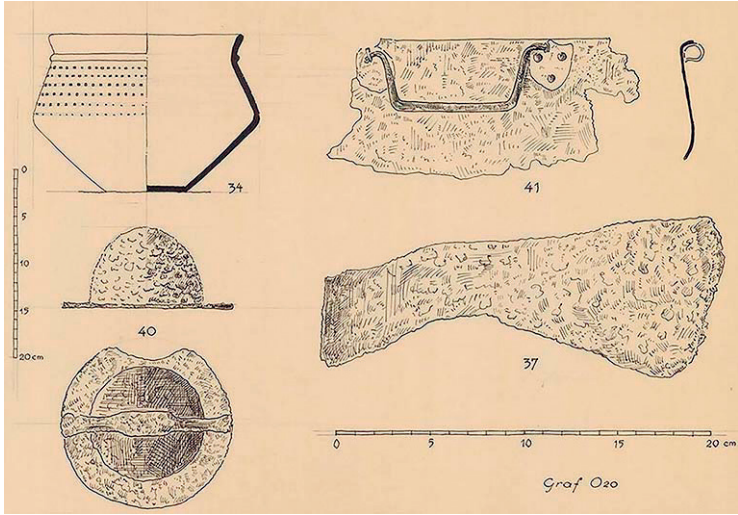


Fig. 2.19
Photograph of finds as published in Beckers/Beckers 1940.



parcel B1277; this exact location cannot be identified). Its exact location and orientation were not recorded, but it is added to the north-eastern section of the cemetery plan (which is thus not representing its original location). It can be assumed that this grave was found more to the north-east or east of the cemetery and thus that the cemetery expanded more to the north-east than the cemetery plan shows. It is not known whether the excavation extended further to the south than the most southern graves recorded on the cemetery plan, but the southern border seems to be indicated by cremation grave 39. The boundaries of the cemetery, the estimated size and the layout of the cemetery are discussed in more detail in chapter 6.

The available documentation: Field drawings and other excavation documentation

The cemetery plan published by Beckers and Beckers in 1940 in-

Fig. 2.20
The spouted pot from Obbicht grave 18 before and after the second restoration round (photograph 1: Restaura, photograph 2: Paulien Gemmeke).



icates that field drawings and/or drawings of individual graves were produced during the excavation, but these original sources of information were not available to us.¹¹ The existing documentation on the basis of which the cemetery is analysed is the cemetery plan (fig. 2.13) and the catalogue of graves and finds published by Beckers and Beckers, the actual grave finds and some old drawings of these finds (fig. 2.18). Photographs of the majority of the finds can be found in the publication from 1940, but, unfortunately, these do not always refer to the associated graves or find numbers and can thus not be used as verification or aid for the actual assignment of finds (or missing finds) to graves (fig. 2.19). Excavation documentation as daily reports, excavation photographs and lists of photographs and drawings are not available.

The published cemetery plan and the available descriptions of the graves reveal that the excavators recorded only the rough outlines, locations and orientations of the burial pits on a field draw-

Fig. 2.21
A box with finds in restoration laboratory Restaura: a photograph and X-ray photograph (1:4) (photograph: Restaura).



ing. Their exact dimensions, some exactly established orientations and the locations of the finds, body imprints and remains or soil discolourations of wooden containers within the graves seem to have been recorded as written information alone. The locations of the pottery vessels in the graves are indicated on the published cemetery plan, but these are merely approximate indications compared to the exact locations given in the descriptive catalogue.

Human and animal remains

Human remains were poorly preserved in the cemetery of Obbicht. Beckers and Beckers published an extensive report of Professor Schoorl and Dr Kurris on the soil conditions which caused this poor preservation.¹² It was concluded that the gravel and loess soil is poor in lime content and high in carbohydrate content, which, in combination with water, causes a reaction that dissolves skeletal remains relatively fast. They concluded that the few skeletal re-

mains observed in the cemetery would have dissolved in the next 50 to 100 years had the cemetery not been excavated. The general concluding part of the publication mentioned that the discovered skeletal remains were very thin and fragile; the few remains present were analysed and are discussed in chapter 4.¹³ Next to the actual remains, soil discolourations indicating the former presence of bodies were observed in a number of graves; these are indicated on the new cemetery plan and discussed in the catalogue on graves and finds.

The age at death, the biological sex, and other features such as pathology could thus not be established for the majority of the individuals buried in the Obbicht graves. Only the artefactual constructed gender could be established on the basis of gender specific finds, and the graves of children were identified on the basis of the recorded length of the coffins or burial pits (see also chapter 3, 6, 7 and 8, the catalogue of graves and grave finds).

One horse burial was identified in the cemetery. Although it was recorded that a considerable part of the skeleton was preserved and excavated, only some molars are currently present in the collection.¹⁴ From one other grave, the teeth of a horse were identified as finds. Other animal remains were not identified.

The history and current status of the finds

It is not known what happened to the finds immediately after their discovery. The majority of the finds were, however, cleansed and/or restored at a certain point after the excavation. The photographs of the metal finds in Beckers and Beckers 1940 show considerable corrosion, so they had presumably not yet been treated at the time of publication. The pots known to have been found in fragmented condition are depicted as complete specimens and were thus restored before 1940 (fig. 2.19). A second round of restoration was executed by the restoration laboratory Restaura in Haelen, the Netherlands. Their restoration reports provided some clues about the condition in which the objects were found, especially about the fragmented condition of the pottery vessels, since the results of the first restoration were made undone. The vessels, but also the other objects, were thereafter restored into (nearly) complete specimens again (fig. 2.20). The majority of the finds is now available in restored condition, but corroded and fragmented objects are also present in the restoration company Restaura since finances for their treatment are not yet available. Photographs and X-ray photographs were made of the boxes in which the fragmented and corroded objects are stored (fig. 2.21). These finds were assigned to specific graves on the basis of their original find numbers and descriptions in the original catalogue and were classified and dated if possible. Individual photographs could be made (by Har Heijmans of Restaura) of some finds stored in the restoration company since they were in a rather good condition.

The collection is nowadays stored or on display in the Museum

(11) We tried to track them via a search of descendants of father and son Beckers, but this endeavour was unsuccessful. (12) Beckers/Beckers 1940, 341-342. (13) They

were analysed by Dr Liesbeth Simts of the University of Amsterdam. (14) They were analysed by Inge van der Jagt MA, of the RCE (State Service of Cultural Heritage).

‘Stichting Erfgoed Stein’ (before Archeologiemuseum Stein) in the village of Stein in the province of Limburg. It is part of the larger collection of ‘Archeologiestichting Dokter Beckers-Pater Munsters’ (founded in 1993, after the death of Munsters, and now ‘Stichting Erfgoed Stein’).¹⁵ The museum, originally named ‘Archeologisch Reservaat’, was founded in 1967 by the pre-existing Archaeological Foundation Stein (Archeologie Stichting Stein). The museum was installed in cooperation with the prehistoric department of the University of Leiden. It can be assumed that the finds from the Merovingian cemetery of Obbicht (and the Merovingian cemetery of Stein, see below) were stored before 1967 either by Beckers himself or by the foundation ‘Archeologie Stichting Stein’ and would have been transferred to the museum thereafter. The above described ‘history’ also applies to the finds from the cemetery of Stein (see below).

A number of old finds drawings are available (fig. 2.18). The finds are now all drawn and photographed for the current publication according to prevalent conventions. Half of the collection was drawn by Bob Donker of the University of Amsterdam and photographed by Anneke Dekker, also of the University of Amsterdam. The other half was drawn by Alicia Zwart and photographed by Archeofact (photographer Paulien Gemmeke). The drawings and photographs are published in detail in chapter 4 and in the catalogue of graves and finds.

Some finds referring to find location Obbicht are on display in the Museum Het Domein (De Domeinen) in Sittard, and some are stored there as well. Unfortunately, find numbers corresponding with the notation of the other Obbicht finds were not recorded on these objects and they are neither depicted on the photographs of the Obbicht finds in the first publication of the cemetery (apart from one red spouted pot). It was impossible to assign them to specific Obbicht graves, and it should be questioned whether they actually belonged to the Obbicht cemetery since they do not match with the find descriptions in the original catalogue and the photographs in the publication of Beckers and Beckers 1940.¹⁶ A number of finds are missing from the collection, and some finds could not be assigned to a grave or were assigned to a grave only on the basis of descriptions in the original catalogue of graves and finds. This specific information is recorded in chapter 4 and in the catalogue of graves and finds.

The original find numbers written on the objects consist of an identification of the excavation terrain, which is VI B for Obbicht, followed by an uninterrupted range of ascending numbers from graves 1 to 65. The numbers recorded on the finds are used to assign them to the graves in which they were found. A number of finds could not be assigned to a grave on the basis of find numbers; they were matched with graves on the basis of the find descriptions in the original catalogue. The newly assigned find numbers

as included in the catalogue of finds and graves in this publication consist of the associated grave number, followed by the main find number and sub number (for example, the first find from grave 1 is: 1-1-1). These numbers are also indicated on the drawings of the individual graves, but only if the find locations of the associated finds could be identified.

A recent search on the field with a metal detector resulted in a number of metal Merovingian finds, which in all probability belonged to the excavated cemetery.¹⁷ The finds are a gold ring with filigree and stones, a bird brooch and a key.¹⁸

The publication record

The cemetery of Obbicht is part of the Beckers and Beckers publication from 1940, not long after it was excavated in 1936. The publication consists of a cemetery plan (fig. 2.13), although not a precise one according to the available information recorded in the descriptive catalogue of graves (see below). After a short introduction, which enlightens the discovery of the cemetery, a description of each grave is given. This description consists of the exact dimensions of the observed outline of the burial pit, the finds and their specifics (appearance and dimensions), the locations of the finds in the graves (measured in centimetres from the grave walls or given in more descriptive terms), the presence of skeletal remains or body imprints and other specifics such as presumed ancient disturbances and the possibility of some graves being double graves. All these descriptions form the basis for the current analysis of the cemetery since other documentation no longer exists.

In the final part on the Merovingian period in the publication of Beckers and Beckers, some conclusions and additional information on the cemetery were provided. Some clues about the original dimensions of the cemetery were given, as were some exact orientations of graves, remarks about the appearance of the cemetery and an analysis of the preservation of skeletal and wood remains in gravel and loess soils. The chapter also deals with the established date range during which the cemetery was used. Further, it addresses whether or not Christians can be identified in the Merovingian burial record.

With regard to the dating of the cemetery, Beckers and Beckers claim that its chronological development cannot be established as precisely as it can for the cemetery of Stein. The graves of the early burial phases were, in their opinion, destroyed in Obbicht but were, according to them, preserved in Stein (see chapter 5 for the dating of individual graves and chapter 6 for a reconstruction of the chronological development of the cemeteries). It was also observed that the graves were distributed over the cemetery unevenly. This particularity is attributed to the presence of family groups, which, according to Beckers and Beckers, also explains the open spaces in the cemetery and the uneven distribution of older and

younger pottery vessels over the cemetery. These conclusions will be dealt with in chapter 6.

That pottery shards were found scattered throughout some of the graves is, according to Beckers and Beckers, an indication of ritual feasting after which vessels were destroyed. The scattering of the shards might have also been caused by an ancient reopening of the graves, as already suggested in the descriptions of individual graves in the original catalogue.

Altogether, this single available source of the Merovingian cemetery of Obbicht provides enough information for a new analysis despite the inexactness of some recorded features (such as the forms, locations and orientations of the graves). The analysis of the available information resulted in a reconstructed site plan which offers a fair basis for a detailed analysis of numerous aspects of the cemetery.

One additional publication can be mentioned: the publication of Ypey on the glass claw beaker from grave 20.¹⁹ The claw beaker is described in detail, and some drawings and photographs were also made of this rather rare specimen (fig. 2.22).

Reconstructing the site plan

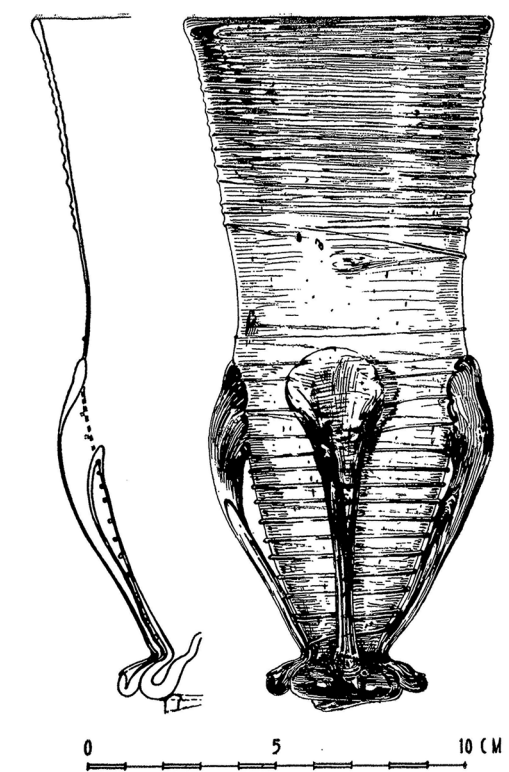
Since field drawings were not present, the cemetery plan published in the publication of Beckers and Beckers from 1940 (fig. 2.13) was used as basis for the reconstruction of the site plan (fig. 2.23). The published cemetery plan was digitized with Adobe Illustrator. The scale was established on the basis of the ruler depicted to the sides of the plan. Unfortunately, these measurements are not exact: the lengths of the single centimetres on the ruler are variable. It was decided to isolate 5 centimetres of the ruler and transform the plan to a scale of 1:100 after which all the depicted elements on the map were digitally traced. The graves were depicted as rectangles, which will not represent their exact original shape. It can be assumed that the exact outlines of the discovered burial pits were not recorded on the field drawing(s).

In the original descriptive catalogue of graves and finds, the dimensions of presumably the outlines of the burial pits were recorded, as were the dimensions of some of the observed traces of wooden constructions and the general orientations of some of the graves. It appeared that the dimensions of the graves in the catalogue were not in accordance with the dimensions of the graves on the cemetery plan; the relative locations of the graves were thus neither exact. The general orientations of the graves for which it was mentioned are similar to the orientations of the graves on the plan; it can be assumed that the general orientations of the graves are represented correctly on the cemetery plan. The dimensions of the graves reproduced on the new reconstructed plan were altered on the basis of the available information. The adjusted outlines were drawn with the original north-western corners of the graves

as a point of departure. The relative locations of the graves were adjusted on the basis of the newly created outlines, which were, for the majority of the graves, different (either larger or smaller) from the original outlines. In particular, grave 27 obtained a rather different location on the cemetery plan since grave 26 to the north of grave 27 was much larger than it was originally depicted. For a number of graves, the relative distance between them was recorded; this was integrated in the adjusted cemetery plan when possible. The graves for which it was recorded that they were (partly) destroyed are indicated on the new cemetery plan with interrupted lines since their exact locations, dimensions and orientations were in fact not observed.

Of all the finds, only the locations of pottery vessels were indicated on the 1940 cemetery plan. The locations of a considerable number of other finds were more or less exactly described in the catalogue of the graves. The finds for which this information was available were also reproduced on the reconstructed cemetery plan; these locations are fairly accurate but not exact since the descriptions were not always obvious. For the majority of the finds, the locations were given as at a certain distance in centimetres from the grave pit walls; it was, however, not clear whether this location was measured from the middle of, for example, a pot or from one of its sides. Nonetheless, the represented locations give a fairly accurate image of the distribution of the finds in the graves.

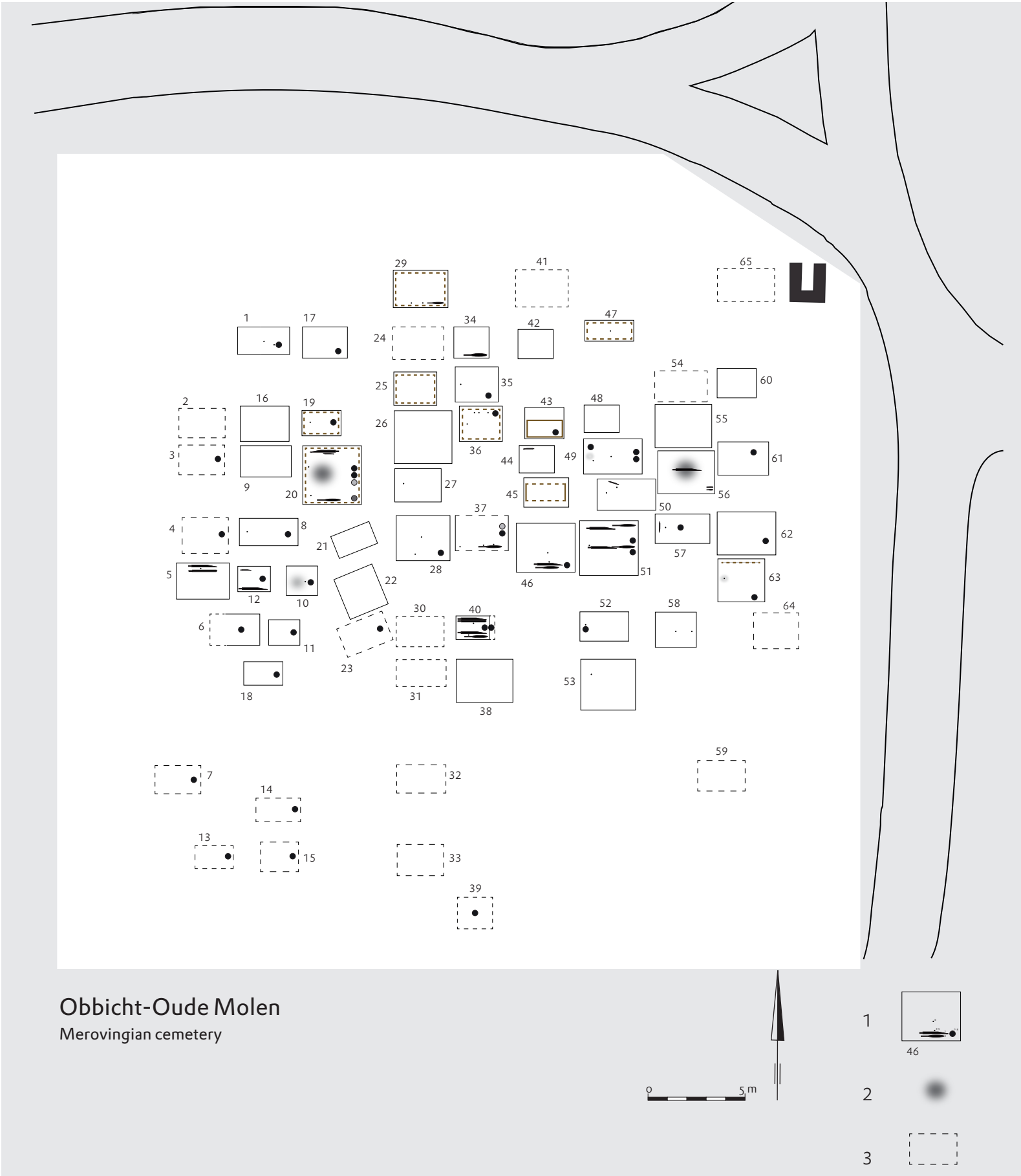
Fig. 2.22
Obbicht claw beaker (scale 1:2) (reprinted from Ypey 1957/1958).



(15) See the website <http://www.stichtingerfgoedstein.nl/> for detailed information on the background of the museum and the collections. (16) Apart from a red spouted pot from Obbicht graves 51 B of which the available old drawing matches with the pot stored in the museum Het Domein. The finds are nonetheless depicted in the current

catalogues of graves and finds. (17) They were found by Mr Moonen, who reported them to Drs. Wim Dijkman (curator at Centre Céramique Maastricht). (18) Photographs could unfortunately not be obtained. (19) Ypey 1957-1958.

Fig. 2.23
Reconstruction of the site plan Obbicht-Oude Molen (scale 1:250). 1. schematic representation of inhumation grave with number, 2. body imprint, 3. disturbed grave: location, orientation and dimensions uncertain.



The vessels (ceramic, glass and copper alloy) are indicated as dark filled circles. The lance heads, seaxes, swords and arrow heads are schematically depicted when their orientation was given. If this was not the case, they are indicated with a dot, as are all the other finds.

In some graves skeletal remains (skulls) or shadows of human remains were discovered. The dimensions of the discolourations or the locations of the skeletal remains were recorded in the descriptive catalogue of the graves. These recorded observations are depicted as shadows or outlines in the graves concerned on the new cemetery plan.

Shadows or wood remains of wooden containers were also observed during the excavation. The exact dimensions of the observed structures were only sporadically given: the majority of the wooden constructions are therefore represented as interrupted lines.

The new reconstructed cemetery plan and individual graves form the basis for the further analysis of the cemetery. It must be kept in mind that the given locations of the graves in the cemetery and the finds in the graves are not exact but merely a fairly accurate representation of the cemetery as it originally was.

The cemetery of Stein-Groote Bongerd

The discovery and excavation of the cemetery

The publication of the excavators Beckers and Beckers, which appeared in 1940, is the single source of written information about the excavation of the cemetery Stein-Groote Bongerd (fig. 2.24). The single clue given in this publication as to why the terrain was eventually excavated is the discovery of a prehistoric pot. It was found, already some years before the actual excavation, in terrain section D nr. 2732, named 'Groote Bongerd', located opposite to the castle ruin Stein (fig. 2.25).²⁰ The plot is known to have been covered with centuries-old oaks by then, of which some were removed and replaced by new trees. The pot was found during these replanting activities and instigated a preliminary archaeological investigation. The exact year in which the excavation took place is not mentioned, but it would not have been long before 1940.

The investigation started with the digging of a number of small test trenches in the steep slope to the south of the terrain. Large quantities of pottery shards dating to the Stone Age, Bronze Age and Iron Age were found, as were some Roman shards, a Roman coin, some flint splinters and a scraper. It is suggested that the terrain was levelled before it was taken into use as a cemetery in the early Middle Ages. This explains the high quantity of shards in the slope and indicates that the terrain had been occupied throughout prehistoric times and thereafter. The small test excavation trench-

es also revealed that the soil was considerably disturbed by the frequent removal and planting of trees.

The soil disturbance became even more obvious when the terrain came into use as a gravel extraction location. The author(s) supervised the gravel extraction archaeologically; they collected shards and interpreted the section walls of the gravel pit. In one of these sections, close to the road from *Keereind* to the castle as they refer to, four grey-black discolourations were observed. On closer inspection, they were identified as Merovingian graves. They were at first dated to the fifth century since they contained numerous terra sigillata shards, next to Merovingian shards. Nothing is mentioned about the actual excavation of the cemetery, but it can be expected that it started just after the four graves were discovered.

The location of the cemetery is only indicated as being in the proximity of the village of Stein (the terrain was not built on in the first half of the 20th century), opposite to the castle ruin Stein, lying on the fringe of a terrace with a magnificent view over the river Meuse. The name of the terrain is by then known as 'Groote Bongerd' (Large Orchard) and parcel number 2732 section D. Both the terrain name and parcel number cannot be found on old maps, but, on the basis of the mentioned clues, the cemetery can be placed on a terrain, now a built-up area, opposite to the castle ruin (figures 2.26 and 2.27).²¹ On the historical maps, the curve of the slope compares well with the curve of the slope on the map of the cemetery by Beckers and Beckers (figures 2.24 and 2.28). Today, the terrain is to the north bordered by a street named Boomgaardstraat (referring to 'Bongerd'), which is also a clue for the location of the cemetery on this exact parcel (fig. 2.26).

The four graves were mentioned to have been found in a section close to the road from 'Keereind' to the castle. On the old cadastral map the supposed parcel in which the cemetery was found is called 'Kereind' (fig. 2.27). On recent maps, a road to the northeast of this parcel is called 'Keerend' (fig. 2.26). The road along which the four graves were found can be considered to be the road from the current road Keerend to the castle (now de Ondergenhausweg), which forms the eastern border of the excavated cemetery (fig. 2.26). This reconstruction is in line with the location of graves 1-4 in the north-eastern section of the cemetery, assuming that these are similar to the first four graves discovered. However, graves 1-4 might also be the first graves excavated, close to the four graves discovered in the section but not included in the cemetery plan (fig. 2.24).

Beckers and Beckers already noticed that the cemetery was originally larger than the 72 identified graves. Graves were destroyed by gravel extraction to the north and in the middle of the cemetery, by the construction of a house, also in the middle of the cemetery, by a broadened road to the east and by erosion of the slope south of the cemetery. Beckers and Beckers suggested that the

(20) The pot was mentioned to have been in possession of notary Haan from Urmond. (21) Because the indications were clear enough, we did not spend money on a survey in the cadastral archives to find the parcel 2732 section D in Stein.

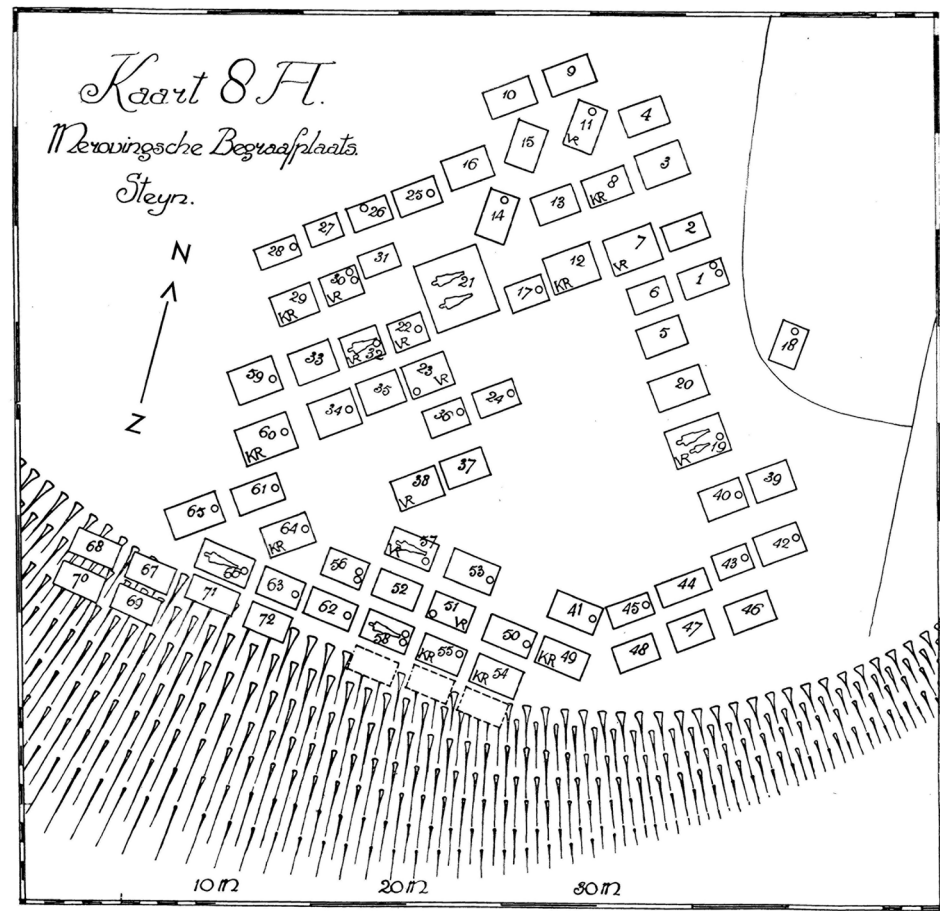


Fig. 2.24
The Stein cemetery plan as published in Beckers/Beckers 1940
(scale 1:400).



Fig. 2.25
The location of the cemetery Stein-Groote Bongerd on the topographical map
(scale 1:33.333).

Fig. 2.26
The exact location of the cemetery Stein-Groote Bongerd on a recent map.

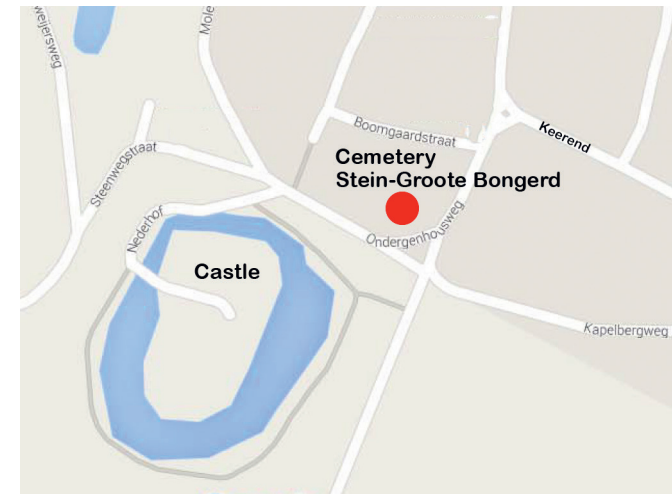
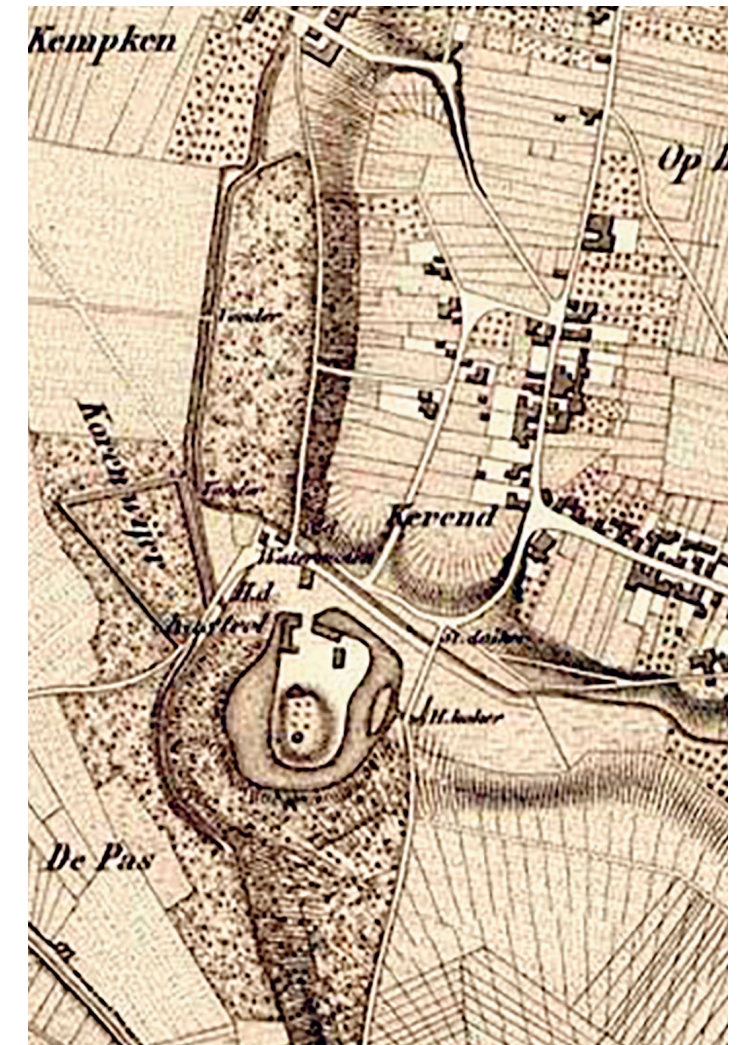


Fig. 2.27
The location of the cemetery Stein-Groote Bongerd on the oldest cadastral map, c. 1830.



Fig. 2.28
The location of the cemetery Stein-Groote Bongerd on a topographical map, c. 1849.



The excavation strategy was not discussed, but the descriptions of the graves reveal some clues. It can be expected that the excavation began with grave 1 and ended with grave 72. The excavation thus started in the north-east and ended in the south-west. The descriptions of the graves reveal that the dimensions of the graves, the location of the finds within the graves, the location of the body imprints and remains and shadows of wooden containers (chambers and coffins) were considered important features for the excavators. It is not clear whether the observed outlines were recorded as they were seen in the field. The graves are depicted as perfect rectangles, which is certainly not how they came across in the field.

The available documentation: field drawings and other excavation documentation

The availability of excavation documentation is similar to that described for the Obbicht cemetery, since for both the cemeteries the publication of Beckers and Beckers from 1940 is the only source of information. It is not known how the structures and finds were recorded during the excavation, but the publications suggest that field drawings and/or drawings of individual graves

cemetery probably reached as far as the first houses of Stein to the north and north-east of the cemetery.

Graves originally present in the slope to the south of the cemetery were expected to have disappeared since two finds of biconical pots were known from this location (2 graves?). One grave was destroyed by the construction of a house. These three graves are numbers 73, 74 and 75 and are depicted to the south of the cemetery. Their exact location is not known. For now, it can be concluded that the original boundaries of the cemetery are difficult to establish, but it will have been comparable to the cemeteries of Obbicht and Sittard-Kemperkoul (approximately 100 graves). The boundaries of the cemetery and its original size and layout are discussed in more detail in chapter 6.

Fig. 2.29
Photographs of Stein graves 19 and 20 as published in Beckers/Beckers 1940.

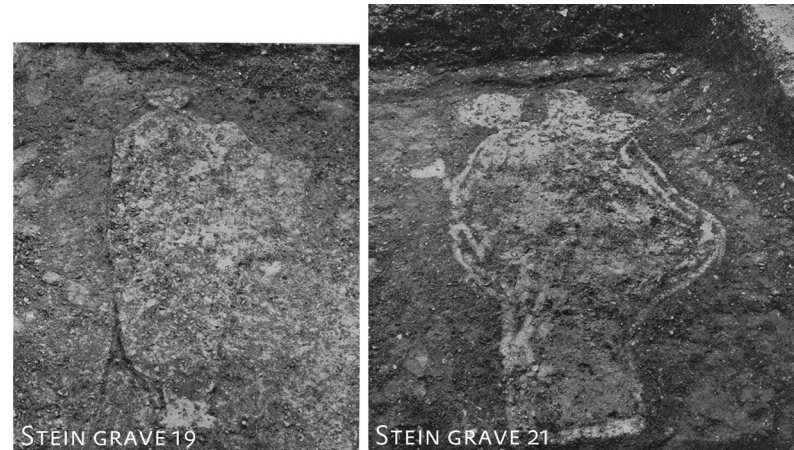


Fig. 2.30
A spouted pot from Stein grave 57 before and after the second restoration round (photograph 1: Restaura, photograph 2: Paulien Gemmeke).



were produced in the field as were written notes. The publication of the cemetery provides a cemetery plan (fig. 2.24) and a rather detailed description of the graves and finds, which forms the basis for the current analysis of the cemetery, together with the actual finds preserved in the Archeologiemuseum Stein (Stichting Erfgoed Stein).

Skeletal remains

As in Obbicht, human remains were poorly preserved in the Stein cemetery. This outcome was caused by the soil conditions (poor in lime and high in carbohydrate), as explained in a detailed report of Professor Schoorl and Dr Kurris (see also the section on human remains in Obbicht above).²² Skeletal remains were not preserved in Stein; however, in ten graves, dark discolourations and the fatty consistency of the soil indicated the former presence of bodies. In graves 19 and 21, the actual silhouettes of the bodies could be discerned and their lengths established; grave 19 showed the silhouettes of an adult and a child, and in grave 21 the outlines of two adults were observed (fig. 2.29, and see also the catalogue of graves and finds). In grave 57, the outline of the head could be discerned in the western section of the grave; it was thus clearly a west-east orientated burial. In the other graves (10, 12, 17, 20, 22, 32 and 58) only amorphous stains and the consistency of the soil indicated the former presence of a body. On a whole, human remains could not be saved, only recorded. The age at death, the biological sex and other features such as pathology could not be established for the individuals buried in the Stein graves. Only the artefactually constructed gender could be established on the basis of gender specific finds. The graves of children were identified on the basis of the length of the coffins or burial pits or the discolourations of the soil caused by the decayed bodies (see chapter 3 and the catalogue of graves and grave finds).

The history and current status of the finds

The history of the finds after their discovery is similar to that of the Obbicht finds (see the description above for the cemetery of Obbicht). The majority of the finds is now available in cleaned and restored condition, thanks to restoration company Restaura, which executed a second round of restoration and preservation in 1994. The first round probably took place not long after the finds were excavated. This restoration had a negative effect on the pottery vessels in particular, and the damage had to be undone in the second restoration round. This second round of restoration provided information on the original condition in which the objects were found (fig. 2.30).

The original find numbers recorded on the finds consist of an identification of the excavation terrain, which is VI A for Stein. This is followed by one of the numbers of the uninterrupted list of ascending numbers; the higher the grave number, the higher the given original find number. The numbers recorded on the finds are used to assign them to the graves in which they were found. A number of finds could only be matched with a grave on the ba-

sis of the find descriptions in the original catalogue. The new find numbers in the current catalogue of graves and finds consist of the grave number followed by the main find number and sub number (for example, the first find from grave 1 is: 1-1-1). After the finds had been assigned to graves, they were described, classified and dated. The finds missing from the collection were identified on the basis of their description in the original catalogue of graves and finds and when possible classified and dated on the basis of these descriptions.

The finds are now for the majority on display or stored in the Archeologiemuseum Stein (Stichting Erfgoed Stein) or are present in corroded or fragmented condition in the restoration company Restaura. Financial means for their restoration is not yet available. Photographs and X-ray photographs were taken of the boxes in which the (corroded) fragments are stored (fig. 2.21), and they were assigned to graves and classified and dated if possible. The results can be found in chapter 4 and in the catalogue of graves and finds.

The publication record

The publication history of Stein is similar to that of the cemetery Obbicht: the cemetery was published in Beckers and Beckers 1940, not long after its excavation, which took place somewhere in the 1930s of the twentieth century; the exact year of excavation was not given in the publication and cannot be found elsewhere. This publication and the preserved finds form the basis for the current analysis of the cemetery. The publication provides a cemetery plan, although not an accurate one, and a descriptive catalogue of graves and finds (fig. 2.24). This description consists of the dimensions of the observed outlines of the burial pits, the finds and their specifics (appearance and dimensions), the location of the finds in the graves (measured in centimetres from the grave walls or given in more descriptive terms) and the presence of shadows of the bodies. It also includes other specifics such as presumed ancient disturbances of graves, the possibility of some graves being double graves and the presence of shadows or remains of the wooden walls of coffins and chambers.

As for the cemetery of Obbicht, additional information was provided in the final part of the publication on the Merovingian period,²³ such as some clues about the original dimensions of the cemetery and some exact orientations of graves.

Beckers and Beckers claim that the chronological development of the cemetery can be established rather precisely since the early phases are preserved in Stein (in contrast to Obbicht). The cemetery started early according to Beckers and Beckers (to be precise in 450 AD), and was in use until the end of the Merovingian period. This date range accorded to the cemetery will be compared to the currently established date ranges of individual graves in chapter 5 and the general chronological development of the cemetery in

chapter 6. It was also observed that the graves were unevenly distributed over the cemetery. This aspect is attributed to the presence of family groups, which, according to Beckers and Beckers, also explains the open spaces in the cemetery and the uneven distribution of older and younger pottery vessels over the cemetery. These statements will also be verified in the mentioned chapters.

Altogether, this single available publication of the cemetery of Stein provides enough information for a new analysis even though some of the recorded features, such as the exact and relative locations and the orientations of the graves, appeared to be inaccurate. The available information, however, made a reconstruction of a site plan possible.

As for Obbicht, one additional publication is available for Stein: the publication of the rare belt fittings from grave 12.²⁴ The belt fittings consist of multiple parts: wooden plates inlaid with gold foil and garnets on top of which the copper alloy fittings with cut out spaces were fixed (fig. 2.31). The parts were carefully dissected by Ypey, and each individual element was thoroughly cleansed and restored. All the merged parts of the fittings could be individually analysed, drawn and photographed, and a detailed reconstruction of the fittings and the complete belt were presented in the publication by Ypey. Since it is currently a rather fragile composition of elements fixed on a display board, it was decided to make a new photograph of only the top surface of the fittings and to leave them on the display board as they are. The drawings and photographs of the individual elements in the publication of Ypey offer the information required for a detailed description in the current chapter on the finds from Stein (chapter 4).

Reconstructing the site plan

Since field drawings were not present, the original cemetery plan in Beckers and Beckers 1940 was used as basis for the final reconstruction of the cemetery plan (fig. 2.32). The original plan was digitized with Adobe Illustrator. The scale was established on the basis of the ruler depicted to the sides of the plan, which is not exact, and the reconstruction was made as was described for the Obbicht cemetery (see above). The new plan includes the actual given dimensions of the graves and wooden constructions and the locations of all the finds, not only the pots. The dimensions of the graves on the first plan were altered with the available information. A number of graves differ significantly from their depiction on the original plan. Graves 11, 13, 14, 27, 20, 22, 59, 60, 38, 67, 68, 38 and 18 are considerably smaller than depicted on the original plan. Graves 5, 2, 70, 69, 56, 57, 51, 52, 46, 44 and 71, on the contrary, are actually much larger than depicted on the original plan.

For a number of graves, the relative distance was given:

- Grave 25 was located next to graves 26 and was exactly in line with grave 16 with a space of 12 cm between them.
- Grave 43 was located next to 42 and nearly touching 44.

(22) Beckers/Beckers 1940, 341-342. (23) Beckers/Beckers 1940, 343-344. (24) Ypey 1974.

Fig. 2.31
Stein dissected plate buckle (reprinted from Ypey 1974).



- Grave 45 was located close to grave 44, reaching the gravel extraction pit.
- Grave 47 was located close to grave 46 with a distance of 10 cm.
- Grave 49 was located next to grave 50 with a distance of 10 cm.
- Grave 51 was located 50 cm from grave 50.
- Grave 52 was located next to grave 51 with a distance of 30 cm.
- Grave 57 was located next to 53 and to the north of 52 with a distance of 35 cm.
- Grave 64 was located 80 cm from grave 61 and in a row with grave 38.
- Grave 70 was the last of a new row, located next to grave 69 with a distance of 120 cm.

This information was applied exactly if possible and only approximately if this was not possible.

In some graves, shadows of human remains were observed. The dimensions of the discolourations were, if indicative of the former length of the body, recorded in the descriptive catalogue of graves. These observations are portrayed as shadows on the new cemetery plan. Shadows or wood remains of wooden containers were also observed during excavation. The exact dimensions were given for some of the observed structures; these are depicted as solid lines. Those for which the exact dimensions were not observed or given are depicted as interrupted lines.

The original cemetery plan can probably best be identified as both a reconstruction and a portrayal of what was seen during excavation. The new cemetery plan and drawings of individual graves with their particular features are produced for the current analysis of the cemetery. It must be kept in mind that the given locations of the graves in the cemetery and the finds in the graves are not exact but are a fairly accurate representation of the cemetery and the graves as they originally were.

Altogether, the data in this publication is organised in three parts: the presentation of the data of the cemeteries Sittard-Kemperkoul, Obbicht-Oude Molen and Stein-Groote Bongerd (chapters 1 to 4), the interpretations based on the data chapters (chapters 5, 6 and 7) and the catalogues of graves and finds from the three cemeteries (chapter 8).

Fig. 2.32
Reconstruction of the site plan Stein-Groote Bongerd (scale 1:250). 1. inhumation grave with number, 2. body imprint, 3. disturbed grave: location, orientation and dimensions uncertain.



3 Burial pits and grave constructions

The present chapter examines the grave structures found at the Sittard-Kemperkoul, Obbicht-Oude Molen and Stein-Groote Bongerd cemeteries. We provide detailed descriptions of all the observed construction types as well as an analysis of the variation in container and burial pit size, depth and orientation.

Sittard-Kemperkoul

A total of 88 numbered contexts were excavated at Sittard-Kemperkoul. Two of them (contexts 27 and 29) turned out not to be graves. Inhumation was the only form of burial found at Sittard-Kemperkoul. The cemetery thus differs from most other Merovingian cemeteries where cremation graves are found amongst inhumation graves.¹ It is assumed that each grave contained (at least) one human body. Still, body silhouettes were only observed in 14 of the 86 graves. The remaining 72 graves revealed no sign of an inhumed body. This number is low in comparison with, for example, Posterholt where 41 graves contained human remains and/or body silhouettes and skeletal remains of 35 individuals were analysed. We assume that bones are mainly absent due to unfavourable soil conditions, but human intervention and other post-depositional processes could also have caused the poor preservation of skeletal remains.

Burial pits

Information on the construction of the burial pits was retrieved from the original field drawings. Since individual grave plans were drawn at a scale of 1:20, it was easy to reconstruct the horizontal shape of the burial pits. The burial pits' vertical shapes were more difficult to reconstruct since section drawings were only made of graves 13, 20 and 50.²

The outlines of most burial pits were rectangular with slightly rounded corners. In four cases (graves 11, 35, 45 and possibly

grave 69), the burial pits have one tapered end, giving the burial pit a slight trapezoid shape. In three cases (graves 10, 12 and 18), the burial pit's shape was not documented. The drawing of grave 10 shows only a possible container outline, of which minor wood traces were preserved in the northeast corner. Of graves 12 and 18 only two beams were recorded; the slight colour difference in between may represent the container's fill (figs. 3.1 and 3.2). Grave 39 is the only grave with a deviant-shaped burial pit. It is square instead of rectangular, but still has rounded corners.

The section drawing of graves 13, 20 and 50 show slight differences in the vertical shape of the burial pits (fig. 3.3). While grave 20 has almost straight vertical walls, grave 13 has slightly sloping walls making the burial pit narrower towards the bottom. Grave 50, on the other hand, has one vertical wall and one that slopes slightly inwards. We assume that these three examples are representative of most other burial pits, and therefore we assume that most burial pits had vertical or slightly sloping walls and levelled bottoms.

Containers

A detailed analysis of Merovingian grave constructions in the Meuse valley is provided by Smal.³ Her elaborate typology of different grave constructions found at early medieval burial sites will be used to define the grave structures found at Sittard-Kemperkoul. However, before we continue with the description of Sittard-Kemperkoul's grave constructions, it is important to comment on the distinction between wooden coffins and wooden chambers.

Following Smal's typology, a wooden coffin is constructed outside the burial pit and the body is placed inside this container before deposition. Wooden chambers, on the other hand, are constructed inside the grave after which the body, sometimes inside a (second) wooden coffin, is deposited.⁴ Though the distinction between wooden coffins and chambers appears clear cut, it becomes more ambiguous when dealing with archaeological traces. The distinction between coffins and chambers is often based on size. But

Fig. 3.1
Sittard-Kemperkoul grave 12 (scale 1:40).

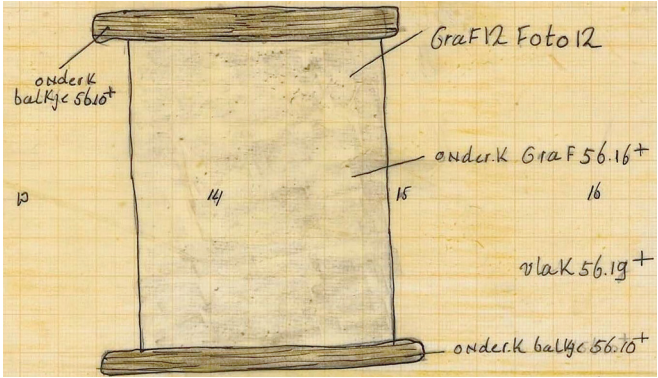


Fig. 3.2
Sittard-Kemperkoul grave 18 (scale 1:40).

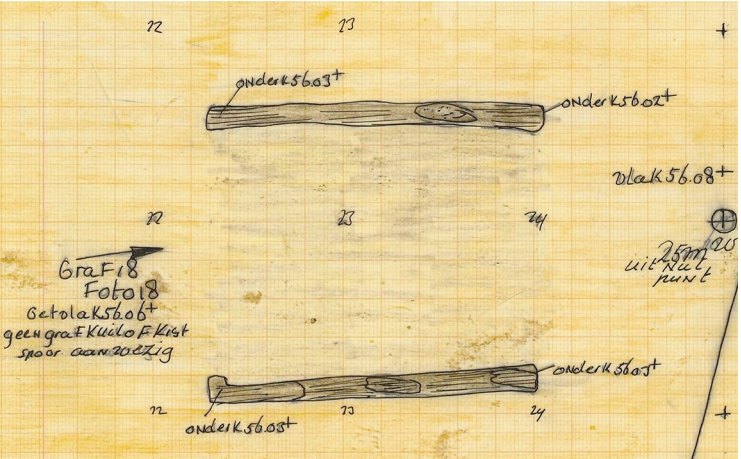
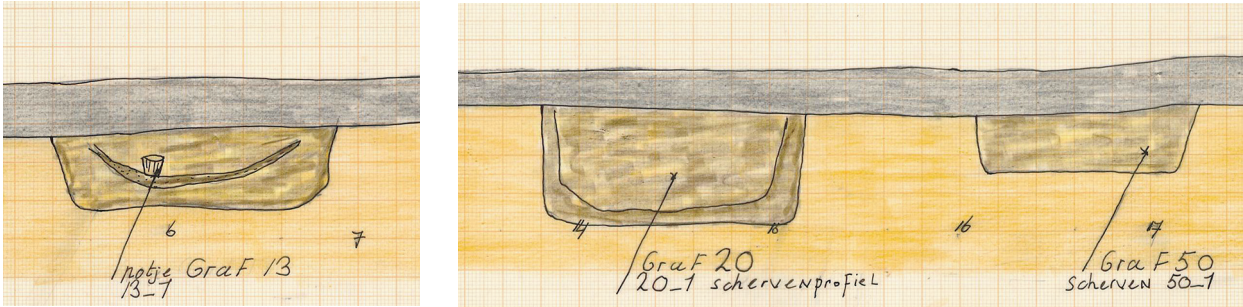


Fig. 3.3
Sections of Sittard-Kemperkoul graves 13 (tree trunk grave), 20 and 50 (scale 1:40).



since size alone is not a reliable gauge, we follow Smal's suggestion and choose to refer to both wooden coffins and wooden chambers as wooden containers in this publication, except in cases where two container outlines are visible in a single grave. In those cases, the outer is called a wooden chamber, and the inner a wooden coffin.

Five types of grave structures were found at Sittard-Kemperkoul: trench graves (graves without containers), wooden container graves (graves with a single wooden container), wooden chamber graves with a wooden container (graves with two wooden containers), tree trunk graves (graves with a tree trunk container) and possible wooden container graves (graves with only beams).

Trench graves

In seven cases⁵, no signs of grave structures were found during excavation. These graves may have been trench graves, but it is also possible that traces of the wooden container were not preserved or dug away. One of the main arguments supporting this assumption is that most of these graves were either recently disturbed or possibly reopened.

The remaining depth of grave 2 was only 2 cm and that of grave 7 only 6 cm. It could thus be possible that most of the grave struc-

tures were capped off by levelling, leaving only the bottom of the burial pit behind for excavation. Still, if this was the case we would expect the remains of beams to be present, since in most cases beams were placed on the bottom of the graves to support the wooden constructions (see section on beams below).

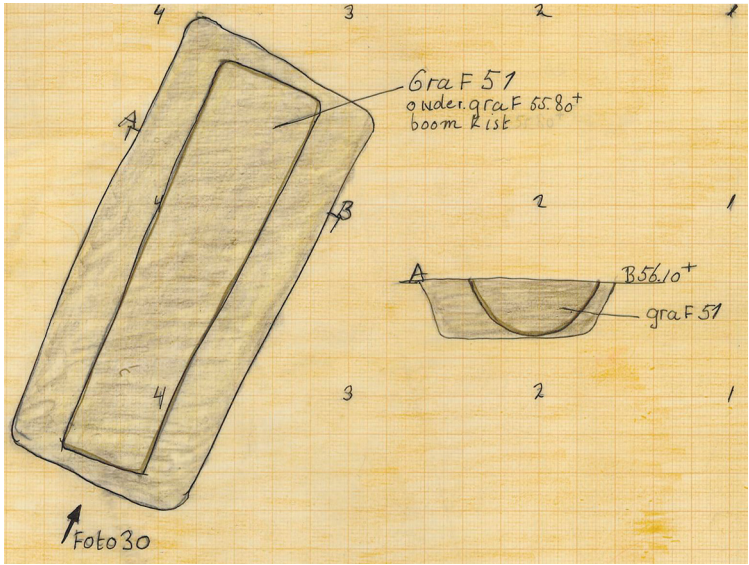
Graves 21, 28 and 54 were recently disturbed. In the case of grave 21 only the western edge was preserved, and in the case of grave 54 only the northern edge survived. The remaining parts of both graves were dug away during construction work but could have contained grave structures. Grave 28 was only partly disturbed, but this disturbance may have affected the conservation of the organic remains, since an increase of oxygen may have caused the organic remains to decay more rapidly.

Grave 87 was only slightly disturbed by a recent pit, but the grave's content with its shattered finds suggest that it was possibly reopened in the early medieval period. Here too, we assume the disturbance probably interfered with the conservation of the organic remains.

The only trench grave that seemed undisturbed is grave 78. In this case, there is no reason to assume that it originally contained a wooden container.

(1) Examples found in the Netherlands are the cemeteries of Alphen, Bergeijk, Gennep, Gilze, Hoogeloon, Meerveldhoven, Obbicht, Posterholt and Veldhoven. (2) A reconstruction on the basis of drawings of various horizontal levels could not be made because only one drawing of a horizontal level per grave is available. (3) Smal, in press in Theuws/Kars, in press. (4) Smal, in press in Theuws/Kars, in press. (5) Graves 2, 7, 21, 28, 54, 78 and 87.

Fig. 3.4
Sittard-Kemperkoul tree trunk grave 51 (scale 1:40).



Wooden container graves

In 44 cases⁶, outlines of a single wooden container were visible. In most of these cases, these outlines and traces probably represented wooden coffins. However, some of the larger specimens could have been wooden chambers as well. Since the difference between wooden coffins and wooden chambers is impossible to determine in these circumstances, no distinction was made for the present analysis.

In 36 cases, the containers were placed on wooden beams. This leaves eight wooden container graves without beams. Three of them (graves 52, 55 and 56) were only partly excavated and wooden beams could have been present in the part that was already dug away during construction work. In the case of grave 10, a remaining depth of less than 1 cm was recorded and only a very vague trace of a grave with a wooden container was observed. Grave 39 had a deviant shape, making the use of beams perhaps unnecessary (though of course we cannot be certain of this). The remaining three (graves 75, 76 and 77) were probably placed directly on the floor of the burial pit.

Wooden chamber graves with a wooden container

A total of 21 graves⁷ contained traces of two wooden containers (fig. 7.1). We assume that in all of these cases the outer container is a wooden chamber and the inner container is a wooden coffin. These are the graves of the so-called Morken type.⁸

In a few cases a definite identification as a grave of the Morken type is not certain. In the case of grave 84, the presence of the second container is uncertain. The drawing shows a vague line of a possible coffin wall. But since the eastern half of the grave was dug away

by construction work, this is the only indicator for the presence of a second container. In four cases (graves 32, 72, 81 and 82), it is unclear whether the grave held a wooden chamber with a wooden coffin or whether a partition wall divided the wooden chamber in two halves. The drawings of all four display a line from the foot end to the head end of the wooden chamber, but it is unclear whether this line was an integrated part of the wooden chamber-construction or whether it was part of a separate coffin that was placed in the wooden chamber. If these are not the remnants of a coffin, these, four graves do not belong to the Morken type but to a type with a partition wall in the chamber.

In all 21 cases, the wooden chambers were placed on wooden beams. This indicates that at the cemetery of Sittard-Kemperkoul, beams were used to support wooden coffins as well as wooden chambers.

Tree trunk graves

In two cases (graves 13 and 51), tree trunk containers were found. The tree trunk coffins were recognised because section drawings were made (see fig. 3.3, presented earlier, and fig. 3.4). These drawings show that the bottoms of the containers were concave. The two tree trunk containers were not placed on beams.

Possible wooden container graves

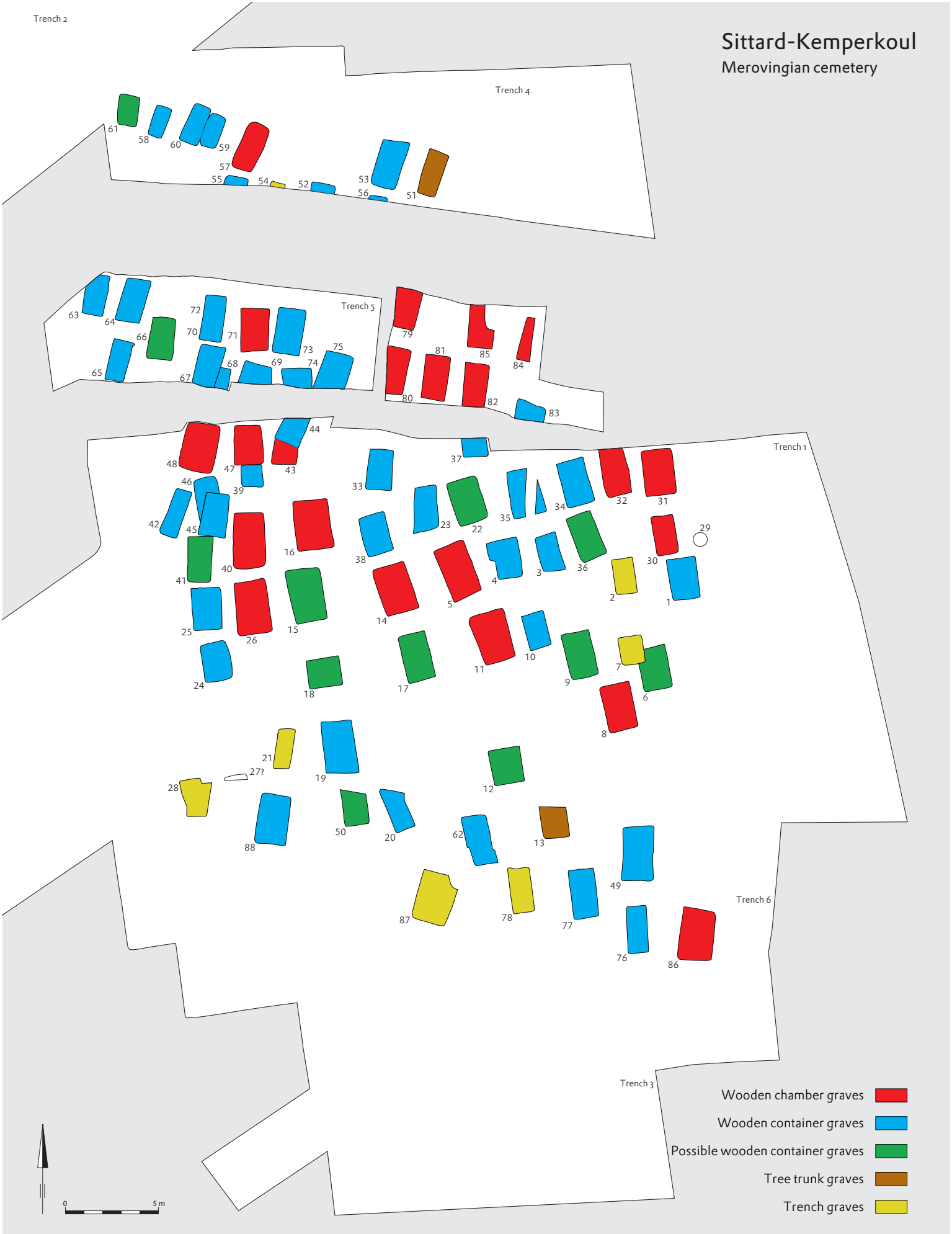
In 12 cases, only traces of beams were found.⁹ It is unclear what kind of grave construction these beams supported, but it seems unlikely that the deceased was deposited on beams only. We assume that a wooden container (coffin or chamber) was originally present of which the traces were not preserved, but it is possible that the body was placed on a wooden board or bier.

Container presence

Even though organic remains were poorly preserved at Sittard-Kemperkoul, the former presence of containers could often be recognized by colour differences in the soil. It should be noted, however, that non-wooden grave furnishings, such as shrouds and pillows, flowers, straw and hay, may have been present as well. Botanical investigation of soil samples could provide information about these furnishings. However, they were not taken during the excavations at Sittard-Kemperkoul. The only information available to us is thus decayed wood remains that were documented on field drawings.

Wooden grave structures were identified in almost all graves at Sittard-Kemperkoul. Especially the number of chamber graves seems striking. In comparison with for example Posterholt, where only four wooden chamber graves were found, and Bergeijk, where only one wooden chamber grave was found, 21 is very high. Still, cemeteries with similarly high numbers of chamber graves

Fig. 3.5
Sittard-Kemperkoul: distribution of grave construction types (scale 1:250).



(6) Graves 1, 3, 4, 10, 11, 19, 20, 23, 24, 25, 33, 34, 35, 37, 38, 39, 42, 44, 45, 46, 49, 52, 53, 55, 56, 58, 59, 60, 62, 63, 64, 65, 67, 68, 69, 70, 72, 73, 74, 75, 76, 77, 83 and 88. (7) Graves 5, 8, 14, 16, 26, 30, 31, 32, 40, 43, 47, 48, 57, 71, 79, 80, 81, 82, 84, 85 and 86. (8) Martin 1976, 22-25 (whose definition of a Kammergrab of type Morken may be too unnecessarily strict); Stein 1993; Fischer/Soulat/Victor 2009; Peters 2011, 20-23. (9) Graves 6, 9, 12, 15, 17, 18, 22, 36, 41, 50, 61 and 66.

houette of a wooden container. The location of the nail seems unusual because one would expect nails to be used mostly along the edges or corners of the wooden containers while figure 3.7 shows that this specimen was found inside the wooden chamber slightly towards its eastern wall (the location of the nail is indicated with a red circle). However, it was found at a relatively high level and the curved line on the drawing suggests that it was attached to a plank that could have been part of the collapsed lid. Nevertheless, we should keep in mind that the presence and consequently the deposition of single large nails in graves were part of the ritual repertoire of a funeral.

Beams

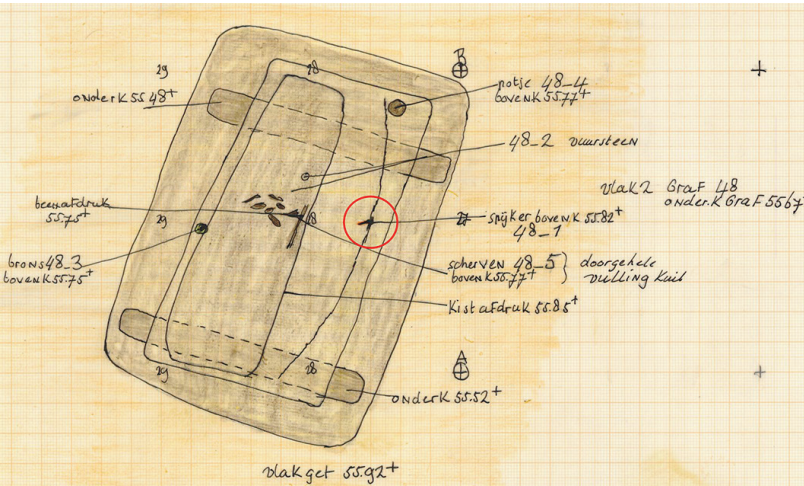
At Sittard-Kemperkoul, almost all grave structures contained wooden beams. The function of these beams remains unclear. As pointed out in the publication of the Posterholt cemetery, one explanation is that they were of use when a coffin was lowered into a burial pit by using ropes.¹⁷ In this way, the ropes could be more easily extracted from the grave once the container was placed on the beams. However, this explanation only applies when beams were found in combination with a wooden coffin. Wooden chambers were built inside the grave and therefore did not need to be lowered into the burial pit. At Sittard-Kemperkoul, all graves with wooden chambers contained wooden beams. It thus seems more likely that in these cases the beams were used primarily for support. This is also the case at Meerveldhoven. Here too, almost all wooden chambers were placed on wooden beams. According to Verwers, excavation of the wood remains revealed that long walls were sometimes inserted a few centimetres into the beams.¹⁸ This is also the case with the reconstructed container of grave 162 of the Oberflacht cemetery.¹⁹ This specific example is discussed more elaborately in the publication of the Posterholt cemetery.²⁰ At Sittard-Kemperkoul, a similar construction with integrated beams seems likely, though it is difficult to prove. The excavation plans only show the view from above and none of the section drawings that are available contain wooden beams.²¹

Grave size and depth

The indication of the size of a burial pit should ideally be based on length, width and depth. The length and width are easily obtained from the excavation drawings. The grave depth, however, is often more difficult to establish since the original surface levels are hardly ever preserved. In the case of Sittard-Kemperkoul, the remaining depth of the graves measured from the first excavation level is documented accurately. However, the area was already levelled before excavation took place and in 14 cases²² only less than 10 cm of the grave depth was preserved. Zoetbrood reconstructed the sur-

for a reconstruction of the bedstead, see Abb. 28. (16) Alfayé Villa 2010. (17) De Haas/Theuws 2013, 60. (18) Verwers 1978, 254. (19) Paulsen 1992, 16-19; Abb. 3-7. (20) De Haas/Theuws 2013, 60-61. (21) A careful examination of the lower levels of burial pits shows that planks of the walls are visible at the same level as the beams or even somewhat lower as the top of the beams. This is an indication that the planks were lowered in the beams. These levels were however not recorded in Sittard. (22) Graves 2, 6, 7, 9, 10, 12, 17, 18, 24, 29, 41, 42, 69 and 70. (23) De Haas/Theuws 2013, 62. (24) Theuws/van Haperen 2012, 41, fig 3.3.

Fig. 3.7
Sittard-Kemperkoul grave 48 (scale 1:40).



face level before construction work to gain a better understanding of the depth of the graves. However, this reconstructed surface level is considered unreliable and will not be used for the present analysis. For now, grave size is thus based on the length and width of burial pits alone, while a separate paragraph on relative grave depth is provided, based on the remaining depths of the burial pits as documented by the excavators. Table 3.1 presents an overview of the burial pit and container dimensions obtained from grave drawings at Sittard-Kemperkoul.

Figures 3.8 and 3.9 display the range of lengths and widths of burial pits and wooden containers found at Sittard-Kemperkoul. Most of the burial pits have lengths between 2 m and 3 m and widths between 1 m and 2 m. The containers mostly have lengths between 1,7 m and 2,5 m and widths between 0,5 m and 1,5 m. Table 3.2 presents the calculated surface areas of the burial pits and their containers. Here, we can see that the largest burial pits often contained the largest containers.

The calculated surface areas of the burial pits at Sittard-Kempkoul range between 1.38 m² and 5.27 m². In comparison to Posterholt and Bergeijk, this is quite small. At Posterholt the calculated surface areas range between 2.28 m² and 6.38 m².²³ And at Bergeijk the difference is even larger. A table with calculated surface areas is not provided, but figure 3.3 in chapter 3 of the Bergeijk publication shows that they range roughly between 2 m² and 11 m².²⁴ Even though the grave of 11 m² may be an exception, there are still quite a few graves with surface areas between 6 m² and 8 m².

Because the grave structures resemble those found at Sittard-Kemperkoul, the Meerveldhoven cemetery may be a better case for comparison.²⁵ However, here too, the burial pits seem to be much larger, ranging between 2.5 m² and even 13 m². So, the burial pits

at Sittard-Kemperkoul can be considered small. Still, cemeteries with burial pits of lesser size are also known. The Alphen cemetery, for instance, contained burial pits with lengths up until 1.95 m and widths between 0.75 m and 1 m.²⁶

The remaining depths of the graves range between 1 cm and 74 cm. In comparison with other cemeteries, these remaining depths are very low. We therefore assume that large parts of the graves were capped off by surface levelling and other types of construction work. Parts of grave constructions must have been destroyed

by these activities, especially in the 15 cases where the remaining depths were less than 10 cm. There does not seem to be a clear relation between the remaining depth and size of the graves. The graves with the largest surface areas (graves 26, 40, 11 and 16) have remaining depths between 25 cm and 48 cm, while the smallest graves (graves 39, 58, 72 and 59) have slightly smaller remaining depths between 15 cm and 22 cm. However, given the fact that we only have the remaining depths, we cannot make clear assumptions.

Table 3.1
Sittard-Kemperkoul: burial pit and container dimensions.

Grave number	Max length burial pit	Max width burial pit	Max length container	Max width container
1	2,23	1,56	2,05	1,14
5	2,85	1,64	2,8	1,37
8	2,53	1,62	2,15	1,49
11	2,68	1,95	2,4	1,34
14	2,56	1,79	2,38	1,24
16	2,65	1,97	2,37	1,34
19	2,77	1,77	2,3	1,21
24	2,08	1,53	1,9	1,05
25	2,24	1,59	1,91	1,14
26	2,82	1,87	2,27	1,3
30	2,13	1,21	1,84	0,84
31	2,45	1,65	2,14	1,29
32	2,53	1,52	2,09	1,19
33	2,16	1,4	1,77	1,02
34	2,46	1,5	2,19	1,24
35	2,5	1,79	2,22	1,3
38	2,11	1,44	1,74	0,86
39	1,19	1,16	0,87	0,9
40	2,99	1,75	2,52	1,36
42	2,6	1,01	2,32	0,76
45	2,32	1,46	2,11	1,17
47	2,13	1,56	1,73	0,96
48	2,62	1,87	2,2	1,23
49	2,8	1,69	2,4	1,24
51	2,44	1,1	2,16	0,57
53	2,62	1,45	2,19	0,87
57	2,69	1,29	2,25	0,92
58	1,67	0,86	1,44	0,52
59	1,85	0,96	1,47	0,6
60	2,18	1,06	1,97	0,53
62	2,59	1,35	2,1	0,7
63	2,2	1,22	2,08	0,94
64	2,35	1,34	2,07	0,94
65	2,25	1,07	2	0,82
71	2,33	1,53	1,98	1,19
72	1,43	1,15	1,23	0,68
73	2,45	1,49	2,14	1,27
76	2,5	1,1	2,28	0,9
77	2,64	1,39	2,29	1,11
86	2,8	1,82	2,09	1,02
88	2,57	1,68	2,34	1,01

Table 3.2
Sittard-Kemperkoul: calculated surface areas of the burial pits and containers.

Grave number	Calculated surface area burial pit (m ²)	Calculated surface area container (m ²)
26	5,27	6,86
40	5,23	7,12
11	5,23	7,00
16	5,22	7,00
86	5,10	5,20
19	4,90	5,93
48	4,90	6,03
49	4,73	5,87
5	4,67	6,40
14	4,58	5,68
35	4,48	5,82
88	4,32	4,36
8	4,10	6,11
31	4,04	5,21
32	3,85	4,58
53	3,80	3,31
34	3,69	4,58
77	3,67	4,07
73	3,65	4,64
71	3,56	4,24
25	3,56	4,06
62	3,50	2,45
1	3,48	3,97
57	3,47	3,19
45	3,39	3,96
47	3,32	3,19
24	3,18	3,34
64	3,15	2,96
38	3,04	2,61
33	3,02	3,08
76	2,75	2,48
51	2,68	1,53
63	2,68	2,52
42	2,63	2,00
30	2,58	2,16
65	2,41	1,97
60	2,31	1,22
59	1,78	1,07
72	1,64	1,12
58	1,44	0,75
39	1,38	1,24

Fig. 3.8
Range of lengths and widths of the Sittard-Kemperkoul burial pits.

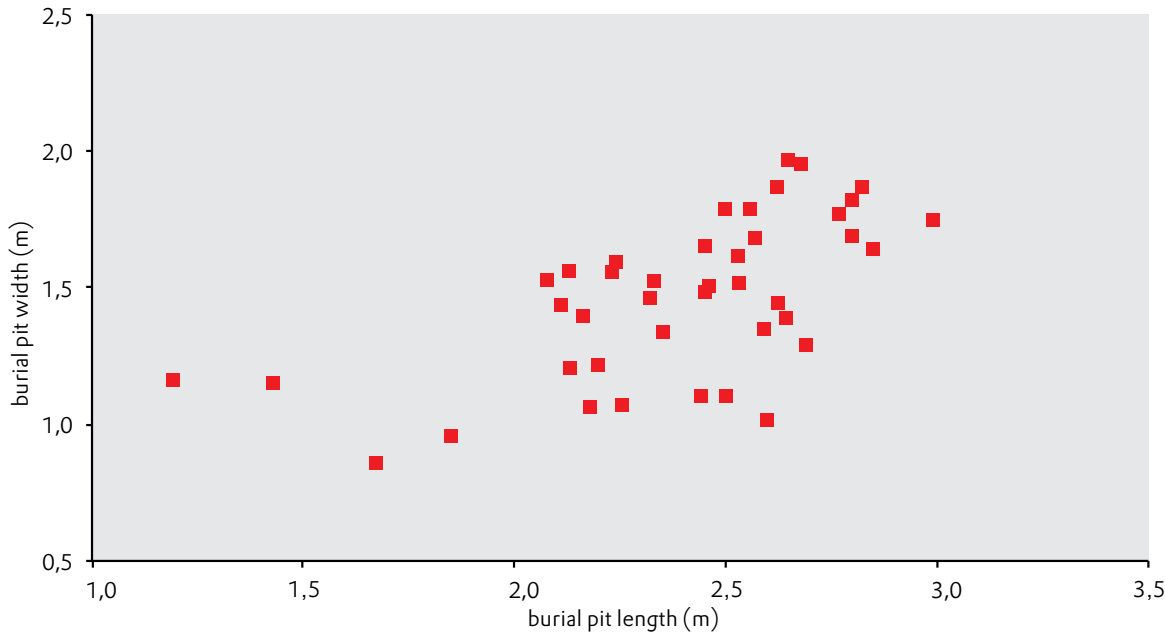
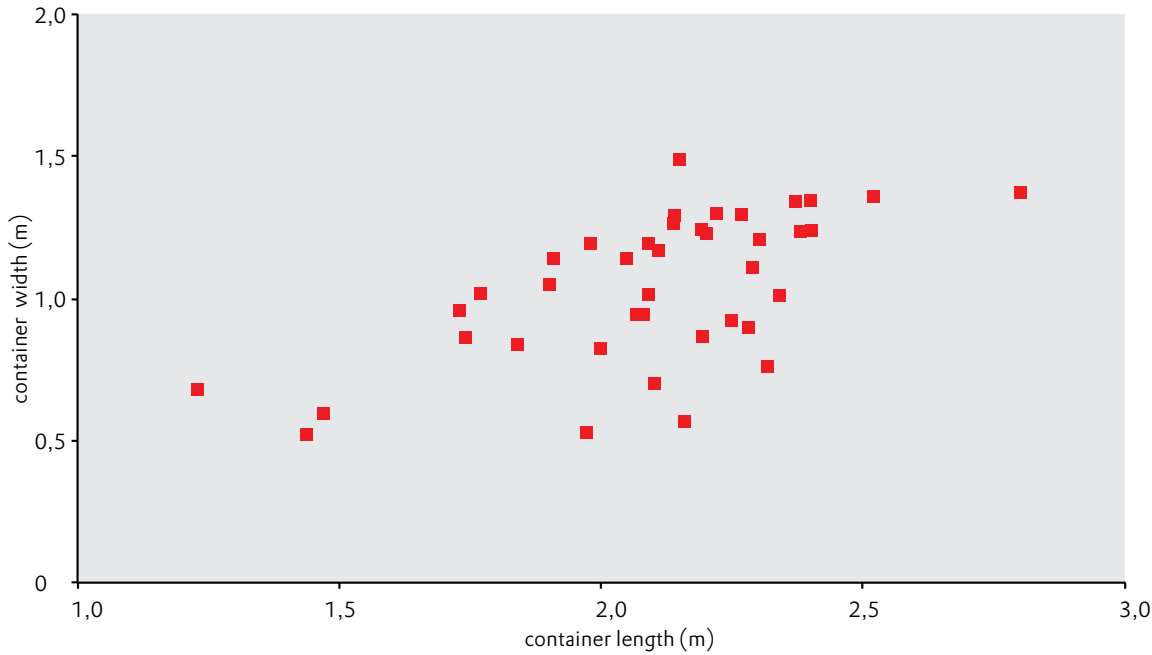


Fig. 3.9
Range of lengths and widths of the Sittard-Kemperkoul wooden containers.



Grave size and Sittard-Kemperkoul phasing

Table 3.3 displays information on the size of the graves in relation to the Sittard-Kemperkoul phases. At first sight, there does not seem to be a correlation between the burial pit's size and chronology. The majority of the larger burial pits belong to SK phase II (565-640/50), but some of the smallest specimens have a similar date. Furthermore, the size of SK phase III burial pits differs too. However, when we take a closer look at the graves that belong to phase III, some remarks can be made. Figure 6.2 displays the distribution of graves belonging to the various chronological phases. Four graves with an SK phase III date are located in the north-western part of the cemetery. They seem to belong to the

group of graves with slightly smaller burial pits and a southwest-northeast orientation. Most of these smaller pits cannot be dated because they did not contain any finds. However, they seem to follow a trend that is also noticeable at the cemeteries of Posterholt and Bergeijk. In both cases, we find zones of graves in the peripheral areas of the cemeteries with smaller graves that were not disturbed or reopened but did not contain finds.²⁷ They did, however, occasionally contain eight century sceattas.²⁸ It is not unthinkable that at Sittard-Kemperkoul, the group of graves at the north-western part of the cemetery, had a similar late date. Unfortunately, certainty cannot be provided for this cemetery.

(25) Verwers 1978. (26) Verwers 1977,169. (27) De Haas/Theuws 2013, chapter 9; Theuws/Van Haperen 2012, chapter 9. (28) At Posterholt, sceattas were found in graves 24, 44 and 47 (De Haas/Theuws 2013, 85), in Bergeijk a sceatta was found in grave 124 (Theuws/Van Haperen 2012, 58).

Table 3.3
Sittard-Kemperkoul: grave size in relation to burial phases.

Grave number	Sittard-Kemperkoul Phase	Calculated surface area (m ²)	Grave number	Sittard-Kemperkoul Phase	Calculated surface area (m ²)
87	SK IID	5,48	57	ND	3,47
15	SK IIA	5,28	04	SK I - SK II	3,45
26	SK IIA	5,27	45	SK IIIA	3,39
11	SK IIB	5,23	47	SK IID	3,32
40	SK IIIB	5,23	41	SK IID	3,24
16	SK IIA	5,22	24	SK IIA	3,18
86	SK IID	5,10	66	NF	3,16
19	SK IIB	4,90	64	SK IIIB	3,15
48	ND	4,90	38	ND	3,04
49	SK IId	4,73	33	SK IIC	3,02
05	SK IIA	4,67	13	SK IIA	2,93
14	SK IIB	4,58	78	SK IIA	2,83
35	ND	4,48	76	SK IID	2,75
88	ND	4,32	51	?	2,68
08	SK IIIA	4,10	63	ND	2,68
31	SK IID	4,04	42	NF	2,63
22	NF	3,87	28	SK IIA	2,58
32	SK IIB	3,85	30	SK IIC	2,58
17	ND	3,80	65	NF	2,41
53	SK IIIB	3,80	20	SK IID	2,34
09	SK IIC	3,76	60	ND	2,31
34	SK IIB	3,69	03	SK IID	2,29
77	SK IIB	3,67	02	ND	2,19
73	SK IIIB	3,65	07	?	1,95
36	SK IIB	3,59	21	ND	1,91
06	SK IIA	3,56	61	?	1,83
25	SK IIIA	3,56	59	SK IIIB	1,78
71	SK IIC	3,56	72	NF	1,64
62	?	3,50	58	?	1,44
01	ND	3,48	39	SK IIC	1,38

Grave orientation

The predominant grave orientation at Sittard-Kemperkoul seems to have been south-north. Since human remains were observed in 14 graves only, certainty about grave orientation can only be provided for a few graves. In four cases (graves 5, 71, 85 and 86), complete or semi-complete body silhouettes clearly establish a south-north orientation. In three more cases (graves 14, 20 and 43), a similar orientation is indicated by the presence of a skull imprint in the southern end of the grave. This is also true for two other graves (graves 11 and 80) where the southern end contained teeth

and beads. Altogether, this evidence provides only nine cases with an established south-north orientation. Less certain indicators are the presence of beads in the southern ends of graves (found in graves 2, 25, 32, 44, 59 and 60), and possibly the position of pottery vessels at the foot end of the grave.²⁹

Only one grave seems to provide a clear indicator for an opposite orientation: in grave 3 the skull imprint is found at the northern end of the grave. The grave seems undisturbed and the skull was found in situ. However, we cannot be certain that the skull was still attached to the body when buried. It is known from the Vrijthof cemetery in Maastricht that at times skulls were deposited in graves in other locations than the normal anatomical position.³⁰ Besides that, several Anglo-Saxon graves are known with skulls buried between the legs³¹ or at the feet.³² This could have been the case with grave 3 at Sittard-Kemperkoul as well.

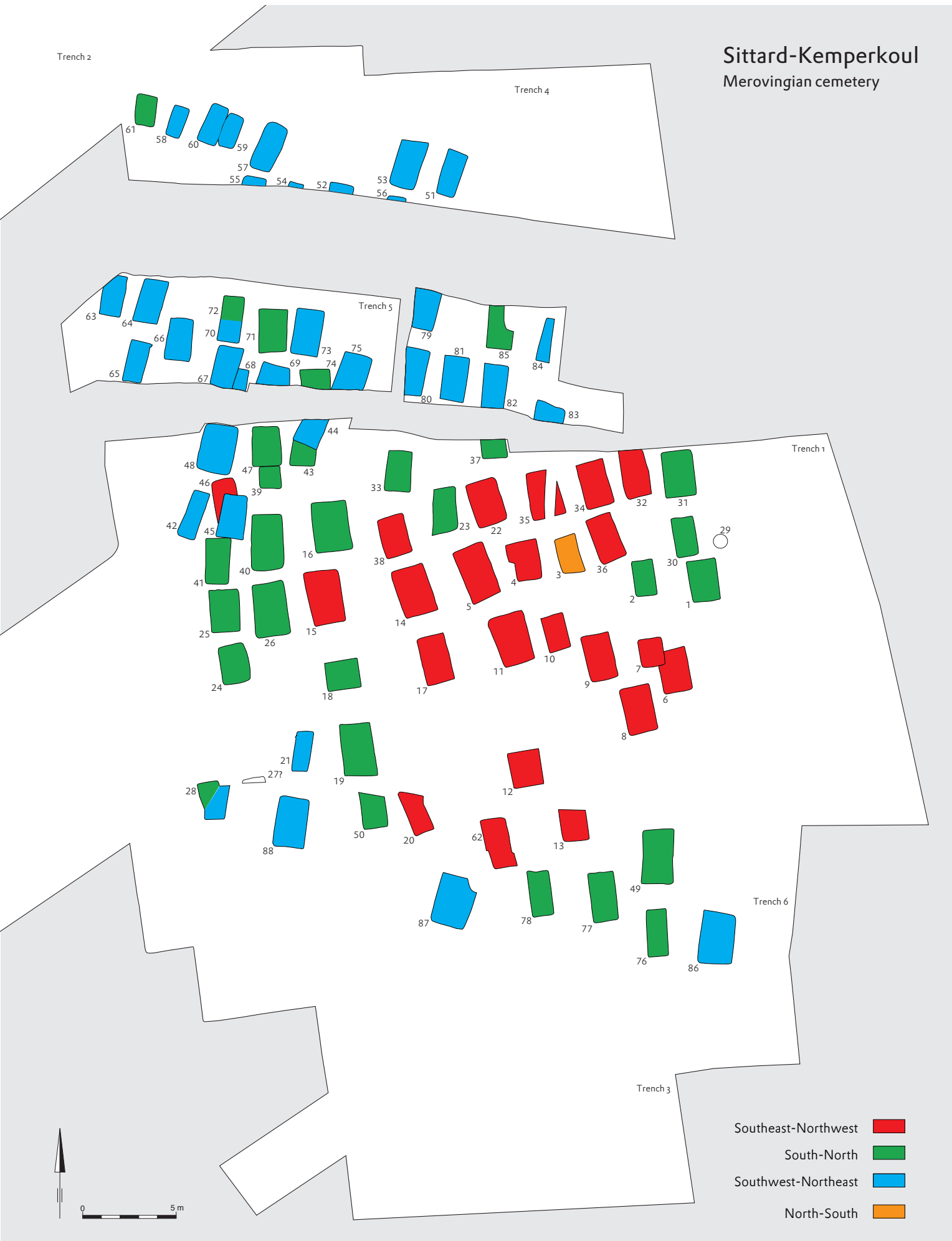
A south-north orientation of graves is rare among Merovingian cemeteries in the Netherlands. Bergeijk, Posterholt and Meerveldhoven had graves with west-east orientations, which seem to be the common orientation of graves in Merovingian cemeteries in the southern Netherlands. Still, other orientations exist as well, though often in combination with west-east orientated burials. Examples are found in the Hoogeloon-Broekeneind (east-west and south-north)³³, Stein (west-east and north-south)³⁴ and Broechem (west-east and north-south) cemeteries.³⁵ A cemetery with even more diverse orientations is the Borsbeek cemetery. Four different orientations were found there: north-south, south-north, west-east and east-west.³⁶

The fact that Sittard-Kemperkoul is the only example of a cemetery in which almost all the buried had their heads placed in the south thus remains remarkable.

Orientation distribution

When taking a closer look at the variability in orientations at Sittard-Kemperkoul, it becomes clear that most graves did not have an exact south-north orientation. In order to analyse the variation in orientation, the orientation angle is measured for each grave separately. This task presents difficulties. Some burial pits are irregularly shaped while others were only partially excavated. In order to take the required measurements, the orientation angle was measured from the centre of the widths of both the burial pits and containers.³⁷ The angle range of burial pit orientations was between 337° and 24°. Since this range is considerably large a division is made between three different orientations: south-east-northwest ($\leq 350^\circ$), south-north (351°-9°) and southwest-northeast ($\geq 10^\circ$). The distribution of these different groups is displayed in figure 3.10. It shows that each group is related to a specif

Fig. 3.10
Sittard-Kemperkoul: distribution of grave orientations (scale 1:250).



(29) See chapter 7 of this publication. Most beads are found in the thorax area. However, they may occur at other locations in the grave too. (30) Theuws in press in Theuws/Kars in press. (31) This was the case for two graves at the Chadlington cemetery in Oxfordshire (Leeds 1939). (32) At the Mitcham cemetery in Surrey, skulls were deposited at the feet several times (Wilson 1992). (33) Glasbergen 1955, 14. (34) Beckers/Beckers 1940, 310. (35) Annaert 2010 (36) De Boe 1970, 103-105. (37) For a description of the method, see: Theuws/Van Haperen 2012, 44, fig. 3.8.

ic area. The graves with a southeast-northwest orientation are located in the central part of the cemetery, the south-north orientated graves are located around them and most of the graves with a southwest-northeast orientation are located in the north-western part of the cemetery. Some exceptions exist, such as graves 86, 87 and 88, which are located at the southern end of the cemetery, but still in a peripheral area. We assume that they are of a later date, which is also supported by the fact that almost all stratigraphically younger (and therefore later) graves have this southwest-northeast orientation.

Grave disturbances

The number of grave disturbances found at Sittard-Kemperkoul is low. Most grave disturbances are caused by construction work, the digging of sewer and gas pipes and recent pits. However, some disturbances can be dated to the early medieval period: there are overlapping graves that disturb older graves, and there are clear indications of graves that were reopened for other reasons.

Recent disturbances

As mentioned earlier, most disturbances were caused by construction work. Graves 52, 54, 55, 56, and 63 were disturbed by the digging of a sewer pipe, graves 27, 32, 49, 67, 68, 69, 74, 75, 82 and 83 were disturbed by the digging of a gas pipe and graves 23, 28, 34, 35, 80, 81 and 87 were disturbed by recent ditches. These ditches have a width between 35 and 65 cm and have a north-south orientation. They mainly disturb the graves found in the eastern part of trench 5 and those in the northeast part of trench one. Their purpose is unknown.

Early medieval interventions

At Sittard-Kemperkoul the number of reopened graves is low. Only five graves (graves 8, 19, 24, 25 and 26) were evidently reopened and one (grave 87) was possibly reopened.

Still, some interesting remarks can be made. First of all, the intervention seems to have been aimed at a specific area of the cemetery, because three of the five graves (24, 25, and 26) were located very close to each other. The other two were located a little farther apart, but still in the southern half of the cemetery. The northern part seems to have remained undisturbed. Second, the reopening pits seem to have been executed with precision. The five graves that evidently have been reopened all contain reopening pits that are aimed directly at the content of the grave. The reopening pit of grave 8 covers the northern part of the wooden coffin and the centre of the wooden chamber, and that of grave 19 covers most of the inside of the wooden container. The reopening of the pits of graves 24, 25 and 26 is also dug with precision – that of grave 24 in the middle, grave 25 in the northern half and grave 26 inside the wood-

en coffin while the wooden chamber is left intact. In the case of grave 87, a reopening pit is not visible but the disturbed character of the grave in combination with possible displaced finds suggests that the grave was reopened. If this was indeed the case, its reopening pit was probably also aimed carefully because the burial pit's walls were still intact. Altogether, it seems safe to state that the location of the graves was either still visible above ground or known with precision to those who were responsible for their reopening.

An explanation for the reopening of graves in early medieval times is difficult to give. For a long time, the practice has been presented as a criminal act executed solely to collect valuable goods from the graves.³⁸ It thus comes as no surprise that grave reopening is often labelled 'grave robbery'. Recent studies, however, focus more on different scenarios and motivations behind grave reopenings instead of searching for a mono-causal interpretation.³⁹ This is reasonable, given that the practice shows great variability. Van Haperen is currently investigating the subject in the region under study, and has presented some of her ideas in the Bergeijk publication.⁴⁰

Overlapping graves

The number of overlapping graves is also quite small. Only seven graves were disturbed by the digging of other graves. They will be discussed here briefly. Grave 7 cuts grave 6 and disturbed the north-western corner of that grave. Grave 45 cuts the south-western part of grave 46 and a small part of the north-eastern corner of grave 41. The disturbance of grave 46 is severe, while grave 41 remained intact. Grave 44 cuts the northern half of grave 43. Grave 67 cuts the northeast corner of grave 68 and both graves are disturbed by construction work. Grave 67 is still mostly intact, but of grave 68 only the northeast part was preserved. Grave 72 cuts the northern half of grave 70. The orientation of the graves is almost the same, which suggests that the graves were planned this way. Unfortunately, the graves could not be dated because they did not contain finds. Grave 59 seems to cut grave 60, but it could also be the other way around. Which of the two graves is older is therefore unknown. Finally, graves 74 and 75 probably overlap, but this is not visible because the overlapping parts are disturbed by construction work.

In three cases (graves 43/44, 45/46 and 74/75), the orientation of the overlapping graves differs, while in all other cases the orientation of the graves is similar. In most cases, the overlapping grave disturbs at least half of the underlying graves. The question remains whether the overlapping graves were positioned there intentionally. Clear answers are difficult to give, but some interesting remarks on the subject will be made in chapter 7 of this publication.

Obbicht-Oude Molen

The variability of grave construction types in the cemetery of Obbicht-Oude Molen could only be identified on the basis of the original catalogue of graves and finds and the published cemetery plan in Beckers and Beckers 1940. In this publication, the (approximate) location and orientation of the graves, the presence of human remains and the location of finds were recorded with variable accuracy. The single available cemetery plan depicts all graves as neat rectangles. It is assumed that these exact rectangles do not represent the actual shapes of the grave pits; the outlines of the graves were probably not that straight. Unfortunately, the shapes of the graves were not described in the original catalogue; it only presents the length, width and depth of the outlines of the observed structures and the traces of the wooden constructions inside them. This information enables the analysis of grave construction types and variation in grave size, depth and orientation to a certain extent. Sixty-four grave contexts were recorded, together with one additional context found at some distance from the cemetery. Not all of the identified grave contexts were excavated; 19 graves cannot be included in the current analysis since details of their morphological features were not recorded in the catalogue of 1940. The excavated cemetery consists of inhumation graves, one cremation/vessel grave⁴¹ and one horse grave. Human remains were poorly preserved in the cemetery⁴² but in five cases the former presence of a body was observed as discolorations of the soil.

Grave constructions

The initial catalogue of graves and finds by Beckers and Beckers from 1940 is the only source that provides information on the grave constructions in Obbicht. For some graves additional information on the observed grave structures inside the burial pits is given. In view of the dimensions of the burial pits it is safe to suggest that the outlines of most burial pits were rectangular; they probably had more or less rounded corners as observed in other cemeteries (see for example Sittard-Kemperkoul in this volume). The vertical walls of the burial pits would have been either straight or slightly inward sloping with levelled bottoms, as observed in other cemeteries (see also Sittard-Kemperkoul in this volume).

Burial pits and wooden containers (both coffins and chambers) are the relevant grave construction types from Smal's typology found at the cemetery of Obbicht.⁴³ As at Sittard-Kemperkoul, wooden coffins and wooden chambers are referred to as wooden containers, except where two container outlines are visible in a single burial pit. The former presence of wooden containers in the Obbicht burial pits became evident because of band-shaped soil discolorations left by the (nearly) completely decayed wood-

en container walls. Figure 3.11 displays the distribution of the various types of grave structures identified at Obbicht. Graves that contained wooden traces will be discussed more elaborately below. First the trench graves (the burial pits without wooden constructions) are discussed.

Trench graves

The majority of the recorded burial pits are without other structures and should thus formally be identified as trench graves. The considerable size of some of these 'trench' graves in relation to the method of excavation, the level of knowledge at the time of excavation, and the soil conditions hampering observations, suggests that a number of these graves originally held wooden containers. Another argument for this suggestion is that at the nearby cemetery of Sittard-Kemperkoul a considerable number of chamber graves were identified. The size of the cemetery and the character of the grave finds from this cemetery are comparable to the Obbicht cemetery.

A number of trench graves (1, 6 and 37) were only partly excavated. The missing parts are indicated with interrupted lines on the new cemetery plan and in the catalogue of graves and finds. Some graves were identified on the basis of finds only. Their outlines were never observed nor recorded in the catalogue of graves from 1940. Nonetheless, they were depicted on the original cemetery plan in this same publication. These are graves 2, 3, 4, 7, 13, 14, 15, 23, 24, 30, 31, 32, 33, 41, 54, 59, 64 and 65 (grave 65 was identified at some distance from the cemetery: its exact location, orientation and shape were not recorded). It has to be concluded that the indicated locations and orientations of these graves on the cemetery plan from 1940 are doubtful and they are indicated with interrupted lines on the new cemetery plan.

Grave 20 is the largest grave of the cemetery. It contained wood remains of what seems to be one wooden container, which is identified as a chamber by Beckers and Beckers. Graves without observed wood remains but of comparable dimensions (and which might thus also have held wooden containers) are graves 26 (without finds), 28 (with a shield boss), 38 (with indifferent finds), 46 (with various weapons), 51 (a double grave with various weapons), 53 (with a shield boss), 55 (without finds), 56 (with various weapons), and 62 (with indifferent finds). The range of weapons, which are often associated with chamber graves, and the sizes of the burial pits allow the identification of these trench graves as possible chamber graves (fig. 3.11), but this will be discussed further in chapter 7 (fig. 7.2).

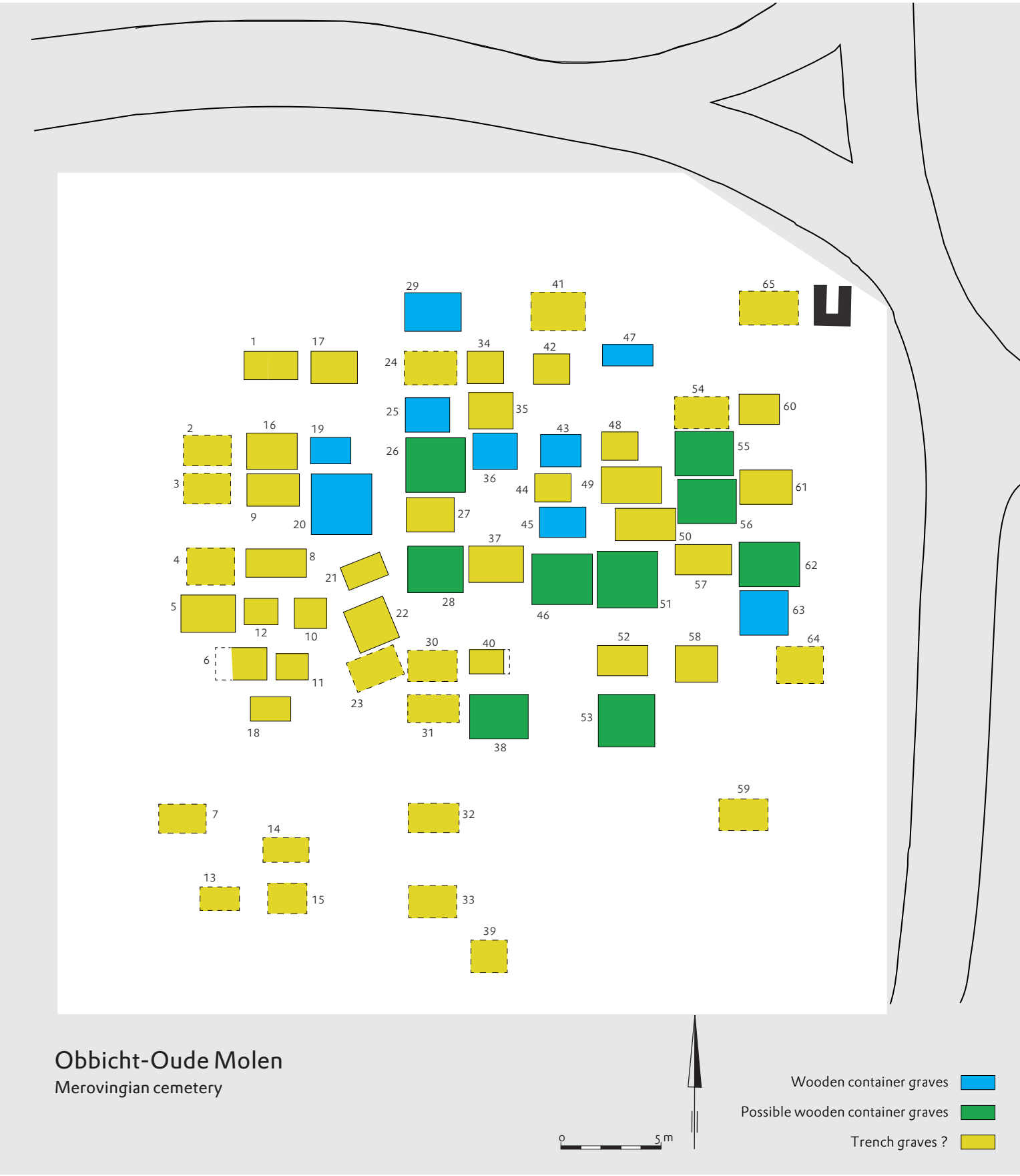
Wooden container graves: coffin graves and chamber graves

In a number of burial pits, wood remains or shadows of wooden container walls were observed (figs. 3.11 and 7.2). A complete out-

(38) See for instance Sági 1964; Roth 1978; Schneider 1983; Knaut 1993; Effros 2002; Bofinger/Sikora 2008. (39) Kümmel 2009; Van Haperen 2010; Klevnäs 2010; Aspöck 2011. (40) Theuws/Van Haperen 2012; see also Van Haperen 2010. (41) Other examples of cemeteries in the Netherlands with cremation graves are the cemeteries of Alphen, Bergeijk, Gennep, Gilze, Hoogeloon, Meerveldhoven, Obbicht, Posterholt and Veldhoven. (42) The poor presence of human remains is mainly explained by

the soil composition (see also chapter 2). The number of graves with traces of human remains is low compared to cemeteries located in landscapes with different soil conditions. (43) Smal in press in Theuws/Kars, in press.

Fig. 3.11
Obbicht-Oude Molen: distribution of grave construction types (scale 1:250).



line of a wooden container, of which the dimensions were also recorded, was observed only in grave 43 and in grave 45 the exact length of only one short wall was recorded. These walls are indicated as solid lines on the cemetery plan; the interrupted lines indicate that the exact dimensions and locations of the observed and recorded wooden container walls are uncertain. In graves 19, 20, 25, 29, 36, 47 and 63, band-shaped discolorations were observed but details were not recorded. On the whole, it remains difficult to identify the observed remains or soil discolorations as traces of either coffins or chambers.

A black-grey discoloration of the soil with a width of 0.85 m and a length of 1.80 m indicated the presence of a wooden container in grave 43 (burial pit: 2.00 x 1.60 m). It was located close to the eastern wall of the burial pit. The description of the discoloration in the original catalogue is not clear: it might have been the imprint of a decayed wooden wall or the bottom of the container. Only the outlines of the wooden container are depicted on the reconstructed grave drawing. In view of the dimensions it appears to be a chamber rather than a coffin, although, as mentioned before, this is not conclusive.

Grave 45 (burial pit: 2.30 x 1.50 m) showed a black band at a depth of 120 cm, indicating the former presence of a wooden container. This band enclosed a space with a width of 85 cm and it is assumed that this band, since it is referred to as 'width' in the original catalogue, formed one of the short walls of a wooden container. The length of the coffin could not be identified. This container might have been, in view of the given width, a chamber and not a coffin. The reconstructed wooden container is for now placed in the middle of the burial pit, but this location is not certain and indicated with an interrupted outline.

In grave 19, the walls of the wooden container were seen as a grey black band, alongside the burial pit's walls (burial pit: 2.00 x 1.30 m). Dimensions of the wooden container were not given; it was decided to draw the outlines close to the outline of the burial pit. Considering the dimensions of the burial pit this grave can be identified as a burial pit with a wooden chamber, presumably also with a wooden coffin. It was the grave of a woman, identified on the basis of beads.

Grave 20 (burial pit: 3.00 x 3.00 m) is the largest grave of the cemetery. It was (probably) the grave of a man with a shield, axe, seax, lance head, copper alloy bowl, two biconical pots and a glass vessel. It was not mentioned whether the finds were found inside or outside the observed wooden container, but the catalogue mentioned that the black bands, forming a rectangle and indicating the former presence of the wooden container walls, were found throughout the entire grave; they might have been the imprints of former chamber walls. The reconstructed grave is drawn with the wooden container walls alongside the walls of the burial pit, and thus with all the finds inside it. Since it is of considerable dimen-

sions it can be assumed that the wooden container originally held a second container, the wooden coffin. The imprint of the body (probably having been inside a coffin) was observed in the middle of the grave, close to the short western wall.

Context 25 (burial pit: 2.20 x 1.70 m) is the burial of a horse. The excavators observed that the horse was buried in a wooden container, indicated by a yellow-brown 3-cm wide band-shaped undisturbed discoloration formed by the decayed wooden walls of the container, which enclosed the horse skeleton entirely. Finds were not observed in this grave.

Grave 29 (burial pit: 2.80 x 1.90 m) was (probably) the grave of a man in which a lance head, shield boss and horse bridle were all found along the long southern wall of the grave, and fragments of what seemed to be a seax, and belt fittings were found scattered throughout the grave. A vague band-shaped soil discoloration, indicating the former wooden walls of a container, was observed close to the walls of the burial pit. In view of the burial pit dimensions, the discoloration might point towards the former presence of a wooden chamber.

Grave 36 (burial pit: 2.20 x 1.80 m) is a richly furnished grave of a woman. A band-shaped soil discoloration, indicating the former presence of a wooden container, was mentioned to be present at a depth of 180 cm. Its dimensions and location were not given and it is thus not known whether it was almost as large as the burial pit, indicating the former presence of a wooden chamber, or if it was smaller, indicating the former presence of a wooden coffin. It is for now depicted as an outline alongside the outline of the burial pit, in line with the majority of the observations in the Obbicht graves with remains of wooden containers.

For grave 47 (burial pit: 2.50 x 1.06⁴⁴/1.60 m) only a dark discoloration indicating the former presence of a wooden container was mentioned; the dimensions of this container are not known. It is reconstructed as an outline alongside the walls of the burial pit, but it might also have been a smaller coffin.

In grave 63 (burial pit: 2.40 x 2.20 m) only a black band-shaped soil discoloration was observed alongside the northern wall of the burial pit. The preserved skeletal remains indicate that it was the burial of a non-adult. This is rather remarkable in view of the dimensions of the burial pit; it might have been a chamber grave containing a smaller wooden coffin.

The number of chamber graves found at the nearby cemetery of Sittard-Kemperkoul (21 out of 86) is rather large, and it might be assumed that more chamber graves were originally present in Obbicht where traces of wooden containers were found in only nine of the 64 graves. A number of large burial pits without traces of wooden containers might have been wooden chamber graves (see also chapter 7). Other features such as traces of wooden beams, known to have carried wooden containers in other cemeteries (see for example Sittard-Kemperkoul) were not recorded at

(44) The recorded width of 1.06 m might be a typo in the original catalogue; a width of 1.60 m is more in line with the length of 2.50 m.

Table 3.4
Obbicht-Oude Molen: burial pit dimensions and calculated surface areas.

Context	Burial pit length	Burial pit width	Calculated surface area (m²)	Burial pit depth
20	3,00	3,00	9,00	1,80
51	3,00	2,80	8,40	1,30
26	2,95	2,70	7,97	1,15
46	3,00	2,50	7,50	1,70
53	2,80	2,60	7,28	1,40
62	3,00	2,20	6,60	1,80
38	2,90	2,20	6,38	1,30
56	2,90	2,20	6,38	1,60
55	2,90	2,20	6,38	1,70
28	2,75	2,30	6,32	2,00
49	3,00	1,80	5,40	1,70
29	2,80	1,90	5,32	1,35
63	2,40	2,20	5,28	1,40
5	2,70	1,85	4,99	1,90
50	3,00	1,60	4,80	1,70
22	2,10	2,20	4,62	1,50
16	2,50	1,80	4,50	1,60
61	2,60	1,70	4,42	1,30
8	3,00	1,40	4,20	1,45
57	2,80	1,50	4,20	1,50
9	2,60	1,60	4,16	1,60
35	2,20	1,80	3,96	1,80
36	2,20	1,80	3,96	1,95
58	2,10	1,80	3,78	1,30
52	2,50	1,50	3,75	1,20
17	2,30	1,60	3,68	0,80
25	2,20	1,70	3,57	1,30
45	2,30	1,50	3,45	1,20
27	2,40	1,70	3,40	1,30
43	2,00	1,60	3,20	1,50
60	2,00	1,50	3,00	1,40
34	1,80	1,60	2,88	1,70
42	1,80	1,50	2,70	1,10
47	2,50	1,06	2,65	1,40
19	2,00	1,30	2,60	1,55
21	2,10	1,20	2,52	1,30
44	1,80	1,40	2,52	1,40
48	1,80	1,40	2,52	1,30
18	2,00	1,20	2,40	1,70
10	1,60	1,50	2,40	1,40
11	1,60	1,30	2,08	1,00
12	1,60	1,30	2,08	1,20
40	1,70	1,20	2,04	1,30
37	?	1,80	?	1,50
6	?	1,60	?	1,30
1	?	1,40	?	1,50

the Obbicht cemetery. They might have been present but left no traces or were not recognized by the excavators.

Figure 3.11 shows that the graves with recorded wooden containers are distributed unevenly over the cemetery; they are mainly found in the northern and middle segment of the cemetery.

Cremation/vessel grave

Only one cremation or vessel grave was found in the Obbicht cemetery: grave 39 (fig. 3.11). Outlines and dimensions of a pit were not recorded in the catalogue although the outlines of a pit are depicted on the original cemetery plan. The dimensions of the outlines of all the depicted graves on the cemetery plan appeared to be highly inaccurate, and thus the way grave 39 was depicted is not necessarily indicative of what was originally observed. The grave consists of a large globular pot (height 28 cm), containing a considerable amount of human cremation remains of at least one individual of c. 14 years. The biological sex of the individual could not be determined on the basis of the available remains.⁴⁵ The vessel also contained unburnt objects: an iron plate buckle and counter plate with silver and copper alloy inlay, an iron belt fitting with plated silver, and a copper alloy rivet and a small oil lamp. The cremation grave was found in the most southern section of the cemetery. It might have been located on purpose at the border of the cemetery which consists of only inhumation graves. The pot with its content dates to phase O-OMIII (640-670). Cremation graves are not unusual in Merovingian cemeteries. Inhumation and cremation were both practised in the Merovingian period, although inhumation prevails.

Construction techniques

The use of different construction techniques is difficult to establish when wood remains are only preserved as soil discolorations with sometimes only tiny traces of wood remains. Wooden containers with straight corners are expected to have contained nails of wood joints holding the boards together. Containers with cross-fixed container walls, on the other hand, did not demand the use of nails or wood joints because the boards fix themselves.⁴⁶ The excavation documentation does not provide sufficient information on wood joints. The presence and position of nails in the graves could inform us on the subject.

Nails

Only four graves yielded iron nails or iron fragments that could be associated with wooden constructions.

Grave 8 contained several iron nails that were found dispersed throughout the grave. Only one of the nails is present among the grave finds. It has a length of 4.8 cm, which is large enough to be used for the construction of a coffin. Unfortunately, the grave did not reveal traces of a wooden construction and there is no information on the location of the finds that could help us determine whether the nails were used for the construction of a coffin.

Grave 20 yielded fragments of nails scattered throughout the

grave. Since this grave also contained traces of a wooden construction, it could be that the nails were part of a wooden construction. However, there is no information on the exact size or location of the nail fragments.

Grave 23 only contained one fragment of an iron nail. Since this grave did not reveal traces of a wooden container, it seems improbable that this single specimen was part of a wooden coffin.

Finally, grave 38 contained three nails that have the size and shape of possible coffin nails. The grave’s size suggests that it could have been a chamber grave that also held a wooden coffin. However, certainty cannot be provided here either, since no traces of a wooden construction were found and no information is provided on the location of the nails.

In the end, it remains difficult to state with certainty that nails were used to construct coffins at the Obbicht cemetery.⁴⁷ The number of nails found at the cemetery is low, as is the number of wooden constructions.

Grave size and depth

Length, width and depth are given for 46 Obbicht graves while in three cases (graves 1, 6 and 37) only the width was recorded (table. 3.4). For the other graves the dimensions were either not provided in the publication or could not be recorded; the majority of these graves were destroyed and could only be identified on the basis of faint traces and finds. Only two burial pits contained traces of a wooden container of which the dimensions could be measured (grave 43, and the width in grave 45). The descriptions in the catalogue of Beckers and Beckers seem to indicate that the wooden containers in the other graves were nearly as large as the burial pit (see also chapter 7).

It is not mentioned how grave depths were determined, but it seems as if the level of the bottom of the graves was compared to the surface level at the time the excavation was recorded. The depths of the remaining grave walls and the depths of the bottoms compared to the early medieval surface level were not recorded. It was not possible to establish this surface level due to problematic terrain conditions as was mentioned in the publication of Beckers and Beckers.

The width of the burial pits ranges from 1.06 m to 3.00 m (in Sittard from 0.86 m to 1.97 m, in Stein from 0.54 m to 2.64 m) while the length ranges from 1.20 m to 3.00 m (in Sittard from 1.19 m to 2.99 m, in Stein from 0.54 m to 4.00 m). The calculated surface areas range from 1.68 m² to 9.00 m² (Sittard from 1.38 m² to 5.27 m², in Stein from 0.29 m² to 9.20 m²).

The surface areas are also provided for a number of other cemeteries. In Posterholt the surface areas of burial pits is between 2.28 m² and 6.38 m²;⁴⁸ in Bergeijk the exact calculations of the surface areas are not provided, but figure 3.3 shows that they range roughly between 2 m² and 11 m².⁴⁹ Even though the grave of 11 m² may

be an exception, there are still some graves between 6 m² and 8 m². In the Meerveldhoven cemetery too, the burial pits seem to be much larger, ranging between 2.5 m² and 13 m².⁵⁰ The surface areas of the graves in the ‘urban’ Vrijthof cemetery in Maastricht are considerably smaller. The lengths and widths of the graves vary from 319 cm to 101 cm and 139 cm to 41 cm. The surface areas of the graves for which the length and width could be recorded vary from 0.4 m² to 3.6 m².⁵¹ Another cemetery with small burial pits is the Alphen cemetery; it contained burial pits with lengths up to 1.95 m and widths between 0.75 m and 1 m.⁵² The Obbicht burial pits (and Stein burial pits) are thus similar in size to those in Bergeijk and Meerveldhoven, and rather large compared to those in Sittard-Kemperkoul, Posterholt, Alphen and Maastricht-Vrijthof.

The recorded depths of the graves range between 60 cm and 2.00 m, but most graves were at least 1 m deep. In comparison to other cemeteries (see for instance Sittard-Kemperkoul in this volume), the graves seem to be rather deep. However, we already explained that the original surface level in medieval times is unknown. The grave depths provided by Beckers and Beckers should therefore be taken as relative depths.

Comparing grave size and grave depth, we find that graves with the largest calculated surface areas are often deeper. Even though the depths are relative, it thus seems correct to assume that the larger graves at Obbicht were mostly deeper. Still, exceptions are found as well; the single largest grave (grave 51) has an average depth of 130 cm and the single deepest grave (grave 36) has an average surface area of 3.96 m².

Grave constructions and chronology

Table 3.5 displays information on the size of the graves in relation to the Obbicht phases. There does not seem to be a correlation between burial pit size and chronology. The smallest graves (graves 11, 12 and 40) belong to Obbicht phase IIa (565-610/20) and I Ib (565-640/50), while the largest (graves 20, 46, and 51) belong to Obbicht phase IIa (565-610/20) and I Ic (610/20-640/50). Both the smaller and larger graves thus have roughly similar dates ranging between 565 and 640/50. A strong correlation between the presence of wooden constructions and chronology is also absent. All graves with datable finds and documented traces of wooden constructions (graves 19, 20, 29, 36, 43, 47) belonged to Obbicht phase IIa or I Ib. This could indicate that both the earliest and latest graves did not contain grave structures, but since we assume more graves originally contained wooden constructions (containers and chambers) this does not seem plausible.

Grave orientation

Beckers and Beckers mentioned that nearly all the Obbicht graves had a west-east orientation, and that only three graves (21, 22 and

(45) Analysis by dr. Liesbeth Smits of the University of Amsterdam. (46) See note 13. (47) See the remarks on the deposition of nails above. (48) De Haas/Theuws 2013. (49) Theuws/Van Haperen 2012, 41. (50) Verwers 1978. (51) Theuws in press in Theuws/Kars in press. (52) Verwers 1977, 169.

Table 3.5
Obbicht-Oude Molen: grave size in relation to burial phases.

Context	Obbicht phase	Calculated surface area (m²)	Context	Obbicht phase	Calculated surface area (m²)
5	O II a	4,99	40B	O II b	2,04
8	O II a	4,2	42	ND	2,7
9	ND	4,2	43	O II b	3,2
10	O II b	2,4	44	O III	2,52
11	O II a	2,08	45	O I-IIc	3,45
12	O II b	2,08	46	O II c	7,5
16	ND	4,5	47	O II b	2,65
17	O I	3,68	48	O I-IIc	2,52
18	O II a	2,4	49	O II b	5,4
19	O II b	2,6	50	ND	4,8
20	O II a	9	51A	ND	8,4
21	O I	2,52	51B	O II c	8,4
22	O I + II a	4,62	52	O IIb	3,75
25	ND	3,7	53	O I – II c	7,28
26	ND	8,0	55	ND	6,38
27	ND	4,1	56	ND	8,41
28	O II a	6,32	57	O II c	4,2
29	O II a	5,32	58	ND	3,78
34	ND	2,88	60	ND	3,0
35	O II b	3,96	61	O II b	4,42
36	O II b	3,96	62	O II b	6,6
38	O I + II	6,38	63	ND	5,28
40A	O II	2,04			

23) have an orientation slightly deviant from this general direction (fig. 6.5).⁵³ They are depicted as graves with a southwest-northeast orientation, but the exact angle compared to the west-east axis was not provided. However, a considerable number of burial pit outlines were not observed and recorded, but nevertheless depicted on the schematic cemetery plan with an orientation in line with the general orientation. Some graves in the southern section of the cemetery were mentioned to have been destroyed by the construction and demolishing of the two subsequent mills. It is not clear whether traces of these graves were still observed or if only grave finds were uncovered at the (approximate) location where these graves are depicted on the cemetery plan. The orientations of these graves remain unknown, but they were probably in line with the general orientation of the recorded graves on the cemetery plan. The same applies to the other graves of which the exact outlines were not observed, but were nonetheless depicted as rectangular graves on the cemetery plan.

On the basis of the observed locations of the finds and the two discovered skulls (in graves 49 and 63), it can be assumed that the heads in this cemetery were generally located in the western section of the graves, as it is usually the case in w-e orientated burials in Merovingian cemeteries. The discolorations caused by decayed bodies in a number of graves are not indicative of their exact ori-

entation. The three graves (21, 22 and 23) with a deviant location are located in the middle west of the cemetery. These graves did not contain skeletal remains.

Grave disturbances

Beckers and Beckers fairly accurately recorded which graves were complete or disturbed. This information is nonetheless not included in the original cemetery plan: the graves of which it is mentioned that their outlines were not or only partly recorded are represented as complete graves. Their catalogue enables the identification of three sorts of grave disturbances: the destruction of graves in the southern part of the cemetery caused by the construction of the two subsequent mills, the destruction of graves in the western part of the cemetery by gravel exploitation, and disturbances attributed to early medieval grave reopening and overlapping graves.

Recent disturbances

The location of the two consecutive mills was reconstructed in the southern section of the cemetery since graves 13, 14, 15, 30, 31, 32, 33 and 59 are mentioned to have been destroyed by their presence (fig. 6.5). It is not clear how these graves were identified and whether their location and w-e orientation on the cemetery plan are accurate. Finds are attributed to all the graves. The discovery of the finds probably made the excavators think that graves were once present at the find locations, hence their depiction on the cemetery plan. Context 33 is the most ambiguous: Beckers and Beckers mention the discovery of finds underneath the mill and the difficulties encountered with assigning them to one or two graves. The location of context 33 on the cemetery plan thus seems rather loosely chosen.

Graves 2, 3, 4, and 7, and part of graves 1 and 6 were mentioned to have been destroyed by construction work. Since gravel exploitation took place to the west of the cemetery (although it is not known exactly where), we assume it was this activity that destroyed the six graves. It seems plausible that their orientation and location on the cemetery map is not that accurate.

For a number of other graves, dimensions were not given because they were partly disturbed. The dimensions of grave 23 were not recorded, but it was not mentioned why. It might have been recently disturbed, but this remains uncertain. Grave 24 was mentioned to have been destroyed by the digging of a trench; it is however not known what trench is referred to and whether this trench was related to the archaeological excavation.

Grave 41 was not excavated due to terrain difficulties. It is mentioned that finds were not recovered from grave 54, but the dimensions of the grave were not given. The reason for this remains unknown. Grave 64 was not declared to have been disturbed, but dimensions of the burial pit were not given. The catalogue reveals that grave 37 was partly disturbed, but not how and why

All together, 44 graves were complete and excavated (including the cremation grave 39). All others were either completely or part-

ly destroyed. The published and single available cemetery plan is thus a reconstruction and not an accurate representation of the excavated graves.

Early medieval interventions

Fragmented and scattered finds were observed in a number of graves. This might be an indication of early medieval reopening activities. Beckers and Beckers already identified the disturbance of grave 8 as an old one because – as they mention – pottery fragments, iron fragments and beads were dispersed all over the grave. The same applies to a number of other graves. In grave 21 the fragments of a red bowl were found scattered throughout the grave. In grave 22 iron fragments, among which were a seax knob and glass fragments, were found dispersed all over the grave. The beads from grave 27 were found at their presumed original location (the neck), but scattered iron fragments were found. The reopening pit probably covered only a segment of the grave. In grave 28 the fragments of two pots were found dispersed, but a complete spouted pot was also found in situ, together with a fragmented sword and shield. Again, a reopening pit might have disturbed only part of the grave. All the objects from grave 29 were found along the southern wall; some can be presumed to be at their original location, but some of the iron fragments might have been of disintegrated objects that were moved from their original location when a reopening pit was dug. In grave 47 fragments of a pot were found scattered throughout the grave and a rim fragment was mentioned to have been found at a relatively high level in the grave. Fragments of a knife and copper alloy fragments were found dispersed in grave 62, although a pot was found undisturbed in the eastern end of this grave. Both the fragmented condition and dispersal of objects in graves indicate disturbances which seem to have been caused by early medieval reopening pits since the outlines of the graves themselves were still completely or partly intact. Beckers and Beckers were already aware of this practice, although they were probably not yet informed enough to identify the actual reopening pits.

Overlapping graves and/or double graves

Notifications of graves overlapping each other to some extent cannot be found in the catalogue of 1940 and overlapping graves were not depicted on the original cemetery plan. However, in two graves (graves 40 and 51) the superimposed depositions of two bodies with associated finds were identified since the separate find assemblages were found at considerably different depths. It is not clear whether these graves were stacked graves, in which the second burial was placed on the exact location of the first deliberately⁵⁴, whether the bodies were placed in the graves simultaneously, or whether two graves overlapped only partly and might have become associated by accident.

In grave 40 a biconical pot was found at a depth of 50 cm. But at a depth of 130 cm various weapons were found as was a second biconical pot with a small pot inside it. It was mentioned that the grave could only be excavated partly, and that the locations of a number of objects could not be established. It was also mentioned that the two pots of the lower burial were found 200 cm measured from the western wall. Since the recorded length of the grave was 170 cm, it might be the case that the lower burial was longer than the outline of 1.70 m observed at a higher level. The gender of the person buried on top cannot be established but the lower burial was that of a man. The biconical pot found at a depth of 50 cm could also be a single pot placed above the ‘lower’ grave after it was already partly filled with soil; if this was the case the biconical pot is the third pot associated with the ‘lower’ burial.

Grave 51 was at first identified as a ‘family grave’ with two superimposed bodies of ‘warriors’. An assemblage of weapons (seax and lance) was found at a depth of 90 cm and a second assemblage containing a seax, belt fittings, tweezers, lance head, spouted pot and biconical pot was found at a depth of 1.30 m. Since the first assemblage is found in the northern half of the recorded outline, and the second assemblage more to the south, the outlines could also have been formed by two separate graves of which the most northern burial pit overlaps the most southern burial pit. It is thus not necessarily a double grave.

The number of overlapping graves in rural cemeteries such as the cemetery of Obbicht is usually rather small.⁵⁵ It can thus be assumed that this was also the case for Obbicht, although the difficult terrain conditions and the standard of excavation back then might have hindered the identification of slightly overlapping graves.

Stein-Groote Bongerd

The nature of the information on grave structures in the Stein cemetery is comparable to that of the Obbicht cemetery; all the excavated contexts are recorded as burial pits and in a few, traces of wooden containers were observed. The features on the basis of which the grave construction types are identified were not documented on the original cemetery plan but only in the descriptive catalogue of graves and finds in the Beckers and Beckers publication from 1940. Although in the catalogue from 1940 the length, width and depth of the observed burial pits and wooden containers are given, they did not describe the graves’ shapes and constructions. We assume that the precise rectangles depicted on this cemetery plan do not represent the original shapes of the graves; their corners and walls would have been more curved and irregular.

As in Obbicht, the original cemetery plan and catalogue of graves enables a limited analysis of the types, sizes, depths and orientations of the 72 grave contexts recorded. Not all the identified

(53) Beckers/Beckers 1940, 359. (54) Theuws/Kars, in press. (55) As opposed to the ‘urban’ Vrijthof and Pandhof cemeteries in Maastricht in which numerous stacked graves were excavated (Theuws/Kars in press).

grave contexts were actually excavated; some were mentioned to have been destroyed by building activities or gravel extraction. They are nonetheless depicted as undisturbed graves on the cemetery plan. The excavated cemetery consists of inhumation graves only, but – in view of the destruction of a considerable part of the cemetery – cremation graves as the one discovered in Obbicht might have been present here as well. Complete or partial outlines of wooden containers (chambers and/or coffins) were observed in 12 graves, and in 10 graves vague shadows or nearly complete body silhouettes were observed. Skeletal remains were completely absent in the Stein cemetery, which is mainly explained by the soil conditions at the location of the cemetery.⁵⁶

Grave construction

The variety of grave construction types in Stein can only be reconstructed on the basis of the catalogue of graves and finds in Beckers and Beckers 1940. The main recorded grave features are the dimensions of the outlines of burial pits. In view of the grave descriptions provided it is safe to suggest that the outlines of the majority of the burial pits were more or less rectangular with rounded corners and slightly irregular walls. The vertical walls of the burial pits would have been either straight or sloping with levelled bottoms. Information on additional structures inside the burial pits was given only for 11 graves.

We assume that burial pits and wooden containers (coffins and chambers) are the relevant grave construction types in the cemetery of Stein.⁵⁷ The wooden containers in the Stein graves were identified on the basis of band-shaped soil discolorations, left there by decayed wooden container walls. This information was recorded in the catalogue of graves in Beckers and Beckers on the basis of which the trench graves also were identified. Figure 3.12 displays the distribution of the various grave structures identified at Stein.

Trench graves

The majority of the observed and recorded burial pits are identified as ‘trench graves’ although this observation may not have much relevance. As in Obbicht some of the large ‘trench’ graves may originally have held wooden chambers (see also chapter 7). The method of excavation, level of knowledge at the time of excavation and soil conditions may have hampered clear observations. An additional argument for this conclusion is that the character of the grave finds is similar to that of the nearby cemetery of Sittard-Kemperkoul, in which abundant chamber graves were discovered. On the other hand, the excavators were aware of soil discolorations indicating the former presence of wooden containers. The fact that wooden container traces were not observed in a considerable number of large burial pits might reflect that large trench graves were common in Stein but soil conditions might rather be responsible for the limited number of recorded wooden containers.

A number of trench graves were only partly observed and excavated: these are graves 1, 6, 9, and 15. Their missing parts are indicated with broken lines on the new cemetery plan (fig. 3.12) and the reconstructed individual grave drawings. Some graves were identified on the basis of finds alone; their outlines were never observed and recorded but nonetheless depicted on the initial cemetery plan. These are graves 3, 7, 34, 39, 40, 41, 43, 45, 53, 62, 63, 72, 73, 74 and 75. They are indicated with broken lines on the new cemetery plan, following their location and orientation on the initial plan, which remains speculative.

Trench grave 46 is the largest grave of the cemetery. Considering the sizes of the graves with chambers and coffins in the cemeteries of Sittard and Meerveldhoven, this grave could have contained a chamber and/or coffin. Chamber grave with coffin 29 is rather small. One could imagine that a number of graves larger than grave 29 were also graves with wooden containers.

Wooden container graves: coffin graves and chamber graves

Shadows of decayed wooden container walls were observed in graves 19, 21, 22, 29, 30, 33, 37, 45, 56, 57, 58 and 60 (fig. 3.12 and 7.3). In grave 29 soil discolorations of a wooden chamber and wooden coffin were observed; in grave 37 traces of two wooden coffins were observed. The other graves contained only traces of one wooden container.

Grave 29 is a relatively small grave (burial pit: 2.70 x 1.65 m) and the only grave in which both a wooden chamber and wooden coffin were observed. The dimensions of the chamber are 2.35 x 1.10 m, and those of the coffin 2.00 x 0.75 m. The excavators made a vertical section of the grave which showed that the wooden wall traces of the chamber and coffin came together at the bottom of the grave. In three corners of the chamber, shadows of additional circular constructions were visible. These were probably posts to which the wooden boards of the chamber were attached. It was not mentioned where the traces of the wooden coffin within the chamber were found exactly, nor in which corners of the chamber the posts were observed. The reconstructed grave drawing is therefore not an exact representation of what the excavators observed. The seax is depicted as a deposition inside the coffin. The reconstruction of the locations of the finds in wooden container graves is discussed in chapter 7.

Grave 37 (burial pit: 2.60 x 2.00 m) held wood traces and band-shaped soil discolorations of two wooden containers. It remains unclear whether these traces represent a wooden chamber with a wooden coffin, two wooden coffins placed alongside each other, or a chamber divided by a wall. The traces were first visible at a depth of 1.20 m (the depth of the grave is 1.60 m); the remaining height of the grave or the walls is thus 40 cm (assuming that the container was not resting on beams placed at the bottom of the burial pit). The outer band with wood remains is 1.80 x 1.10

Fig. 3.12
Stein-Groote Bongerd: distribution of grave construction types (scale 1:250).



(56) Beckers/Beckers 1940, 340-343. (57) Again we follow the analysis of grave constructions by Smal (Smal in press in Theuws/Kars in press).

m. It is divided in half by a band-shaped soil discoloration with wood remains: it seems thus as if two coffins were placed in close contact. It was mentioned that one coffin was 15 cm longer than the other. It is not mentioned where the coffins were located within the burial pit and which coffin was the longer one; the reconstructed grave drawing is thus not an exact representation of the original appearance of the excavated grave.

Graves 19 and 21 clearly contained two bodies, but traces of only one wooden container were found in both graves. The traces of the wooden container in grave 19 (burial pit: 3.40 x 2.30 m) measured 2.65 x 1.70 m and became visible at a depth of 1.50 m; the remaining height of the walls was 20 cm (grave depth 1.70 m). The discolorations left by the two bodies were found at a higher level; they were visible at a depth of 1.20 m. Considering the difference between this height and the bottom of the burial pit, the excavators suggested that the container did not reach this lowest level but was placed on a construction, probably made of wooden beams as regularly found in other cemeteries with wooden container graves (see for example Sittard-Kemperkoul in this volume). The vertical section through the grave showed that the walls sloped inwards towards the bottom. The dimensions of the wooden container and the observation that it contained two bodies suggest it was a chamber. Whether it contained a division wall or two coffins remains uncertain. The exact location of the wooden container in the burial pit is not known, but the location of the bodies was indicated and is represented on the reconstructed individual grave drawing. Following the location of the bodies it can be assumed that the container was placed more towards the long southern wall.

Grave 21 (3.35 x 2.65 m, depth 1.70 m) also contained silhouettes of two bodies, first visible at a depth of 1.10 m. It was mentioned that soil discolorations formed nearly perfect imprints of the former corpses as if they were actually there. The length of the discoloration was 2.00 m and the largest width, where the two body silhouettes touched, was 1.43 m. Both the heads had a length of 37 cm; one had a width of 30 cm and the other a width of 23 cm. The space between the heads was 10-20 cm. The legs of both the bodies left a soil discoloration with a length of 50 cm and a width of 50 cm. Some faint band-shaped discolorations of a possible container wall were found along one of the short sides and one of the long sides of the burial pit at a depth of, respectively, 1.55 m and 1.60 m. Where exactly these traces were found was not recorded: they are indicated with interrupted lines on the reconstructed grave drawing. It remains uncertain whether the two bodies were buried in separate coffins, or placed together in one wooden container. The grave was without finds.

Graves 33, 56, 57, 58 and 60 contained traces of the walls of single wooden containers of which the dimensions and/or locations within the burial pit were recorded. In grave 33 (2.20 x 2.20 m, depth: 1.20 m) a rectangular outline was observed at a depth of 78 cm close to the short walls, and 15 cm from the long northern wall and 40 cm from the long southern wall of the burial pit. Finds are not known from this grave.

Grave 56B (2.75 x 1.95 m, depth: 1.60 m) showed a rectangular discoloration at a depth of 1.40 m, with a length of 1.90 m and a width of 65 cm. It was observed that the short western wall of the wooden container was rounded. It is plausible to identify the context as a grave with wooden coffin in view of the recorded dimensions. The burial pit is considerably larger than the coffin but traces of a chamber were not observed. The grave contained a large biconical pot which was mentioned to have been found within the coffin, which might indicate that a chamber was never present since vessels are generally placed outside the coffins in chamber graves (see for example Sittard-Kemperkoul). The exact location of the wooden coffin within the recorded burial pit is not known; in the reconstruction it is placed in the middle of the burial pit on the basis of the location of the biconical pot.

In grave 57 (2.65 x 2.20 m, depth: 1.85 m), the contours of a wooden container measuring 1.50 x 1.10 m was visible at a depth of 1.45 m. It was placed 90 cm from the eastern burial pit wall, 50 cm from the northern wall, and close to the western and southern wall. The location of the completely decayed body could be observed alongside the southern wall of the wooden container: the soil discoloration left by the body clearly showed contours of the head, located in the western end of the wooden construction. It was thus clearly a west-east orientated burial. The length of the body silhouette was 1.17 m and the width 60 cm, which indicate that it was the burial of a child. It was visible 15 cm from the southern wall of the wooden construction. The locations of the majority of the finds were given, and it could be concluded that they were all deposited within the wooden container. Traces of a larger wooden construction were not identified despite the burial pit being considerably larger than the observed wooden container.

Grave 58 (2.50 x 1.80 m, depth: 1.85 m) showed an irregular and vague outline of a wooden container surrounding a soil discoloration indicating the former location of a body. The excavators concluded that this 'coffin' was probably richly decorated since numerous iron mounts were found at its former location, as were some iron nails. It is not clear where exactly in the burial pit these objects were found; it is now drawn as a container with walls not far from the burial pit walls. The other finds (pottery fragments) were found throughout the grave; exact locations were not given.

Grave 60 (2.40 x 1.40 m, depth: 1.50 m) showed a rectangular fill of gravel and clay, different from the surrounding sandy soil, at a depth of 1.28 m indicating the former presence of a wooden container measuring 1.70 x 0.90 m. It is not clear where exactly the wooden container was observed in the burial pit; it is drawn in the middle of the pit on the reconstructed individual grave drawing. The locations of the finds are described in relation to the 'grave walls'; it is not clear whether this was in relation to the burial pit walls or the wooden container walls. On the new drawing of the grave the locations of the finds are reconstructed in relation to the wooden container walls.

In graves 22, 30 and 45 traces of wooden containers were men-

tioned to have been observed, but their exact dimensions and/or locations were not documented.

Grave 22 (1.15 x 1.00 m, depth 0.80 m) contained one wooden container in the middle of the grave, 20 cm from the burial pit walls. It was observed as a darker rectangular discoloration indicating the former wooden container and the body inside it. It is not clear whether traces of the walls were observed as in the other Stein graves, or if the discoloration was formed by the floor of the coffin and the body imprint. It is on the new grave drawing depicted as a stain in the middle of the grave. It was mentioned that the finds (a biconical pot and 40 beads) were found within the outline of the discoloration, thus inside the wooden container. In view of the dimensions of the burial pit, it is safe to suggest that it was a wooden coffin grave of a non-adult.

In grave 30 (1.85 x 1.40 m, depth 1.05 m), the bottom and walls of a wooden container were observed close to the walls of the burial pit at a depth of 65 cm. Since the dimensions of the traces are not documented, the wooden container is depicted as an interrupted line alongside the burial pit walls. The finds seem to have all been deposited within the container.

Grave 45 (burial pit, dimensions not given) was mentioned to have been carefully excavated, which resulted in an observation of a rectangular soil discoloration left by wooden container walls at a depth of 1.25 m. The width of the wooden container was 0.82 m, and the length of the long walls were not given. Pottery shards were found dispersed throughout this grave, which suggests that it was possibly reopened.

Other features such as beams (known from other cemeteries with wooden containers) were not observed in all the Stein graves with traces of wooden containers. Possibly, they were originally present but not recognized by the excavators.

Figure 3.12 shows that graves with wooden containers are distributed over the cemetery unevenly; they are mainly found in the middle section of the cemetery. The low number of chamber graves in Stein is in line with for example Posterholt, where only four wooden chamber graves were found, and Bergeijk, where only one wooden chamber grave was found, but is in contrast with Sittard-Kemperkoul, where 21 were found. Still, it remains unclear whether more chambers and coffins were originally present in the larger burial pits of the cemetery of Stein.

Possible cremation grave

One possible cremation grave was found in the Stein cemetery: grave 67. It is a square pit with a width and length of 54 cm, which is very small. It could only have contained the body of a baby or reburied disarticulated skeletal remains. A small biconical pot was the only find from this grave. It might thus also have been a cremation grave although no cremated remains were found.

Construction techniques

The outlines of the wooden containers from the cemetery of Stein were not recorded on the initial cemetery plan. It can be as-

sumed that they were rectangular and similar to the wooden containers in the nearby cemetery of Sittard-Kemperkoul, except for grave 56 of which it was mentioned that one of the short sides was rounded. The presence and position of nails in the graves could inform us about the construction of the containers.

Nails

Only seven graves at Stein yielded large iron nails or iron fragments that might be associated with wooden constructions. In five cases (graves 23, 37, 49, 60 and 66), only one iron nail was found. In three cases, the location of the nail is provided as well. These locations do not seem to indicate that the nails were used for a wooden construction; in grave 23, the nail was found next to a pottery vessel, in grave 49 it was found near the northern wall of the burial pit but without traces of a wooden construction, and in grave 66 the nail was found in the proximity of a plate buckle.

In grave 46, six iron nails were found scattered throughout the grave. Unfortunately, no traces of a wooden construction were recorded. However, being the largest grave found at the Stein cemetery, the grave's size (4.0 m x 2.3 m) indicates that it could have been a chamber grave of which the wood has decayed. Information on the exact location of the nails is not provided, but since the excavators documented that the grave was probably disturbed, we do not expect the nails to have been found in situ.

Grave 57 contained two iron mounts, one with some wood remains, which were mentioned to have been found close to the northern and eastern walls of the grave. Additionally, a possible third iron mount with multiple heads of nails and some detached iron fragments was found in the vicinity of the southeast corner of the wooden container. One of the mounts is now identified as the extremity of a shield grip, the other is an indeterminate fragment, and the third is not available anymore. The last two mounts might have been coffin mounts, but this is very uncertain; many other possibilities, as for example the presence of a wooden box, can also explain their presence.

Finally, Beckers and Beckers write that the container found in grave 58 was probably richly decorated. According to them, several mounts and nail fragments were found. Unfortunately, these finds were not present when re-examining the Stein cemetery. It is therefore not possible to elaborate on grave 58's container construction. As was mentioned in relation to the find of nails in Sittard, we might consider other interpretations for the presence of nails in graves. They might relate to ritual practices.⁵⁸

Grave size and depth

The length and width of 57 graves were recorded in the original catalogue of graves (table 3.6). An exact representation of these measurements was not used on the initial schematic cemetery plan, in which all graves were presented as equally sized rectangles. The correct scaled dimensions of the graves are integrated in the new cemetery plan. Complete outlines were not observed for all the graves: the length alone was given for graves 6 and 7, and the width

Table 3.6
Stein-Groote Bongerd: grave dimensions.

Context length	Burial pit width	Burial pit surface area (m²)	Calculated depth	Burial pit
46	4,00	2,30	9,20	2,10
21	3,35	2,65	8,88	1,70
19	3,40	2,30	7,82	1,70
5	2,80	2,50	7,00	1,20
55	3,00	2,00	6,00	1,90
69	3,10	1,90	5,89	1,80
57	2,65	2,20	5,83	1,85
44	3,60	1,50	5,40	1,06
71	3,00	1,80	5,40	1,40
56	2,75	1,95	5,36	1,60
32	2,80	1,90	5,32	1,25
37	2,60	2,00	5,20	1,60
70	2,80	1,80	5,04	1,90
66	2,50	2,00	5,00	1,20
65	2,70	1,80	4,86	1,50
33	2,20	2,20	4,84	1,20
52	3,00	1,60	4,80	1,45
49	2,40	1,90	4,56	1,10
2	3,25	1,40	4,55	1,85
58	2,50	1,80	4,50	1,85
29	2,70	1,65	4,46	1,20
23	2,60	1,70	4,42	0,80
24	2,60	1,70	4,42	1,00
51	3,70	1,10	4,07	1,27
25	2,60	1,55	4,03	1,20
54	2,40	1,65	3,96	1,40
12	2,20	1,80	3,96	1,00
17	2,70	1,40	3,78	1,00
64	2,50	1,50	3,75	1,80
61	2,40	1,50	3,60	1,70
60	2,40	1,40	3,36	1,50
47	1,90	1,70	3,23	0,75
10	2,30	1,40	3,22	0,90
35	2,00	1,60	3,20	1,30
50	2,10	1,50	3,15	1,50
8	2,10	1,50	3,15	1,30
4	2,00	1,50	3,00	1,80
16	2,10	1,40	2,94	1,00
36	2,00	1,45	2,90	1,70
31	2,15	1,30	2,80	0,80
30	1,85	1,40	2,59	1,05
42	2,15	1,15	2,47	1,20
28	1,80	1,35	2,43	1,05
59	2,00	1,20	2,40	0,95
20	2,25	1,05	2,36	0,76
26	2,30	1,00	2,30	0,80
48	1,70	1,10	1,87	1,50
68	1,80	0,90	1,62	1,00
38	1,60	1,00	1,60	1,00

Context length	Burial pit width	Burial pit surface area (m²)	Calculated depth	Burial pit
18	1,32	0,87	1,15	0,70
22	1,15	1,00	1,15	0,80
27	1,50	0,70	1,05	0,90
14	1,35	0,77	1,04	0,64
11	1,20	0,80	0,96	0,68
13	0,85	0,60	0,51	1,20
67	0,54	0,54	0,29	0,60
7	2,00	-	-	0,90
9	-	2,00	-	1,50
1	-	1,20	-	1,70
15	-	1,20	-	1,20
6	1,70	-	-	-

alone was given for graves 1, 9 and 15. The dimensions of a number of other graves (indicated with broken lines on the new cemetery plan) could not be recorded either; they were destroyed and could only be identified on the basis of some faint traces or finds.

The grave depth was recorded for 60 graves. It was not explained how this depth was obtained, but it seems that the bottom of the burial pit was measured in relation to the surface level at the time of excavation. The early medieval surface level was not established; the recorded depths therefore do not indicate the original depth of the graves. Still, they are useful for comparison within the cemetery since the surface level at the time of excavation, and presumably the early medieval surface level, was relatively flat.

Table 3.6 displays the maximum lengths and widths of the burial pits found at Stein. The width of the burial pits ranges from 0.54 m to 2.65 m (in Sittard from 0.86 m to 1.97 m, in Obbicht from 1.06 m to 3.00 m) while the length ranges from 0.54 m to 4.00 m (in Sittard from 1.19 m to 2.99 m, in Obbicht from 1.20 m to 3.00 m). The calculated surface areas range from 0.29 m² to 9.20 m² (in Sittard from 1.38 m² to 5.27 m²; in Obbicht from 1.68 m² to 9.00 m²). The grave pits from Stein are thus rather similar to Obbicht and are rather large compared to Sittard-Kemperkoul.⁵⁹

Table 3.7 displays the maximum lengths and widths of the few wooden containers found in Stein. The length of the outer or single wooden containers in the Stein graves varies from 1.70 m to 2.35 m, and the width from 0.55 m to 1.70 m.

The remaining depths of the graves range between 0.60 m and 2.10 m, but most graves were at least 1.0 m deep. In comparison to other cemeteries⁶⁰ the graves seem rather deep, though their depths are similar to those recorded at Obbicht. The original surface level of the site in early medieval times is unknown. The grave depths provided by Beckers and Beckers should therefore be taken as relative depths.

Comparing grave size and grave depth, we find that graves with the largest surface areas are mostly also the deepest graves. Even

Table 3.7
Stein-Groote Bongerd: container dimensions.

Context	Container length	Container width
19	2,65	1,70
29 (chamber)	2,35	1,10
29 (coffin)	2,00	0,75
33	2,10	1,65
56	1,90	0,65
37 (container 1)	1,80	0,55
37 (container 2)	1,65	0,55
60	1,70	0,90
57	1,50	1,10
45	-	0,82
30	-	-
58	-	-
21	-	-

though the depths are relative it seems that larger graves correlate with greater depths, as it was also observed for the cemetery of Obbicht. Still, exceptions are found; the second largest grave (grave 5) in Stein has an average depth of 120 cm.

Grave constructions and chronology

Table 3.8 displays information on the size of the graves in relation to the Stein burial phases. Just as at Obbicht, there does not seem to be a correlation between burial pit size and chronology (fig. 6.10). The smallest graves (graves 11 and 22) belong to Stein phase II d (610/20-670/80) and II a (565-610/20), while the largest graves (graves 46 and 55) belong to Stein phase II b (565-640/50). Again, the difference is rather small, although the overall picture suggests that smaller graves at Stein are of a slightly earlier date than the larger graves. Graves 28, 36, 50 and 59, for instance, all belong to phase I and have surface areas of less than 3.50 m². However, the number of graves is too small to make any firm statements.

A strong correlation between the presence of wooden constructions and chronology is also absent. Most graves with datable finds and traces of wooden constructions (graves 30, 37, 56, 57, 58, 60) belonged to Stein phase II a of II b, which is similar to the dates of graves with wooden constructions at Obbicht. Graves 29 and 45 could be of a slightly earlier (phase I-II a) and later (phase II b-d) date. As was the case at Obbicht, the earliest and latest graves did not contain traces of wooden grave structures. However, we assume that more graves originally contained wooden constructions than those that were documented.

Grave orientation

Beckers and Beckers observed that the graves in the northern and

southern cemetery sections were orientated differently.⁶¹ The northern graves were all, with a few exceptions, roughly south-west-northeast orientated. The exact orientations of a number of these graves were identified by Mr. Van Rummelen, as it is mentioned in the publication of Beckers and Beckers.⁶² Graves 11, 14, 15, and 18 had an exact south-north orientation. Grave 18 was found at some distance from the cemetery in another parcel. Grave 8 was orientated at an angle of 43 degrees to the east of the exact south-north axis. Following this, grave 13 was orientated at an angle of 52 degrees to the east, graves 17 and 20 at an angle of 60 degrees to the east, and graves 19 and 26 both at an angle of 65 degrees to the east. In graves 19, 21 and 32 traces of skulls were found in the southern ends of the graves; for the other graves the orientation of the burials was based on the location of the pots (near the feet) and weapons (tips of seaxes, swords and lance heads pointing to the feet). All graves with a southwest-northeast orientation in the northern part of the cemetery are depicted on the cemetery plan from 1940 as having exactly the same orientation. However, in view of the remarks made above it can be advocated that all the northern graves had an orientation on an angle ranging from at least 43 to 65 degrees to the east in relation to the exact south-north axis.

The original cemetery plan in Beckers and Beckers shows that the graves in the south-western section of the cemetery, along the slope, have an exact west-east orientation (fig. 2.25). The four south-western graves mentioned to have deviant orientations are graves 60, 61, 64 and 65: they have an orientation in line with the northern graves. In the final section of the publication on Merovingian cemeteries, Beckers and Beckers declared that traces of heads were observed in the western ends of graves 57, 58 and 66 (although in the case of grave 58, the orientation of the body silhouette was not described in the catalogue of graves). In the catalogue it is mentioned that grave 59 also had a deviant orientation from the west-east orientated graves, namely a southwest-northeast orientation similar to the northern graves and graves 60, 61, 64 and 65.

The cemetery plan shows that only the graves in the south-western section have a west-east orientation; the graves in the south-eastern section and middle of the cemetery all have orientations similar to graves 8, 13, 17, 20, 19 and 26, of which orientations were established in the field measuring between 43 and 65 degrees to the east of the south-north axis. It can be concluded that the majority of the Stein graves in fact had a sw-ne orientation.

It has to be kept in mind, however, that a number of burial pit outlines were not observed and recorded, but are nevertheless depicted on the cemetery plan. It seems likely that the actual orientations of these graves were not known, but they are recorded in line with the general orientation of the observed and recorded graves

(58) See note 15. (59) See the section on burial sizes in the sections on the cemeteries of Obbicht and Sittard-Kemperkoul in this chapter for comparisons with other cemeteries (60) See for instance Sittard-Kemperkoul in this volume, but also the publications of Bergeijk (2012) and Posterholt (2013). (61) Beckers/Beckers 1940, 359. (62) Beckers/Beckers 1940, 359.

Table 3.8
Stein-Groote Bongerd: grave size in relation to burial phases.

Context	Stein phase	Calculated surface area (m²)	Context	Stein phase	Calculated surface area (m²)
46	S II b	9,20	54	S II b	3,96
55	S II b	6,00	12	S II a	3,96
69	S II b/c/d	5,89	64	S III	3,75
57	S II a	5,83	61	S II b	3,60
56A+B	S I/III	5,36	60	S II a	3,36
32	S II d	5,32	50	S I	3,15
37	S III	5,20	8	S II c	3,15
66	S II b	5,00	36	S I	2,90
65	S III	4,86	30	S II a	2,59
52	S I	4,80	28	S I	2,43
49	S II c	4,56	59	S I	2,40
58	S II a	4,50	26	S II b	2,30
29	S II a	4,46	18	S I + II a	1,15
23	S III	4,42	22	S II a	1,15
24	S II a	4,42	11	S II d	0,96
51	S II a	4,07	67	S II d	0,29
25	S I + II a	4,03			

in their proximity. Still, the analysis of the grave orientations can only be done on the basis of the graves that were actually observed.

In view of the finds and location of head silhouettes or skulls (graves 57, 58, 49 and 63), it is safe to claim that the heads were placed in the southern end of the s-n and sw-ne burials, and in the western end of the w-e burials, in line with the general practice in Merovingian cemeteries. The exact orientations of the interred bodies could however not be observed in the majority of the burials in Stein.

South-north orientations are rare in Merovingian cemeteries. In Bergeijk, Posterholt and Obbicht the graves had west-east orientations, which is rather common. Still, other orientations exist as well, as the nearby cemetery of Sittard-Kemperkoul shows. Other examples of cemeteries with mixed orientations are Hoogeloon-Broekeneind (east-west and south-north)⁶³ and Broechem (west-east and north-south)⁶⁴. In the Borsbeek cemetery four different orientations were observed: north-south, south-north, west-east and east-west.⁶⁵

Grave disturbances

The graves that were documented as partly or completely destroyed are depicted on the original cemetery plan as undisturbed graves. It is assumed that their location and orientation are related to complete graves in their proximity. It must thus be concluded that the first cemetery plan from 1940 is partly representing the original condition of the graves and is partly a reconstruction. Several graves at the cemetery of Stein were disturbed in both recent and ancient times.

Recent disturbances

The slope which borders the cemetery to the south suffered from erosion which destroyed some graves in the slope, or in the transition from cemetery terrain to slope. A number of graves could nonetheless be excavated in this transitional zone in the south-western section of the cemetery, but some are mentioned to have disappeared when the slope crumbled off.

Grave 72 was described as a nearly completely destroyed grave and dimensions could not be given. It was probably identified on the basis of a considerable number of finds that were found together, presumably at the location of grave 72 indicated on the original cemetery plan, and identified as belonging to a single grave. The same applies to graves 73, 74 and 75: their outlines were not observed, but some finds were found in the slope, indicating the former presence of graves approximately at the location depicted on the original cemetery plan. A remark was made that one of these three graves (it is not known which) was destroyed by the construction of a house.

Grave 40 was also mentioned to have been destroyed by the construction of a house in 1932. The excavation of this grave was stopped due to terrain difficulties. When gravel exploitation revealed some shards at this same location some years later, further investigation took place in 1936. The exact location of grave 40 is not known, but it was described to have been found in the proximity of grave 19. It can thus be assumed that grave 40 was located in the south-eastern part of the cemetery, as the original cemetery plan also shows. However, it is not clear whether the destruction of grave 40 and graves 73, 74 or 75 are related to the same building activities. The dimensions of grave 40 could not be established, but finds were nevertheless assigned to this grave.

The gravel exploitation in the middle of the cemetery caused the large open space depicted on the cemetery plan; numerous graves were evidently destroyed in this section. Some graves were mentioned to have been affected by the gravel exploitation. Grave 41 was destroyed but, nonetheless, sherds were gathered on the basis of which its location could be identified. The exactness of its location and orientation on the original cemetery plan, however, should be questioned. Grave 43 is located close to the open space. Its nearly complete destruction might thus have been caused by gravel exploitation or the building activities that destroyed grave 40. Grave 6 was discovered close to graves 1-4; its width could not be established since its section was only visible in the gravel exploitation pit wall, thus in the northern wall of the gravel pit. The other graves bordering the northern wall of the pit were however not affected by it. Only grave 7 was partly preserved and, although it was not mentioned, probably also destroyed by the gravel pit. Grave 53 was also demolished; it borders the gravel pit to the south-west and seems to have been affected by gravel exploitation.

Gravel exploitation also caused the destruction of the northern part of the cemetery, as mentioned in the final part of the Merovingian section in Beckers and Beckers (see chapter 2 in this volume for a detailed description of the established borders and

disturbed parts of the cemetery). The northern graves 9 and 15 are mentioned to have been completely and partly destroyed, which might have been caused by the gravel exploitation in the northern section of the site. Grave 15 is one of the few graves with an s-n orientation; it can be assumed that this orientation was observed in the field although the grave was only partly preserved.

The roads west and southeast of the cemetery were broadened and probably destroyed a number of graves. Whether remnants of graves were observed during the construction works is not known. Only grave 39 was mentioned to have already been destroyed by road construction some time before excavation; some remnants of the grave were observed in a slope. How and whether the graves in the proximity of grave 39 were affected by this same construction work is not mentioned.

The terrain was covered by centuries-old oaks; they were chopped some time before excavation and replaced by new trees. The old oaks themselves, and also their chopping and replacement caused some disturbances. Grave 34 is mentioned to have been destroyed when an oak was chopped. Only one biconical pot was found in the corner of the grave; dimensions of the grave, however, could not be given. Grave 50 was also destroyed when an oak was chopped; shards were found scattered throughout this grave, probably caused by this disturbance. The dimensions of this grave could nonetheless be established and a complete biconical pot was also discovered in this grave.

The dimensions of a number of graves could not be established because they were completely or partly destroyed, although it is not mentioned how this happened. The length of grave 1 could not be observed, but its width and depth could (table 3.6). Grave 1 might have been one of the four graves of the cemetery discovered when a road was constructed. It was mentioned that these four graves became visible in the wall of a construction trench. Of graves 2 and 4, however, only the length was documented. Grave 3 was part of the north-eastern rows of grave 1 to 4 on the cemetery plan; its dimensions could not be given although it was noticed that it seemed much smaller than the other graves in this row.

Grave 63 was in the catalogue not mentioned to have been destroyed, but its dimensions were not given. It might have been an intact grave of which the dimensions were not recorded by mistake.

Finally, grave 48 was thought to have been emptied after the tree growing on top of this grave was chopped down. Nothing was found in this grave of which the outlines were still visible for the excavators. The chopping of the tree and discovery of grave 48 occurred quite likely in recent times.

Early medieval interventions

Archaeological traces identifying the ancient reopening of burials were not consequently recorded during excavations at the time

the Stein cemetery was discovered. Nonetheless, remarks about early interventions were made for some graves. These early interventions were identified on the basis of the obvious dispersion of (fragmented) finds throughout the graves. It was for example observed that grave 8 was already partly emptied, but we don't know how this observation came about. The remaining finds from this grave were all found alongside the southern wall; a reopening pit in the middle of the grave might have been present but not observed or recorded since the outline of the burial pit was probably intact (its dimensions were documented). The same applies to grave 11: it was made clear that the location of the finds could not be documented since the grave was already partly emptied. This comment might indicate that some additional finds were expected by the excavators but not found, or that the uncovered finds, such as beads, were not at their presumed original location anymore.

Grave 55 was recorded as a reopened grave since the majority of the finds were taken, apart from a lance head and sherds of a biconical pot (scattered alongside the northern wall). The conclusion that the grave was reopened was probably supported by the observation that the remaining finds were found alongside the walls (assuming that a reopening pit was dug in the middle of a grave) and by the observation that next to these finds only some metal fragments were recovered.

The excavators identified the pottery shards found scattered throughout grave 45 as an indication of its reopening. The dimensions of the burial pit were not given, only the dimensions of the width of the wooden container. Grave 46 was identified as a reopened grave on the basis of the foot of a terra sigillata bowl found in the upper filling of the grave.

Overlapping graves and/or double graves

Overlapping graves were not recorded or observed in the cemetery of Stein. However, in one grave two superimposed bodies with associated finds were found. Grave 56 (2.75 x 1.95 m, depth: 1.60 m) contained numerous finds of which a large biconical pot was mentioned to have been found inside a coffin at a depth of 1.40 m. The other finds were all found at a depth of 90 cm and seemed to have belonged to another burial, 50 cm higher, on top of the wooden container. The exact location of the wooden container within the recorded burial pit is not known but its observed outlines were intact; it was thus not disturbed by the second burial on top of it. It is not clear whether the second burial was placed on top of the coffin deliberately in order to express some kind of relation, or if this association came into being by accident.

The number of overlapping graves in Merovingian cemeteries is in general rather small; it can thus be assumed that this was also the case for Stein, even though the excavation techniques employed and the difficult terrain conditions might have obstructed observations of slightly overlapping graves.

(63) Glasbergen 1955, 14. (64) Annaert 2010. (65) De Boe 1970, 103-105.

4 Grave Finds

This chapter presents the description, classification and dating of the finds from the burials pits, chambers and coffins, and reopening pits of the cemeteries of Sittard-Kemperkoul, Obbicht-Oude Molen en Stein-Groote Bongerd. The finds are discussed per functional category, of which some are organised on the basis of the identified types.¹

Finds from the cemetery of Sittard-Kemperkoul

Belt fittings

The belt fittings from the Sittard cemetery vary from copper alloy to iron fittings and from waist belt fittings to small shoe or purse fittings. The discussion of the belt fittings starts with the most prominent specimens: the plate buckles of the waist belts and their matching counter plates, back plates and additional plates. The fittings without matching plate buckle are discussed separately as are the smaller fittings of purses, shoes or straps associated with seaxes or swords.

Belt fittings: iron, round plates, without decoration

Find numbers: 14 (14-1-1; 14-1-2; 14-2-1; 14-2-2; 14-2-4); 26 (26-5-2; 26-5-3; 26-5-4.1; 4.2; 26-5-1); 37 (37-2-1; 37-2-2; 37-2-3)

Two nearly identical sets of belt fittings consisting of plate buckles and counter plates were found in grave 14 (fig. 4.1). Grave 14 is a chamber grave in which a wooden coffin and box were recorded. The belt fittings 14-1-1 and 14-1-2 were found inside the large coffin which was standing alongside the western wall of the chamber.

They were found at the presumed former location of the breast. The fittings 14-2-1 and 14-2-2 were found just outside the outline of the small wooden container which was placed in the south-eastern part of the chamber and just outside the coffin. It remains uncertain how the second set of belt fittings was deposited; the belt (with fittings) might have been deposited on top of one of the two containers. The belt fittings were found at a depth of 56.06-55.98 m NAP. The traces of the box were recorded at a depth of 55.88 NAP and the bottom of the burial pit was recorded at a depth of 55.72 NAP; the belt set was thus not lying at the bottom of the burial pit, which might indicate that it was deposited on top of the box or coffin and moved somewhat from its original location. The burial pit outline was recorded at a depth of 56.08 m NAP; the belt fittings were the first objects visible inside this outline. The presence of two waist belts in one grave is rather unusual. Since the large coffin already contained a set of belt fittings, it can be assumed that the second set was originally associated with the small container although the nature of this association remains obscure. The burial in the coffin is identified as that of a man on the basis of a seax. Grave goods were not recorded in the small container, but in the north eastern corner of the chamber a lance head and ceramic and wooden vessels were found.

Iron plate buckle 14-1-1 of the first set of belt fittings consist of a round plate with three domed copper alloy rivets. The plate is attached to an iron buckle loop with a wrapped and slotted construction. The copper alloy buckle tongue shows the only element of decoration on this plate buckle: a line of stamped in triangles alongside the edge of the shield tongue base. The width of the end of the leather belt to which the belt fittings were attached was approximately 4.3 cm, which is reconstructed on the basis of the in-

ner length of the buckle loop. The width of the buckle plate is 5.7 cm, and the rest of the leather belt might have been as wide as this plate. Some textile and leather remains of the belt are still preserved at the back of the plate. Counter plate 14-1-2, which was associated with the plate buckle, is also round and has a width of 6.3 cm, which is slightly larger than the width of the plate of the plate buckle. This difference might be a result of corrosion and/or restoration. Two, of originally three, domed copper alloy rivets are present on the plate: the remains of the copper alloy pins of three rivets can be observed at the back side of the counter plate, of which two are part of the two remaining rivets on the front side of the plate. Some leather remains are attached to the rivet pins.

Iron plate buckle 14-2-1 resembles plate buckle 14-1-1; it has a round plate, not decorated, with one domed copper alloy rivet still attached to it, probably one of a set of three. The pin of this rivet is visible at the back of the plate and a fragment of a thin plate is still attached to it. Examples of leather belts that were fixed between the plate buckle and similar thin plates at the back side are known, and probably the leather belt to which this plate buckle belonged was also fixed in between the plate buckle and a thin plate of sheet metal. The reconstructed belt width on the basis of the inner length of the buckle loop is approximately 4.1 cm, and that on the basis of the width of the plate is 6.5 cm: the leather belt became narrower towards its end. This plate buckle was found in association with round iron counter plate 14-2-2, which is without decoration and on which two (of probably three or four) copper alloy rivets are present. The pin of one of these rivets can be observed at the back of the plate. The maximum width of the plate is 5.3 cm, which is somewhat smaller than the maximum width of the plate of the plate buckle (6.5 cm). However, the plate is heavily restored and the current dimensions might be different from the original dimensions. The plate is completely round. Counter plates often have one straight side (as can be observed on counter plate 14-1-2); when the belt was worn this straight side was to be found to the opposite of the buckle loop of the matching plate buckle. Restoration probably caused the counter plate to be more round than it originally was. Considering its round shape, however, it can also be a back plate although its function as counter plate seems more plausible. Fragment 14-2-4 is an iron fragment of a plate (probably of a counter plate or plate buckle) with a length of 3.1 cm; it has one copper alloy rivet attached to it and leather remains were observed at its back. This might be a fragment which was originally part of the plate buckle or counter plate with missing rivets described above, but not used in the restoration process.

A three-partite set of iron belt fittings was found in grave 26 (fig. 4.1). The plate buckle (26-5-2) with round plate is not decorated but shows three copper alloy rivets of which the pins are visible at its back. The buckle loop has an inner length of 3.7 cm and the plate has a length of 4.9 cm and a width of 6.7 cm. The iron counter plate (26-2-3) is similar to the plate of the plate buckle; it is rounded and has one straight side and three copper alloy rivets. Textile or leather remains are preserved at its back. The plate has a length

Fig. 4.1
Iron belt sets with round plates, graves 14, 26 and 37 (scale 1:2).



of 4.8 and a width 6.1 cm. The matching back plate (26-5-4) is rectangular. It has a length of 5.1 cm and a width of 4.0 cm and three (of originally four) copper alloy rivets. The pins of the rivets are still visible at the back of the plate. The associated leather belt had a width of approximately 6.1-6.7 cm, but had a narrower end if it went through the buckle loop. The ensemble of belt fittings was found in the grave of a man (identified on the basis of a seax) on the preserved pelvis in the middle of the grave and the re-opening pit. The pelvis and belt fittings did not move from their original locations when the re-opening pit was dug and not taken from the grave.

Iron plate buckle 37-2-1 from grave 37 is incomplete; only the oval buckle loop with tongue and a small fragment of the plate is left (fig. 4.1). The shape of the plate can thus not be determined. However, the matching counter plate is (37-2-2) round, with one straight side. It can thus be assumed that the plate buckle had a similar plate. The inner length of the buckle loop is 3.3 cm. The width of the counter plate is 3.8 cm. The leather belt had a width of approximately 3.8 cm, and was only a little narrower towards the end

(1) In this chapter photographs of the finds are depicted as overviews of these functional categories or type groups, as opposed to their depiction as part of a grave goods assemblage in one of the relevant catalogues. Some of the Sittard, Obbicht and Stein finds are only depicted in these catalogues; significant overviews could not be realised for these objects.

if the belt was worn in such a way that it went through the buckle loop. Three copper alloy rivets (37-2-3) were found detached from the object they originally belonged to. It can be assumed that they were rivets of the plate buckle, since they resemble the copper alloy rivets on the counter plate. The belt fittings were found in the grave of a man (identified on the basis of the axe) of which the northern half is gone. Assuming that the belt fittings were still at their original location, they were found at the assumed former location of the waist of the now completely decomposed body.

Iron plate buckles with round plates without decoration are common grave finds in the Rhineland, the Middle Meuse area and Northern France. The variety in this category of belt sets is small, and mainly concerns the size and the presence of additional belt fittings. Koch dates these belt sets to Schretzheim Stufe 3-5 (565-650/60).² She observed that single plate buckles are more common in Stufe 3 whereas two- or tri-partite belt (plate buckle, counter plate and back plate) are more common in Stufe 4 and 5. Similar observations were made in the cemetery of la Grande Oye at Doubs (France) where these belt sets are dated to phase HA (c. 580-600/610). In this cemetery too, the bi- or tri-partite belts seem to be somewhat younger than the single plate buckles.³ Siegmund considers the category of belts with round iron plate buckles to be the earliest group of belts with iron belt fittings in the Rhineland. They are classified as Siegmund type Gür4.1 or 4.2 (depending on the additional plates present) and dated to Rhineland phase 7 (585-610).⁴ The Franken AG discarded the typological difference between the two types since the former presence or absence of the additional fittings is difficult to establish with certainty. They define only one typological group for all the iron belt fittings with rounded plates (Gür4.1/4.2) and date them to their phases 5-6 (565-610/20).⁵ Legoux, Périn and Vallet make a distinction between two groups of iron plate buckles with round plates on the basis of the presence (type 149)⁶ or absence (type 148)⁷ of additional belt fittings. Type 149 dates to their phases MA3-MR1 (560/70-630/40), although predominantly to phase MR1 (600/10 630/40). They observed that plate buckles with additional fittings are often larger than those without.⁸ It was mentioned in an earlier publication of Périn that plate buckles with round plates are not very common in northern France.⁹ Altogether, dating the Sittard belt fittings to 585-610 seems a plausible option.

Plate buckle: iron, rectangular/trapezium plate, not decorated, copper alloy rivets
Find number: 29 (29-3-1; 29-3-2)

Iron plate buckle 29-3-1 has a rectangular to trapezium shaped plate with four domed copper alloy rivets (fig. 4.2). The plate has a length of 8.8 cm, and a width, at its base, of 4.2 cm. The end of the plate has a width of 5.3 cm; the plate is thus not exactly rectan-

Fig. 4.2
Iron trapezium shaped plate buckle and belt fitting, grave 29 (scale 1:2).



gular, but slightly trapezium shaped. The buckle loop with shield tongue has an inner length of 3.9 cm. The leather belt had a width of approximately 4 cm; in view of the dimensions of the base of the plate and the inner length of the loop it seems as if the leather belt was not narrower towards its end (if it was worn with the end of the leather belt going through the buckle loop). The plate is attached with two loops wrapped around the buckle loop. These loops seem rather short compared to other wrapped and slotted constructions of iron plate buckles; the thorough restoration of the plate buckle might have caused this. The small copper alloy slotted plate 29-3-2 from possible grave 29 is the only other belt fitting known from the ensemble of finds without grave context. They might have belonged to an extended set of belt fittings since slotted plates often are. Slotted plates might have fixed narrow straps, which carried a variety of objects, to the waist belt. The slotted plate from context 29 has a length 3.0 cm and a width of 2.3 cm. It has two copper alloy rivets at the base of the plate, and one at the end. The plate has a stamped-in decoration of dot-in circles, covering its entire surface. The plate buckle and slotted plate belonged to an ensemble of finds of a man, identified as such on the basis of a lance head. The slotted plate is for now dated in line with the plate buckle since clear typochronological information is not available for this category of belt fittings. Plate buckle's with rectangular to trapezium shaped plates are classified as Siegmund's type Gür4.3, which are described as broad trapezium shaped plate buckles with five, four or six rivets. This type dates to Rhineland phase 8 (610-640).¹⁰

Plate buckle: iron, triangular to tongue shaped plate, profiled outline, three rivets, without decoration
Find numbers: 20 (20-3-1; 20-3-2)

Iron plate buckle 20-3-1 is heavily restored and completed: its original shape is therefore difficult to determine (fig. 4.3). However, the associated counter plate (20-3-2) offers some clues. The basic shape of this counter plate (although also heavily restored and completed) is triangular or tongue shaped, as is the plate of the plate buckle. However, the outline of the counter plate is profiled and the outline of the plate of the plate buckle might have been alike. The length of the plate of the plate buckle is 7.0 cm and of

the counter plate 8.1 cm; the width of the plate of the plate buckle is 5.3 cm and that of the counter plate 5.1 cm. These differences might be attributed to their rigorous restoration. The plate buckle has two of the probably three copper alloy rivets still attached to it. One of these rivets has a carved rim, which was probably also a feature of the two other rivets. Only one (of three?) rivet with carved rim is present at the end of the counter plate. The reconstructed width (on the basis of the inner length of the buckle loop with iron shield tongue) of the leather belt is approximately 5.5 cm. Some leather remains of this belt can be observed at the back of the plate of the plate buckle.

The grave was identified as that of a man on the basis of an axe and seax. The plate buckle and counter plate were found approximately in the area where the breast of the now completely decayed body originally was since the orientation of the burial was S-N and the shadow of the decayed skull was found in the southern part of the grave.

This two-partite belt is classified as Siegmund's type Gür4.5, which is defined as tri-partite belts with broad triangular or broad trapezium shaped plates with three rivets. The Sittard fittings could originally have been part of a tri-partite belt, but the shape of the two fittings match with this Siegmund type, which dates to Rhineland phase 8A (610-625).¹¹ The Franken AG maintained Siegmund's type but did consider the presence of three fittings as an essential feature of this type. Franken AG type S-Gür4.5 dates to their phase 7 (610/20-640/50).¹²

Plate buckle: iron, triangular to tongue shaped plate, without decoration
Find number: 41 (41-3-1)

The iron plate buckle from grave 41 is the only belt fitting known from this grave (apart from a simple buckle). The plate is heavily restored and for a large part completed; it is uncertain what its original shape actually was (fig. 4.4). The plate has a length of 7.0 cm and a width of 5.0 cm. Two (of probably three) rivets are present at the base of the plate. The third was probably placed at the end of the plate. Traces or a hole indicating its former presence are, however, absent (due to corrosion or thorough restoration). The two rivets are large, domed copper alloy rivets with carved rims. The buckle loop with shield tongue is attached to the plate with a wrapped and slotted construction. The inner length of the loop is 3.4 cm. The leather belt probably had a width of approximately 5.0 cm fitting the plate of the plate buckle), and was narrower towards the end (if it was worn in such a way that it went through the buckle loop). The plate buckle was found in the middle section of the grave, and thus at the presumed former location of the waist of the now completely decomposed body. The burial is identified as that of a man on the basis of the seax. This plate buckle is classified as

Fig. 4.3
Iron belt set, tongue shaped plates, grave 20 (scale 1:2).



Fig. 4.4
Iron triangular to tongue shaped plate buckle, grave 41 (scale 1:2).



Fig. 4.5
Iron belt set, grave 49 (scale 1:2).

Siegmund's type Gür4.5 because of its broad triangular to tongue shaped plate with three rivets.¹³ This type dates to Rhineland phase 8A (610-625), and to Franken AG phase 7 (610/20-640/50).¹⁴

Counter plate/plate buckle: iron, triangular plate with protruding end, without decoration
Find numbers: 49 (49-5-1; 49-5-2; 49-5-3; 49-5-4 (2x); 49-6-1)

The set of three iron belt fittings from grave 49 became attached to one another due to corrosion (fig. 4.5). The set consist of an iron plate buckle or counter plate (49-5-1), a back plate (49-5-2) and a strap end (49-5-3). The triangular/tongue shape plate with protruding end is damaged at its base, which makes it difficult to identify whether it was a plate buckle or counter plate since remnants of a buckle attached to the plate were not preserved. The plate has a length of 6.7 cm and a width of 2.8 cm. It has three small domed copper alloy rivets. Around one of the rivet pins, at the back of the plate, a fragment of a thin iron plate can be observed. The leather belt to which the iron plate was attached was probably fixed in between the iron plate and the thin plate. Some textile or leather remains were also observed around the rivet pin.

The iron back plate is a rectangular plate with four small domed copper alloy rivets. It has a length of 4.0 cm and a width of 2.4 cm. It can be assumed that the leather belt to which the fittings were attached had a width of 2.4-2.8 cm.

The iron strap end is tongue shaped. It has a length of 5.1 cm and a width of 2.4 cm. Two copper alloy rivets are present at the base of the plate. The strap end is heavily restored, and this may be the reason that a split base, a common feature of strap ends, could not be observed.

published cemetery of Cutry quite a few have been found (Legoux 2005, planche 46). (10) Siegmund 1998, 31. (11) Siegmund 1998, 31-32. (12) Müsseseimer *et al.* 2003, 20. (13) Siegmund 1998, 31-32. (14) Müsseseimer *et al.* 2003, 20.

(2) Koch 1977, 125-126. (3) Urlacher/Passard/Manfredi-Gizard 1998, 142-144. (4) Siegmund 1998, 29-31. (5) Müsseseimer *et al.* 2003, 20. (6) Legoux/Périn/Vallet 2004, 16, 31, 53 (type 149). (7) Legoux/Périn/Vallet 2004, 16, 31, 53 (type 148). (8) Legoux/Périn/Vallet 2004, 16. (9) Périn 1980, 231. However, in the recently

Fig. 4.6
Iron belt set, triangular plates with profiled outlines, grave 86 (scale 1:2).



Fig. 4.7
Iron belt set with additional fittings, grave 30 (scale 1:2).



The ensemble of belt fittings was found in the middle section of the grave; presumably at the presumed former location of the waist of the now completely decomposed body. The burial is identified as that of a man on the basis of a lance and shield boss.

Two small copper alloy rivets (49-5-4), also from grave 49, were found detached from the object they originally belonged to. The small nails bear resemblance to the nails on the ensemble of belt fittings from this grave. The nails were found at the same location as this ensemble. Although rivets do not seem to be missing from these plates, it can be imagined that additional plates to which the two nails were attached are now gone. A small fragment of a plate (49-6-1) with two nails resembling the two detached ones was found in this grave. The plate is not complete since it was observed that the edges are considerably ragged. The two small copper alloy rivets on this plate resemble to two single nails and the nails on the described belt fittings. The find location of this small ragged plate was unfortunately not recorded on the field drawing. It might have belonged to the ensemble of belt fittings, and the two detached rivets can thus have belonged to this plate fragment.

The fittings are classified as a variant of Siegmund's type Gür4.5 (broad triangular fittings with three rivets; the Sittard fittings are however not that broad), which dates to Rhineland phase 8 (610-640)¹⁵ or Franken AG phases 6-7 (610/20-640/50).¹⁶

Plate buckle: iron, triangular plate, profiled outline, five rivets, without decoration

Find number: 86 (86-4-3; 86-4-4; 86-4-2)

Iron plate buckle 86-4-3 from grave 86 has a triangular plate with an undulating outline and a protruding end (fig. 4.6). Five copper alloy rivets (or iron rivets with copper alloy plating) are still present on the heavily restored surface of the plate. The loop has an inner length of 3.8 cm. The length of the plate is 9.7 cm and the width of the plate is 7.2 cm; the leather belt to which the fittings of the tri-partite belt were attached had a width of approximately 7.2 cm, and was narrower towards the end that went through the buckle loop. The matching counter plate is also heavily restored. It is triangular with an undulating outline and protruding end. Five rivets of copper alloy rivets (or iron rivets with copper alloy plating) were still present; the two rivets at the base of the plate are smaller than the other rivets. The plate has a length of 11.3 cm, which is considerably longer than the plate of the plate buckle, and a width of 6.8 cm. The rectangular iron back plate 86-4-2 is also heavily restored. The reconstructed plate has a length of 6.1 cm and a width of 5.8 cm and was, in view of these dimensions, a fitting of a waist belt. The plate is not decorated, and all the four copper alloy rivets are still present. The belt fittings were found in

the grave of a man (identified as such on the basis of the seax), on the preserved pelvis, and the body was thus buried with the belt around the waist. Siegmund classifies tri-partite broad iron belt fittings with five rivets as type Gür4.3, which dates to Rhineland phase 8 (610-640).¹⁷

Pate buckle: iron, triangular plate, four rivets, without decoration

Find numbers: 30 (30-3-9; 30-3-2; 30-3-10; 30-3-1; 30-3-3; 30-3-7; 30-3-8)

An iron tri-partite belt with additional fittings is known from grave 30 (fig. 4.7). Iron plate buckle 30-3-9 has a triangular plate with an undulating outline. The edges of the plate buckle are, however, somewhat damaged and it is also heavily restored; it is not certain whether its actual state represents its original shape. The plate buckle has a length of 7.6 cm and a width of 4.6 cm. The inner length of the buckle loop with shield tongue is 3.3 cm. The leather belt had a maximum width of approximately 4.6 cm, and might have been narrower towards its end if it went through the buckle loop. The plate has four copper alloy rivets of which the ones at the base of the plate are slightly larger than the other two. Iron belt fitting 30-3-2 is severely damaged. Its original size and outline are impossible to reconstruct, but it probably resembled the plate of the associated plate buckle since it was presumably its matching counter plate. The remaining length of the plate is 7.5 cm and its remaining width 5.2 cm. Four copper alloy rivets of different dimensions are still present on the plate; two are large domed rivets and two are smaller domed rivets, similar to the rivets on the plate buckle. The rectangular iron back plate (30-3-10) has a width of 4.8 cm and a length of 5.6 cm and has four copper alloy rivets, in each corner one. The back plate is heavily restored and its current state is probably somewhat deviant from its original dimensions.

The plate buckle, counter plate and back plate are associated with a number of other belt fittings: two iron slotted plates, the base of one strap end and a small plate buckle. Slotted plate 30-3-1 is not complete; only the lower slotted end of the plate is preserved. The width of the plate is 2.3 cm. The opening (slot) in this plate has a length of 1.2 cm. Slotted plate 30-3-3 is complete. It has

a length of 4.2 cm, the width of the head of the plate is 2.2 cm, and the length of the opening is 1.2 cm; the head of this plate is similar to the other slotted plate but the narrow extension of the incomplete slotted plate is split, and the extension of the complete plate is not. The split probably served to fix a narrow leather strap, but might also be a result of corrosion. Both the slotted plates have two copper alloy rivets. The complete slotted plate also shows the remains of a rivet pin at the backside of the plate end, which indicates that both plates originally had three rivets, which fixed the plates to a strap or the waist belt. The openings of the slotted plates were used to attach utensils or smaller straps.

Of strap end 30-3-7 only the base remains. It has four small copper alloy rivets going through the split base in which the leather strap was originally fixed. The width of the strap end is 2 cm, which indicates that the attached strap was of a similar width. This strap was probably not attached to the main waist belt (which had a width of at least 5.0 cm according to the associated belt fittings), but maybe to an additional strap which suspended the scabbard of the seax, found in association with the belt fittings, to the waist belt. Plate buckle 30-3-8 was probably also part of this additional strap. It is an iron plate buckle with a rectangular plate, and two small domed copper alloy rivets. The plate has a length of 2.4 cm and a width of 2.6 cm. It was attached to a strap with a similar width, which is in accordance with the width of the strap to which the strap end and slotted plates might have been attached. The complete ensemble of belt fittings was found to the left of the left arm (of which only the 'shadow' was preserved), in association with a seax on the basis of which the burial is identified as that of a man.

The tri-partite belt is classified as Siegmund's type Gür4.3 (broad iron belt fittings, trapezium shaped plates, with six, five or four rivets) or type Gür4.5 (broad triangular fittings with three rivets). Type Gür4.3 dates to Rhineland phase 8 (610-640)¹⁸ or Franken AG phases 6-7 (610/20-640/50).¹⁹ Type Gür4.5 dates to Rhineland phase 8 (610-640)²⁰ and the Franken AG phase 6-7 (610/20-640/50).²¹ The slotted plates are difficult to date independently; they are for now dated as type Gür4.3./4.5 of Siegmund and the Franken AG.

Fig. 4.8
Copper alloy belt set and iron belt fittings, grave 31 (scale 1:2).



(15) Siegmund 1998, 31-32. (16) Müssemeier *et al.* 2003, 20. (17) Siegmund 1998, 31. (18) Siegmund 1998, 31. (19) Müssemeier *et al.* 2003, 20. (20) Siegmund 1998, 31-32. (21) Müssemeier *et al.* 2003, 20-21. (22) Ypey/Glazema 1954; Kars 2011, 248-249, fig. 25.

Plate buckles: copper alloy, triangular hollow plate, hinged construction, decorated buckle loop

Find numbers: 31 (31-3-5; 31-3-6.2; 31-3-4; 31-3-2; 31-3-6.1; 31-3-3; 31-2-2.1; 31-2-2.2; 31-2-1)

An ensemble of copper alloy belt fittings (fig. 4.8) consisting of a plate buckle (31-3-5), counter plate (31-3-4), slotted plate (31-3-6.1) and additional plate (31-3-2) was found in the middle of grave 31 together with a small iron plate buckle (31-3-3). Another iron plate buckle and strap end (31-2-2.1 and 31-2-2.2) were found in association with the sword from this grave, deposited in the middle left section of the grave. These two belt fittings were probably attached to a strap, which connected the sword scabbard and the waist belt. Plate buckle 31-2-2.1 resembles plate buckle 31-3-3 (found in association with the first mentioned set of belt fittings): they probably had a similar function. It can be imagined that the waist belt and the sword (and sword scabbard with additional strap) were deposited as one ensemble.

The waist belt plate buckle (31-3-5) is not complete, but find number 31-3-6.2, attached to a slotted plate (31-3-6.1), can be identified as the detached protruding end of the plate. The plate buckle has a hollow plate and the buckle loop is attached to the plate with a hinged construction. The buckle loop and shield tongue are decorated with an engraved geometric pattern of stripes and dots-in-circles. The inner length of the buckle loop is 3.6 cm and the width of the plate 3.8 cm. Leather remains of the belt are still present at the back side of the plate; the width of these remains is 4.6 cm. It can thus be assumed that the original belt had a width of approximately 4.6 cm and was thus wider than the plate of the plate buckle. It might have been narrower towards the end if it went through the buckle loop. The plate has three copper alloy rivets (two at the base of the plate, and one at the protruding end), all without decoration. At the back of the plate, on the exact locations of the rivets, the remains of loops can be observed. These loops attached the plate buckle to the leather belt. The plate buckle is associated with a resembling counter plate. The width of this plate is 3.5 cm, and its length 8.4 cm (however, the plate was restored and completed in the middle section; its original length might have been somewhat different). The counter plate is hollow and has also three copper alloy rivets. The remains of one loop can be found at the back of the counter plate, at the exact location of the rivet at the protruding end of the plate. Again leather remains of the belt are attached to the back of this plate.

A third resembling belt fitting (31-3-2) belongs to the described ensemble. It is a triangular additional plate, also hollow. It has three copper alloy rivets and remains of loops at the back of the plate at the exact location of the rivets. The plate has a length of 4.8 cm and a width of 3.5 cm. This indicates that the plate was probably attached to the leather belt vertically (with the base of the plate

either to the top or bottom of the leather belt). The exact position of this plate on the belt is not known.

Another additional plate is the thin copper alloy slotted plate (31-3-6.1), found attached to the detached protruding end (31-3-6.2) of plate buckle 31-3-5. A leather fragment connects the end of the plate buckle with the slotted plate. The plate is not complete but it seems to have been a rectangular plate with a slot at the base of the plate. It has three (of a set of originally four) small copper alloy rivets which fixed the plate to the leather belt or additional strap. The plate is decorated with a punched in pattern of dots-in-circles.

The only somewhat smaller iron plate buckle (31-3-3), which was also found in association with the ensemble of belt fittings with hollow plates, has a flat triangular plate with three small copper alloy rivets (two at the base of the plate, and one at the protruding end of the plate), and a oval buckle loop with shield tongue, attached to the plate with a wrapped and slotted construction. The plate has a width of 3.4 cm and a length of 6.0 cm. The plate buckle seems to resemble plate buckle 31-2-1.1 (not completely visible because the strap end is due to corrosion attached to the plate of the plate buckle), which was found in association with the sword from this grave. The outer loop length of plate buckle 31-3-3 is 4.1 cm, the inner loop length 2.4 cm. The outer loop length of plate buckle 31-2-2.1 is 4.0 cm and the inner length 2.3 cm. The outlines of the plates of the two plate buckles are slightly profiled, but the outline of the protruding end of the plate of plate buckle 31-3-3 seems to be more pronounced than that of 31-2-2.1. However, as it was already mentioned, the shape of this plate is difficult to establish. Strap end 31-2-2.2 is attached to the top of the plate buckle (31-2-2.1) due to corrosion, and leather remains of a strap (or sword scabbard?) cover the back of the plate buckle. The strap end has a length of 6.1 cm and has two small copper alloy rivets at its base that fixed the leather strap to which it was attached. A split in the base of the strap end could not be observed, which might be due to corrosion and restoration.

Another plate (31-2-1) was found in association with the sword. It has a length of 7.6 cm and a width of 3.2 cm. The plate is bent and convex, which might indicate that it was bent around the scabbard and that the rivets fixed the plate to the sword scabbard, together with the rivet at the protruding end of the plate. A slot may be present at the basis of the plate (but this is not clear due to its corroded condition); it probably served to attach a narrow strap that connected the sword scabbard with the waist belt. Plate buckles 31-3-3 and 31-2-2.1, (slotted?) plate 31-2-1, and strap end 31-2-2.2 seem to form one ensemble, which is associated with both the waist belt and the sword (with scabbard). The complete original assembly probably consisted of a waist belt with additional straps that made it possible to secure the sword with scabbard to the waist belt. A similar set of plate buckle with counter plate, additional plate and

Fig. 4.9
Copper alloy plate buckle with hollow plate, grave 87 (scale 1:2).



thin plates (similar to plate 31-3-6.1) was found in Pandhof grave 555.²²

Copper alloy plate buckles with hollow plates and their associated belt fittings are classified as Siegmund's type Gür3.3, which dates to Rhineland phase 8 (610-640).²³ Koch dates similar belt sets to Schretzheim Stufe 5 (620/30-650/60).²⁴ A similar example is known from the cemetery of Bülach (grave 127); it consists of a plate buckle, counter plate and triangular back plate.²⁵ Werner dates this belt set to the second half of the seventh century and claims that this type is found throughout Merovingian Europe but is characteristic for the Lombard area. Werner claims, however, that the ones found in the northern regions are local products and can be distinguished from the Lombard ones on the basis of their broader and ungainly appearance.²⁶ Legoux, Périn and Vallet classify similar plate buckles and associated belt fittings as type 172 and date them to their phases MR1-MR2 (600/10-660/670).²⁷

Plate buckle: copper alloy, hollow plate and profiled outline, wrapped and slotted construction

Find number: 87 (87-5-2)

Copper alloy plate buckle 87-5-2 from grave 87 has a triangular hollow plate with a profiled outline (fig. 4.9). Three rivets were presumably attached to the plate: their pins can be observed at the back of the plate and traces of the rivets can also be observed on the surface of the plate. A textile fragment is also preserved on the surface of the plate. The plate is without decoration. It has a length of 6.6 cm and a width of 2.7 cm. The inner length of the buckle loop is 3.0 cm, and the leather belt will have been of approximate-

ly the same width. The buckle loop, of which the tongue is gone, is attached to the plate with a wrapped and slotted construction. The belt fitting was found in a grave of a woman in which the majority of the objects seem to have been moved from their original location; maybe due to the observed disturbance of the north-eastern corner of the grave. The plate buckle was found in the middle of the eastern half of the grave. Assuming this was its original position it was deposited near the presumed former location of the upper right leg.

A similar plate buckle was found in the Vrijthof cemetery (grave 11: 1664-1). It was identified as a plate buckle of a strap that attached the seax and scabbard to the waist belt. However, the Sittard plate buckle was found in the grave of a woman. It is not comparable to the plate buckle with hollow plate from Sittard grave 31, which has a hinged construction and is also larger. It might have been a purse buckle considering its possible find location near the upper right leg. Features as the hollow plate classify it as a variant of Siegmund types Gür3.3/3.4, which date to Rhineland phase 8 (610-640);²⁸ it is safe to suggest that the plate buckle dates to the first half of the seventh century.

Plate buckle and back plate: iron, trapezium shaped, silver and copper alloy inlays, geometric

Find numbers: 84 (84-1-9; 84-1-8)

Iron plate buckle 84-1-9 has a trapezium shaped plate with three copper alloy rivets (fig. 4.10). The plate has a length of 7.3 cm and a width of 3.6 cm. The inner length of the buckle loop is 3.3 cm. The fittings were attached to a leather belt of approximately this width. The plate has silver and copper alloy inlays, the buckle loop and shield tongue show a geometric decoration formed by only silver inlays. The decoration on the shield of the tongue consists of a silver spiral band. The bichrome decoration on the plate consists of a middle field with silver plating suggesting braided bands filled with silver dots. The middle field is surrounded by copper alloy vertical stripes. Back plate 84-1-8 is heavily restored; only the middle field with plated silver intersected by braided bands, similar to

Fig. 4.10
Iron belt set with silver and copper alloy geometric inlays, grave 84 (scale 1:1).



(23) Siegmund 1998, 27. (24) Koch 1977, 125. (25) Werner 1953, Taf 4, 12. (26) Werner 1953, 25. (27) Legoux/Périn/Vallet 2004, 16, 32, 53 (type 172). (28) Siegmund 1998, 27-28.

Fig. 4.11
Iron belt set with copper alloy inlays, grave 45 (scale 1:1).



Fig. 4.12
Iron back plates, graves 5, 28 and 36 (scale 1:2).

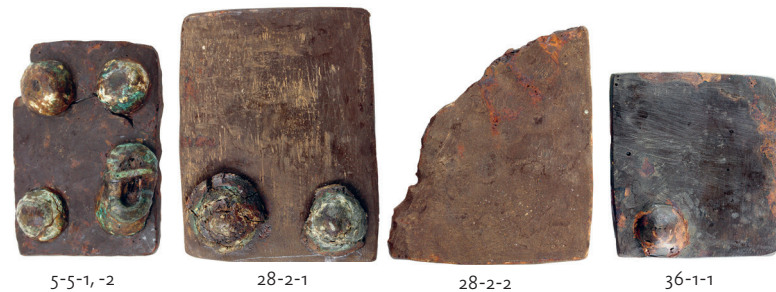


Fig. 4.13
Iron strap end with silver inlays, grave 79 (scale 1:1).



the plate buckle, are preserved. The copper alloy stripes, as on the plate buckle, were presumably also applied on this back plate. The back plate has four copper alloy rivets, and has a width of 4.0 and a length of 6.4 cm. Fragments of rivet pins are visible at the back side of the plate, which is severely corroded and on which probably some mineralised leather remains are still present.

The belt fittings were found in association with a seax in the western half of the grave of which the eastern half is gone. They were deposited to the left of the upper body of the now completely decomposed body assuming that the seax and fittings were still at their original location.

Iron plate buckles with geometric decoration formed by inlays are classified as Siegmund's type Gür4.6 of which the ornamentation is often executed in a monochrome style; bichrome inlays of this type are more rare. However, Siegmund mentions that the decoration pattern is chronologically more significant. Type Gür4.6 dates to Rhineland phase 8 (610-640)²⁹ and Franken AG phase 7 (610/20-640/50).³⁰

Plate buckle and counter plate: iron, copper alloy inlays, elongated tongue shape

Find numbers: 45 (45-1-2; 45-1-3)

The set of belt fittings from grave 45 consists of an iron plate buckle and counter plate, both with copper alloy inlays (fig. 4.11). The

plate of the plate buckle is elongated tongue shaped, as is the counter plate. The plate of the plate buckle has a length 7.9 cm and a width of 3.6 cm. The buckle loop is without tongue and is attached to the plate with a wrapped and slotted construction. The inner length of the buckle loop is 2.7 cm. The leather belt to which the belt fittings were attached probably had an approximate width of 3.6 cm and was narrower towards the belt end that went through the buckle loop. The copper alloy inlays applied on the buckle loop are for the majority gone. The remaining inlays consist of stripes and ladder bands. The inlays on the plate of the plate buckle are also considerably damaged. The better preserved inlays on the related counter plate indicate that it the applied decoration originally covered the entire surfaces of the plates; the middle fields were covered with two 'suns' and a smaller 'sun' was applied at the extremities of the plates. Bands of degenerated animal heads were applied around the decorated middle fields. Two domed iron rivets, plated with copper alloy, are present at the base of the plate buckle plate; a third rivet was probably fixed at the end of the plate. The counter plate has a length of 7.2 cm, and a width of 3.5 cm. It has three iron domed rivets plated with copper alloy. The two belt fittings were found in the eastern middle section of the grave, and thus near the presumed former location of the waist of the now completely decayed body. Other finds (apart from an iron nail) are not known from this grave; it is not possible to identify the grave as that of a man or women on the basis of the belt fittings alone.

Belt fittings with only copper alloy inlays are exceptional: they either have only silver inlays or a combination of copper alloy and silver inlays. The belt fittings from grave 45 can best be identified as Gür4.8 (belt fittings with degenerated animal style decoration of bichrome inlays on elongated plates, although the Sittard fittings are not as elongated as Siegmund's examples of this type and the decoration on the Sittard plates is not a degenerated animal style pattern in its strict sense), which dates to Rhineland phase 9 (640-670).³¹

Back plates; iron, large, not decorated, copper alloy rivets

Find numbers: 5 (5-5-1); 28 (28-2-1; 28-2-2); 36 (36-1-1)

Iron back plate 5-5-1 from grave 5 has four domed, copper alloy rivets (fig. 4.12). On the back of the plate some leather remains of the belt are still present. The plate has a length of 5.7 cm, and a width of 4.1 cm. Depending on how the back plate was fixed, the width of the belt was similar to one of these dimensions. This belt fitting was not found in association with other belt fittings of the waist belt. It was found in the middle section of the grave, thus presumably at its original location. The back plate might have been the only waist belt fitting deposited in the grave, or the grave was reopened and the associated waist belt fittings taken from it. The small simple buckle (5-5-2) from this grave probably belonged to a smaller strap.

Iron back plate 28-2-1 from grave 28 is heavily restored and completed (fig. 4.12). The reconstructed back plate has a length of 6.2 cm and a width of 5.1 cm, and was, in view of these dimensions, part of a waist belt. The back plate is not decorated, and two, of the presumably four, domed copper alloy rivets are present. The pin of one of the rivets can be observed at the back of the plate. Other waist belt fittings are not known from this grave, which might be a result of its recent disturbance. However, a fragment of an iron plate (28-2-2) was found together with the back plate (fig. 4.12). It might have been part of it (the dimensions are comparable), or of a second fitting of the waist belt; the remaining length is 6.0 cm and width 5.1 cm, and rivets or rivets holes were not present on this plate (evidence of rivets might have disappeared). The back plate and additional plate were found in the middle of the disturbed grave; this would have been the position of the waist of the now completely decayed body. The grave contained the burial of a man, identified as such on the basis of a lance head.

From grave 36 the only belt fitting known is an iron back plate (36-1-1). It was, in view of its length of 5.0 cm and a width of 4.5 cm, a fitting of a waist belt (fig. 4.12). The plate is not decorated, and only one, of the probably four, copper alloy rivet is present. Some corrosion, of which it is not clear whether it contained textile or leather remains, can be observed at the back of the plate. The plate was found in the north-eastern corner of the grave, which in-

dicates a location near the right foot or left shoulder, depending of the orientation of the burial (generally S-N in the Sittard cemetery). The other finds from this grave are not gender specific.

The back plates belong to the group of broad bi-partite and tri-partite iron belt fittings without decoration and can thus be classified as Siegmund's types Gür4.1/4.2/4.3/4.5, which date to Rhineland phases 7-8 (585-640).³²

Strap end: iron, silver inlays

Find number: 79 (79-4-1)

The iron strap end from grave 79 has a length of 7.8 cm and a base width of 2.2 cm (fig. 4.13). It probably belonged to a waist belt, although other belt fittings are not known from this grave (gone due to reopening?). The silver inlays are considerably weathered. The decoration seems to consist of braided bands, and there seem to be some traces of copper alloy threads also included in the decoration pattern. This is however not certain; the copper alloy may also be a result of corrosion. Geometric decorations patterns are commonly executed with silver inlays only, and this might also be the case for this strap end. The strap end is heavily restored: a split base and traces of rivets cannot be observed. The strap end was found outside the coffin, in the western section of the chamber in the disturbed grave. It probably moved from its original location in the coffin (which is an indication that the grave may have been reopened).

Siegmund classifies belt fittings with geometric decoration patterns of silver inlays as type Gür4.6, which dates to Rhineland phase 8 (610-640)³³ and Franken AG phase 7 (610/20-640/50).³⁴

(29) Siegmund 1998, 32. (30) Müssemeier *et al.* 2003, 20-21. (31) Siegmund 1998, 32-33. (32) Siegmund 1998, 29-32. (33) Siegmund 1998, 32. (34) Müssemeier *et al.* 2003, 20-21.

Small belt fittings of shoes, purses or additional straps

Fig. 4.14
Iron foot wear fittings with silver inlays, grave 8 (scale 1:1).



Numerous small belt fittings were found in the Sittard graves. They could not be identified as fittings of waist belts because of their dimensions, but also because of their find locations in the graves. They are either the fittings of shoes or leg wear, the fasteners of purses or the fittings of additional leather straps (carrying sword or seax scabbards, various belt pendants (varying from utensils to amulets) attached to the waist belt.

Foot wear: iron belt fittings with silver inlay
Find numbers: 8 (8-5-1; 8-5-2; 8-5-3; 8-3-1; 8-3-2; 8-3-3)

The set of belt fittings from grave 8 consists of two plates (probably plate buckles) and two strap ends (fig. 4.14). They are identified as shoe fittings because of their relatively small size, their paired occurrence and their find location in the northern part of the grave, the presumed former location of the feet. Find numbers 8-5-1, 8-5-2 and 8-5-3 were found in the north-eastern part of the grave (right shoe) and find numbers 8-3-1 and 8-3-2 were found in the north-western part of the grave (left shoe). Find number 8-5-1 is a small triangular plate, and find number 8-5-3 is a fragment of a buckle loop; these two find numbers together form a plate buckle. The plate has a remaining length of 4.1 cm and a width of 2.3 cm. The inner length of the buckle loop cannot be reconstructed; a considerable part is gone. The decoration pattern of silver in-

lays consists of a single braided band filled with dots and bordered with zones of stripes. The buckle loop is decorated with zones of two or three silver threads. The associated iron strap end (8-5-2) has a length of 3.4 cm and a width of 1.4 cm. It is decorated with silver inlays forming three ladder bands, bordered by stripes. The strap end is severely damaged, and the former presence of a split base and rivets could not be identified.

The belt fittings of the left shoe consist of a triangular plate (8-3-1) and the base of a strap end (8-3-2). The plate is severely damaged, but it was in all probability the plate of a plate buckle similar to the plate buckle of the right shoe. Two copper alloy rivets (or iron rivets covered with sheet copper alloy) are still attached to the plate. Remnants of a third rivet (8-3-3) were found detached from the plate. The remaining length of the plate is 4.6 cm, and the width 2.5 cm. Only some stripes of silver inlay are left on the plate. A pattern cannot be identified, but it might have been similar to the pattern on its counterpart. The base of strap end 8-3-2 has a width of 1.4 cm. One rivet hole can be observed, but originally two rivets were present. The remnants of the decoration consist of a few stripes of silver inlay. The decoration on the strap end might have been similar to the decoration on the other strap end of the set. This type of foot wear is generally associated with burials of women. The Sittard foot wear fittings were also found in the grave of a woman (identified on the basis of beads).

Paired iron plate buckles with triangular shaped plates with inlays and accompanying strap ends are classified as Siegmund's type Sna 2.4 or 2.5, depending on the decoration.³⁵ The Sittard set is classified as Sna2.4 on the basis of its monochrome inlays. This type dates to Rhineland phase 8 (610-640). The Franken AG maintained this type, but mention that it is difficult to date it to a restricted phase on the basis of the associated grave inventories; this type is dated to their phases 5 to 7 (565-640/50).³⁶ Legoux, Périn and Vallet identified one type of iron shoe buckles with triangular plates, which dates to their phase MR1 (600/10-630/40),³⁷ which corresponds with the date range of Siegmund's type Sna2.4. The shoe fittings from Sittard grave 8 are dated accordingly.

Purse fittings: copper alloy plate buckle with strap end
Find numbers: 11 (11-7-3; 11-7-1; 11-7-4.2)

A small copper alloy plate buckle with fixed plate (11-7-3) and strap end (11-7-1) were found in the western middle section of the grave (fig. 4.15). Since a number of teeth and the beads were found in southern segment of the grave it is safe to suggest that the plate buckle and strap end were found along the left side of the body, close to the waist or left upper leg. This is a common find location of purses with their contents. The plate buckle has a fixed plate with a length of 2.7 cm and a width of 1.2 cm. The plate is decorated with stamped in dots along the edges and some larger dots on

Fig. 4.15
Copper alloy purse fittings, grave 11 (scale 1:2).



Fig. 4.16
Copper alloy purse fitting, grave 43 (scale 1:2).



Fig. 4.17
Copper alloy purse fitting, grave 82 (scale 1:2).



the middle of the plate. Some leather remains were discovered on the buckle loop. The two loops at the back of the plate are severely damaged. The matching copper alloy strap end is broken in two. It has a length of 4.1 cm, its split base has a width of 0.9 cm, and it is decorated with a groove following the edges of the plate. The strap end has one rivet hole at the split base of the plate.

Another copper alloy strap end (11-7-4.2) was found at the same location in the grave, but attached to a corroded ensemble consisting of a comb with case, an iron ring rod and an iron loop (fig. 4.46). The decoration on this strap end is similar to that on strap end 11-7-1. It has a length of 9.1 cm and its split base a width of 0.9 cm. It clearly forms one ensemble with the other strap end and plate buckle: they were probably fittings of the purse in which the comb and iron ring and rod were deposited or of a leather strap carrying these items. The simple iron rings (11-7-2) which were also found in this segment of the grave were also part of the 'purse' or the ensemble of belt pendants. The other finds (among which beads) from this grave indicate that it was the burial of a woman.

Purse fitting: plate buckle with hinged construction
Find number: 43 (43-1-1.1)

The find location of the small plate buckle (43-1-1.1) from grave 43 is not known (fig. 4.16). The function of this plate buckle is difficult to identify, but, in view of its size, it is not unlikely that it was part of a purse or maybe the foot wear. It is associated with objects commonly identified as purse contents or belt appendages (a coin and chain links). The plate of the plate buckle is severely damaged; its original shape cannot be identified. The plate is attached to a rectangular buckle with a hinged construction. The buckle loop has an outer length of 2.6 cm and an inner length of 1.5 cm, which indicates that it was attached to a relatively narrow strap. The finds in the grave for which no find number is recorded might be this set of objects.

Small rectangular simple buckles are classified as Siegmund's type Sna1.1,³⁸ but small plate buckles with rectangular buckles were not identified in his research area. Simple rectangular buckles are considered to be part of purses or additional straps attached to the waist belt. They date to Rhineland phase 5 (555-570). Within the category of rectangular buckles, Legoux, Périn and Vallet make a distinction between buckles with flat loops and those with faceted loops, similar to the buckle of Sittard plate buckle. This morphological feature has no chronological signifi-

cance since both type 124 and 125 date to their phases MA1-MR1 (470/80-630/40).³⁹ Dating the Sittard plate buckle as the simple rectangular buckles, and thus to the second half of the sixth century, seems a plausible option.

Purse fitting: plate buckle with rectangular plate
Find number: 82 (82-1-1)

Small copper alloy plate buckle 82-1-1 was found in the eastern part of the grave, between the middle and northern (feet) section; it was thus deposited to the right of the lower body. The plate of the plate buckle is rectangular and has a length of 2.4 cm and a width of 1.7 cm (fig. 4.17). The loop has an outer length of 2.1 cm and an inner length of 1.4 cm. The plate is attached to the buckle loop with a wrapped and slotted construction. Only a fragment of the tongue is present, and rivets are not observed. The grave suffered from a recent disturbance of its southern and western part, and the plate buckle might have moved from its original location. It is a rather small plate buckle; it is therefore not identified as a fitting of the waist belt; other identifications, among which the fitting of a purse, or a strap hanging down from the waist are thus possible. The finds from this grave are not gender specific.

Purse fittings: strap end, copper alloy
Find numbers: 8 (8-4-1); 76 (76-4-1)

A small copper alloy strap end (8-4-1), with a length of 4.7 cm and a width of 2.1 cm was found in the north-eastern segment of grave 8, not far from the ensemble of iron shoe fittings with silver inlay. It was probably not part of this ensemble given its rather different appearance (fig. 4.18). The strap end is decorated with two grooves applied at the base of the plate. The two small rivets, also at the base of the plate, attached the strap end to the leather strap. It is possible that the strap end moved from its original position since the middle section of the grave was disturbed; it might have belonged to a purse or additional strap attached to the waist belt. The strap end was found in association with organic remains, probably wood or bone. It is classified as L/P/V type 199, which dates to their phases MA1-MR1 (470/80-630/40).⁴⁰

Fig. 4.18
Copper alloy purse fittings, graves 8 and 76 (scale 1:2).



(35) Siegmund 1998, 40-41. (36) Müssener *et al.* 2003, 41-42. (37) Legoux/Périn/Vallet 2004, 16, 30, 53 (type 135). (38) Siegmund 1998, 40. (39) Legoux/Périn/Vallet 2004, 15, 30, 52 (type 124 and 125). (40) Legoux/Périn/Vallet 2004, 17, 34, 53 (type 199). (41) Legoux/Périn/Vallet 2004, 17, 34, 53 (type 199).

The copper alloy strap end from grave 76 is the only belt fitting known from this grave. The plate is tongue shaped and it has a length of 8.3 cm and a width of 2.3 cm (fig. 4.18). In view of these dimensions it could have been a fitting of the waist belt, but considering its find location it is more likely a purse fitting or fitting of an additional strap. The strap end has a split base in which the leather strap was fixed. The two copper alloy rivets at the base of the strap end secured the leather belt. The plate has faceted edges and a decoration of one zone of five grooves applied on the middle of the plate. The strap end was found to the left of the left upper leg or pelvis (assuming that the burial has a south-north orientation), where also a latch lifter key and knife were found. It is uncertain whether it was the burial of a man or a woman. It is classified as type L/P/V 199 which dates to their phases MA1-MR1 (470/80-630/40).⁴¹

Additional straps: simple buckles

Find numbers: 5 (5-5-2); 26 (26-5-1); 41 (41-2-3)

The small simple copper alloy buckle from grave 5 was found attached to a large back plate (5-5-1). The buckle has an oval loop and a straight copper alloy tongue (fig. 4.12). The loop has an inner length of 1.3 cm, and the small strap to which it was attached will have been a different one than the belt to which the back plate was attached (with a reconstructed belt width of approximately 4.1-5.7 cm). However, the buckle and back plate were found together, in the section of the grave associated with the waist (grave 5 is one of the few Sittard graves in which a considerable part of the articulated skeleton was preserved). The ensemble of finds (fire steel, flint, shears and a knife), found to the left of the waist in this grave, is commonly known as the contents of purses or as objects hanging down from the waist belt. The small buckle might have fixed an additional strap, to which the purse or the objects themselves were attached, to the waist belt.

Simple buckle 26-5-1 from grave 26 is no longer present in the collection. It was found in the grave of a man (identified as such on the basis of a lance head, seax and sword). It was found close to the pelvis.

Iron loop 41-2-3 from grave 41, attached to the blades of a pair of shears and an iron knife, is identified as a fragment of a buckle loop, probably of a simple buckle. The three objects were found in the middle section of the grave, and thus close to the initial location of the waist. The shears and knife might have been carried as an ensemble in a purse that was attached to the waist belt. The reconstructed length of the oval loop is approximately 5.5 cm, which is relatively large; it might have been the fastener of the waist belt. A function as purse buckle is less likely in view of these dimensions, despite its association with the purse contents.

Dress accessories

Fig. 4.19
Coin pendants, graves 11 and 87 (scale 1:1).



Coin pendants

11 (11-7-5); 43 (43-0-3.3); 87 (87-1-1)

A copper alloy coin pendant with a diameter of 3.1 cm was found in grave 11 of a woman (fig. 4.19, left). A fragment of a suspension ring is still present in its suspension hole. The pendant was probably an altered Roman coin, but images, which were presumably present on both 'coin' sides, are not visible anymore. The coin pendant was found in the middle of the western section of the grave, and was thus deposited to the left of the waist or left upper leg together with other items which were probably the contents of a purse. However, it might also be the copper alloy object found in association with the beads and which is recorded as number 11-8 on the field drawing (an object with this find number is not available).

The copper alloy coin from grave 43 is one of the objects of a corroded ensemble consisting of iron chain elements and a fragment of an equal armed brooch (see the catalogue of graves and finds). The suspension hole has a wire fragment still attached to it; it was a Roman coin turned into a pendant with a diameter of 2.5 cm. The ensemble was one of the objects found to the left of the body, but its exact location cannot be determined due to an administrative error.

The coin pendant from grave 87 is an altered copper alloy Roman coin with two holes (fig. 4.19, right). The edges of the coin are severely damaged. One side shows a lateral view of an emperor's head (pointing to the right). The other side is completely worn and does not show anything of the former image. The coin was found in the northern section of the grave, together with all the other finds from this grave (of a woman, based on the bracelet). The grave was probably re-opened and the finds probably moved from their original location.

Fig. 4.20
Bracelets, graves 71 and 87 (scale 1:1).



Bracelets/Arm rings

Find number: 71 (71-5-1); 87 (87-2-1)

The copper alloy ring from grave 71 is a circular, open, cast ring (fig. 4.20, left). It has slightly expanding extremities, and falls within the category of 'Kolbenringe', although the extremities are not as prominent as those of the silver *Kolbenringe*. The ring has an outer diameter of 6.6 cm, and an inner diameter of 6.1 cm, it has an oval section, and is not decorated. The arm ring or bracelet was found in a grave of a woman, identified as such on the basis of feminine objects such as beads and a finger ring. The bracelet was found close to the lower left arm (grave 71 is one of the few Sittard graves which still contained skeletal remains or imprints, although they were in such a poor condition that they could not be preserved for analysis), and its function as bracelet is with this find location confirmed.

Wührer presented an elaborate overview of metal arm jewellery of the early medieval period (although over an extended area).⁴² Five main groups are identified: *Kolbenarmringe*, bracelets of sheet metal, bracelets with animal head decoration, iron rings and a group that consists of a variety of other types. The Sittard specimen from grave 71 is classified as Wührer's type A.3.1⁴³ (solid *Kolbenarmringe* of nonferrous metal without decoration), which has an extended distribution pattern (from Northern France and the Benelux countries to Crimea), although they appeared predominantly in the Middle Rhineland and in Southern Germany/Northern Switzerland. They are dated to an extended period, namely to 450/80-720. This bracelet can also be classified as Siegmund's type Rng1.3, which includes open arm rings with slightly thickened or straight extremities without decoration. Siegmund observed that these rings were often found at the (presumed) location of the left hand in graves of women and claims that they are chronological indifferent.⁴⁴ Legoux, Périn and Vallet classified bracelets on the basis of material used: the group of copper alloy bracelet contains both decorated and undecorated exam-

ples. Type 338 dates to their phases MA1-MA3 (470/80-600/10), but they are also current thereafter.⁴⁵

A copper alloy bracelet (87-2-1), open, with slightly broadened extremities, was found in grave 87 (fig. 4.20, right). The extremities are decorated with three or four zones of three to four engraved or cast lines with slightly sunken triangles in between. The bracelet was found in the north-western corner of the grave. The finds from this grave, however, seem to have moved from their initial location; the bracelet might have been deposited around the arm of the deceased.

Wührer classified this specific specimen from Sittard as type A.3.8 (*Kolbenringe* with cast or engraved geometric ornaments).⁴⁶ This type knows only a few examples, of which the distribution pattern is more or less restricted to Northern France, Belgium and the Rhineland, predominantly between Mayen and Koblenz. Especially the specimens with decoration comparable to the Sittard specimen are restricted to the area west of the river Rhine.⁴⁷ A similar bracelet is known from the cemetery of Meerveldhoven, which is relatively nearby.⁴⁸ Wührer claims that these specific specimens date to 600-630/40 and that the other examples of type A.3.8 occur already in the sixth century.

The bracelet is classified as Siegmund Rng1.2: arm rings with open thickened extremities with engraved decoration. This type dates to Rhineland phase 8 (610-640).⁴⁹

Brooches: equal armed

25 (25-3-1); 43 (43-0-3.1); 64 (64-1-1)

The copper alloy fragment from grave 25 is one half of a small equal armed brooch (fig. 4.21, left). The remaining extremity of the brooch consists of a circular plate with a diameter of 1.4 cm; the other end plate, now lost, was in all probability similar. The remnant of the middle section of the brooch indicates that the brooch had a slightly elevated bow. A fragment of the needle case can be observed at the back of the end plate. The fragmented equal

(42) Wührer 2000. (43) Wührer 2000, 27-29. (44) Siegmund 1998, 80. (45) Legoux/Périn/Vallet 2004, 19, 40, 54 (type 338). (46) Wührer 2000, 41-44. (47) Wührer 2000, abb. 32. (48) Wührer 2000, 148. (49) Siegmund 1998, 80.

armed brooch was found in the middle of the grave, in the re-opening pit. Its assignment to grave 25 is therefore not certain. The other finds from this grave were a collection of beads found near the neck, and a pottery fragment. Grave 25 was thus of a woman, and probably contained more (gender specific) objects than the ones uncovered. The remnants are not enough to classify this brooch on the basis of Thörle’s typological scheme. However, the presented overview of brooches per region shows that small undecorated equal armed brooches were characteristic for Austrasia; they are in this overview dated to the JMII (630/40-670/80)⁵⁰.

The end plate of an equal armed brooch (43-1-3.1) was identified in the corroded ensemble of chain links, rings and a coin from grave 43 (see the catalogue). The plate has a diameter of 2.0 cm, and is decorated with an engraved/stamped in pattern of dots-in-circles. The bow and other end plate could not be identified. The find number of the corroded ensemble of objects was not recorded on the field drawing. All the other finds from this grave, of which the northern part was cut by grave 44, were however found in the western section of the grave, and thus to the left of the body (the skull was still preserved in the southern end of the grave). Beads were also found in this grave, on the basis of which it is identified as the burial of a woman.

Brooches with round end plates can be placed in Thörle’s basic group II. The dot-in-circle decoration on the end plate of the Sittard brooch resembles the examples of his sub-group II A 1b.⁵¹ The brooches of group II A 1b are predominantly known from Belgium and Northern France.⁵² They date to JMII (630/40-670/80).⁵³

The small copper alloy equal armed brooch from grave 64 has a length of 2.3 cm (fig. 4.21). It is a rectangular brooch: both the end plates are rectangular and have the same width (0.8 cm) as the bow of the brooch. The brooch is not decorated. Remnants of an iron needle and copper alloy needle case can be observed at the back of the brooch. The equal armed brooch was found to the left of the presumed former location of the upper part of the body, approximately at the height of the left shoulder/arm.

The brooch belongs to Thörle’s basic group of band shaped brooches: Group XI (consisting of 26 examples), and especially sub-group XI A of which the majority have undecorated or simple surfaces and are made of copper alloy sheet metal, except for one example from Frankfurt which is cast and which resembles the Sittard brooch.⁵⁴ Group XI A is known from the region to the east of the river Rhine, group XIB is especially known from the Netherlands, Belgium and Northern France. The brooches date to the late Merovingian (JM II/III: 630/40-720) or early Carolingian period.

Fig. 4.21
Equal armed brooches,
graves 25 and 64 (scale 1:1).

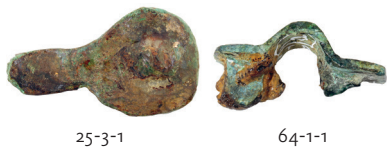


Fig. 4.22
Silver earring, grave 59
(scale 1:1).



Earring, silver

59 (59-2-1)

A fragment of a silver earring was found in grave 59 (fig. 4.22). It is a fragment of the ring with two zones of twisted silver wire wrapped around it. The ring has a circular section. The appendage is a solid silver polygonal cube with a width of 0.7 cm, which was placed at the end of one zone of twisted silver wire. The solid polygonal appendage was probably pierced through its middle and pushed on the silver ring: the twisted wire probably kept the appendage at its place. The earring was found in the southern section of the grave, together with a collection of beads, and thus close to the presumed former location of the head. The other find from this grave is a copper alloy ring, which is no longer present in the collection. The earring and beads form an obvious feminine assemblage of grave goods. In view of the dimensions of the coffin it was the burial of a child.

Von Freeden offers a detailed typology of Alamannic earrings in the Merovingian period.⁵⁵ This is a detailed overview of nearly all the forms of earrings known and is, for the greater part, adopted by Siegmund and the Franken AG. It appears that earrings similar to the one from Sittard are rare in the Alamannic area; they are discussed as ‘sonderform’.

Siegmund mentions that earrings are rare in the Rhineland. This observation matches with the finds from Sittard since this is the only earring known from the cemetery. Siegmund classifies specimens as the Sittard earring as type Ohr7: earrings with solid polygonal appendages and a thread enfolding the main ring. A distinction is made between rings of which an extremity is folded back and wrapped around the ring and as such forms a loop which could be fastened with the hook made of the other extremity (Ohr7.1),

Fig. 4.23
Copper alloy finger ring,
grave 71 (scale 1:1).



and the younger variant of which the wrapped threads are separate from the main ring and merely decorative (Ohr7.2). The earring from Sittard is clearly type Ohr7.2 since the threads are obviously additional threads and not part of the fastening device of the earring. Siegmund identifies similar rings as typical ‘Frankish’, since their main distribution area covers the area west of the Rhine, as it is also discussed in relation to a similar ear ring found in Bergeijk.⁵⁶ Type Ohr7 dates to Rhineland phase 10 (670-705); it is claimed that sub type Ohr7.2 is the younger variant within this date range.⁵⁷ The Franken AG did not distinguish between the two sub types since they could not discover a chronological difference between them. They date Ohr7 to their phases 9-10 (670/80-710), but refer to their possible presence in phase 8 (640/50-670/80).⁵⁸ Dating this earring to the second half of the seventh century seems a plausible option.

Finger rings

71 (71-3-1); 76 (76-3-1)

One of the two finger rings from the Sittard cemetery was found in grave 71 (fig. 4.23). It is a copper alloy ring with a lozenge-shaped bezel. The middle field of the bezel is decorated with an incised/engraved cross surrounded with an incised/engraved line following the bezel edges. A considerable part of this engraved line is gone, as are parts of the bezel edges. The band shaped ring is circular and closed. It has a diameter of 1.9 cm from the bezel to the opposite point, and the other crossing imaginary diameter is 2.3 cm. The finger ring is part of a grave goods assemblage of a woman, identified on the basis of beads and a bracelet. The ring was found near the left hand, and was thus actually worn on a finger during the burial event.

Find number 76-3-1 from grave 76 is a finger ring which is no longer present in the collection. It is described, in the thesis of Zoetbrood, as a copper alloy ring with a D-shaped section and a rectangular flat bezel with an engraved cross. The extremities of the cross arms and their crossing point are pronounced with more deeply incised points. A drawing of this object is not available. The ring was found along the western wall of the coffin, and was thus presumably deposited on the left hand of the now completely decomposed body of a woman.

Finger rings with flat bezels and engraved decoration (animal style or Christian (cross)) are classified as Legoux/Perin/Vallet type 334; they date to their phases MA3-MR2 (560/70-660/70).⁵⁹

Beads

Numerous beads, with great variety between the twenty graves in which they were found, are known from the Sittard cemetery (table 4.1). In grave 11, for example, approximately 700 beads were found. This is in comparison to other graves with beads from Sittard and its surroundings, but also in general, a very high number. However, the majority consists of the well known miniature yellow beads, which are rather common. Nonetheless, some re-

Table 4.1
Number of beads per Sittard grave.

Grave	Number of beads		Monochrome	Polychrome	Amber	Amethyst
	Zoetbrood	Present				
2	5	5	5	-	-	-
8	1	1	1	-	-	-
11	175	c. 175	c. 167	8	-	-
	139	c. 139	c. 129	10	-	-
	181	c. 181	c. 172	9	-	-
	231	c. 231	c. 181	49	1	-
16	22	27	18	8	-	1
20	1	1	1	-	-	-
23	43	39	38	-	1	-
25	7	7	7	-	-	-
32	8	8	3	1	4	-
43	11	0	(9)	(2)	-	-
44	29	0	(18)	(5)	(6)	
45	1	0	-	-	(1)	-
46	8	8	5	2	1	
59	8	9	5	4	-	-
60	8	8	5	3	-	-
64	1	1	-	-	1	-
71	10	8 ¹	6	2	-	-
73	1	1	1	-	-	-
79	3	4	2	-	2 ²	-
80	23	23	11	6	6	-
88	1	1	1	-	-	-
Total	917	877	758 (785)	102 (109)	16 (23)	1

1 Because one bead is a triple coiled bead (this is a single bead).
2 Including some fragments of an amber bead or beads.

markable polychrome beads are also known from grave 11, as they are from other Sittard graves. For a number of graves there is some discrepancy between the beads listed in Zoetbrood’s thesis and the number actually present; some are no longer present in the collection.

Strings of beads are common finds in Merovingian graves of women and children. Because the biological sex of young children is difficult to determine it is not certain whether beads were generally part of grave inventories of girls (which seems obvious) or that they were also deposited with boys. Ethnographic research shows that beads were suitable objects to transmit at several special occasions associated with life cycle transformations and that both girls and boys received beads at certain ages.⁶⁰ Single beads can be detached from a string of beads and integrated into another string. As such they form the material expression of various relations between givers and receivers over both short and long distances and of relations with foregoing generations. The bead strings from Sittard may therefore refer to a variety of relations,

(50) Thörle 2001, Tafel 60. (51) Thörle 2001, 54-56. (52) Thörle 2001, 60-62. (53) Thörle 2001, 82. (54) Thörle 2001, 178, tafel 53, 7-11. (55) Von Freeden 1979. (56) Theuws/Van Haperen 2012, 74-75, fig. 6.13. (57) Siegmund 1998, 43-44. (58) Müssenseier *et al.* 2003, 24. (59) Legoux/Périn/Vallet 2004, 19, 40, 54 (type 334). (60) Graeber 1996, 4-5; Woodward 2002, 1043-1047; Fowler 2004, 40.

which are, however, not that obvious for us. Age at death, biological sex, isotope profiles and DNA profiles can provide some insights but, unfortunately, human remains were poorly preserved in Sittard. In general, a strong correlation exists between the burials of women and the deposition of beads: this is extensively demonstrated in Merovingian cemeteries all over Europe. It is safe to assume that the burials with beads in Sittard were those of women. For the graves of children it cannot be specified whether the burials with beads were those of only girls.

The typo-chronologies of beads

Beads and strings of beads are meticulously discussed in numerous typo-chronological studies.⁶¹ The classifications of Siegmund⁶² and the Franken AG⁶³ are used for all the Sittard beads (polychrome and monochrome), but for the polychrome beads the classifications of Koch (based on the beads from Schreztheim and Pleidelsheim)⁶⁴ are also consulted. Siegmund defined the monochrome bead types on the basis of shape, colour and opacity/transparency. The beads are in the following discussed as separate

[illegible]

groups of monochrome, polychrome, amber and amethyst beads, followed by a description of each individual string.

Monochrome beads

A number of c. 758 monochrome beads from sixteen graves are present in the collection of beads from the Sittard cemetery (some are now missing and not included in the table; see the catalogue of graves). For the analysis of monochrome beads a matrix is established with the parameters colour, shape, opacity/transparency

which also shows the types identified in Siegmund's research area (table 4.2); of all the possible combinations only a small number is identified in the Rhineland. A second matrix shows which types (the cells with an orange shade) are present in the Sittard cemetery and whether they match with Siegmund types (table 4.3). The monochrome beads are, if possible, classified and dated after Siegmund's typo-chronology of monochrome beads. As the matrix shows, not all the types discovered in the Sittard cemetery are identified in the Rhineland and these are for now difficult to date.

Brown translucent	White opaque	White translucent	Colorless transparent	Silver Überfang perle	Gold Überfang perle	Cristall	Amethyst (various orms)	Shell discs	Opaque general	Translucent general	Amber
BRT	WO	WT	CT	SU	GU	C	AM	S	OG	TG	A
								S5.5 (I)			
S1.2 (B-C)	S1.2 (B-C)	S42.3 (C-D) S1.2 (B-C)							S1.2 (B-C)	S1.2 (B-C)	
S1.5 (A)	S1.5 (A)	S1.5 (A)							S1.5 (A)	S1.5 (A)	
	S1.6 (H-I)								S1.6 (H-I)		
									S1.8 (H-I)	S1.8 (H-I)	
	S1.4 (A)								S1.4 (A)		
	S32.3 (G-I)										
	S32.2 (H-I)										
	S32.2 (H-I)										
	S42.2 (A)		S40.1 (C-E)	S40.2 (C-E)							
	S1.3 (D-I)								S1.3 (D-I)		
									S1.7 (D-H)		
	S32.1 (H)										
		S42.1 (A)									
						S5.1 (C-?)					

Table 4.2
The standard identification table for monochrome beads (developed for the ANASTASIS project) including Siegmund's corresponding types (Siegmund 1998).

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The standard identification table for monochrome beads
(developed for the ANASTASIS project) including
Siegmund's corresponding types (Siegmund 1998).

Table 4.3
Classification of the monochrome beads from Sittard.

Shape Colour	Red opaque	Red translucent	Green opaque	Green translucent	Yellow opaque	Yellow translucent	Blue opaque	Blue translucent	Orange opaque	Orange translucent	Black opaque	Black translucent	Brown opaque	Brown translucent	White opaque	White translucent	Colorless transparent	Silver Überfang perle	Gold Überfang perle
	RO	RT	GO	GT	YO	YT	BO	BT	OO	OT	BLO	BLT	BRO	BRT	WO	WT	CT	SU	GU
1	1		5		8		4	1											
2				1															
3			1		1														
4															1				
5																			
6								1											
7																			
8																			
9									1										
10																			
11	7				5		4	1							8				
12																			
13																			
14																			
15																			
16																			
17																			
18	2														1				
19	1		4	1	3		13		12						4				
20	1						2		2		1				7				
21																			
22																			
23			1																
24	1							1											
25	1			1	2		2	3							1				
26																			
27																			
28		1						1											
29																			
30	7				c. 571			8			1								
31																			
32	2														1				
33																			
34																			
35	3			21				10			13								
36																			
37																			
38																			
39			1				1												
40																			
#shapes	10	1	5	4	6	0	6	8	3	0	3	0	0	0	7	0	0	0	0
#beads	26	1	12	24	590	0	26	26	15	0	15	0	0	0	23	0	0	0	0

Cristall	Amethyst (various orms)	Shell discs	Opaque general	Translucent general	Amber	# colors	# beads	Shape
C	AM	S	OG	TG	A			
						5	19	1
						1	1	2
						2	2	3
						1	1	4
						0	0	5
						1	1	6
						0	0	7
						0	0	8
						1	1	9
						0	0	10
						5	25	11
						0	0	12
						0	0	13
						0	0	14
	1				5	2	6	15
						0	0	16
						0	0	17
						2	3	18
						7	38	19
						5	13	20
						0	0	21
					4	1	4	22
						1	1	23
						2	2	24
						6	10	25
					1	1	1	26
						0	0	27
						2	2	28
						0	0	29
						4	c. 587	30
						0	0	31
						2	3	32
						0	0	33
						0	0	34
						4	47	35
						0	0	36
						0	0	37
						0	0	38
						2	2	39
					6	1	6	40
0	1	0	0	0	4			
0	1	0	0	0	16			

Fifty-three types are identified in the Sittard collection of monochrome beads (table 4.3). From high to low numbers of beads with particular colours these are: yellow, all of them opaque (590; the majority are the common miniature beads), blue (52; of which 26 opaque and 26 translucent), green (36; 12 opaque and 24 translucent), red (27; 1 translucent), white (23, all of them opaque), black (15; all of them opaque), and orange (15; all of them opaque). The common shapes are (fig. 4.24): 19 (barrel shape; occurring in combination with six different colours, including opaque and translucent beads), 25 (double connected beads; not present in high numbers, but occurs in combination with a relatively wide variety of colours, namely five colours, including the opaque and translucent beads). Shapes 11 (thick, cylindrical large), 20 (biconical), and 25 (double connected) are not abundantly present but occur in combination with a high variety of colours, that is with five different colours (including the opaque and translucent beads). The highest number of beads with a particular shape are the miniature beads (shape 30), the barrel shaped beads (shape 19), the biconical beads (shape 20), and the small short cylindrical beads (shape 35).

The matrix also shows that the red beads are distributed over the highest number of shapes, as are the blue translucent and the white opaque beads. Contrarily, the black opaque and the orange opaque beads are distributed over a relatively low number of shapes.

The high number of beads in grave 11 consists for the greater part of miniature yellow opaque beads, which are rather common. Nonetheless, this abundant presence of beads in one grave is rather peculiar. The chemical analysis of the beads from two graves of the cemetery of Borgharen in the province of Limburg showed that the yellow miniature beads from one grave were comparable in terms of chemical composition (two groups were discovered), but that seven different groups could be identified on the basis of the chemical composition of the small yellow beads from the other grave. It is suggested that yellow beads were produced in numerous local workshops since yellow pigment was not that difficult to make. This might explain the discovered variety of the chemical composition of the simple yellow miniature beads in a single grave; they may have been produced in several workshops in the proximity of Borgharen.⁶⁵ The high number of yellow beads from Sittard might indicate that they were produced locally and that their significance was different from the rare polychrome beads that were integrated into the same strings of beads and which, in all probability, had more remote provenances (see below).

Polychrome beads

One hundred and nine polychrome beads were found, of which hundred and two are currently present in the collection (fig. 4.25 shows the identified types). The polychrome beads are classified and dated after the typo-chronological schemes of Siegmund and Koch. Koch developed her detailed classification on the basis of the beads from Schretzheim⁶⁶ and Pleidelsheim.⁶⁷ The catalogue of graves and finds presents the types and date ranges assigned

(61) See for an overview Sasse/Theune 1997. (62) Siegmund 1998, 57-80. (63) Müssemeier *et al.* 2003, 35-39. (64) Koch 1977, 198-218, Frabtafel 1-6; Koch 2001, 160-164, Farbtafel 1-8. (65) Lauwerier *et al.*, 2014, 151-152. (66) Koch 1977, 198-218, Farbtafel 1-6. (67) Koch 2001, 160-164, Farbtafel 1-8.

Fig. 4.24
Bead shapes

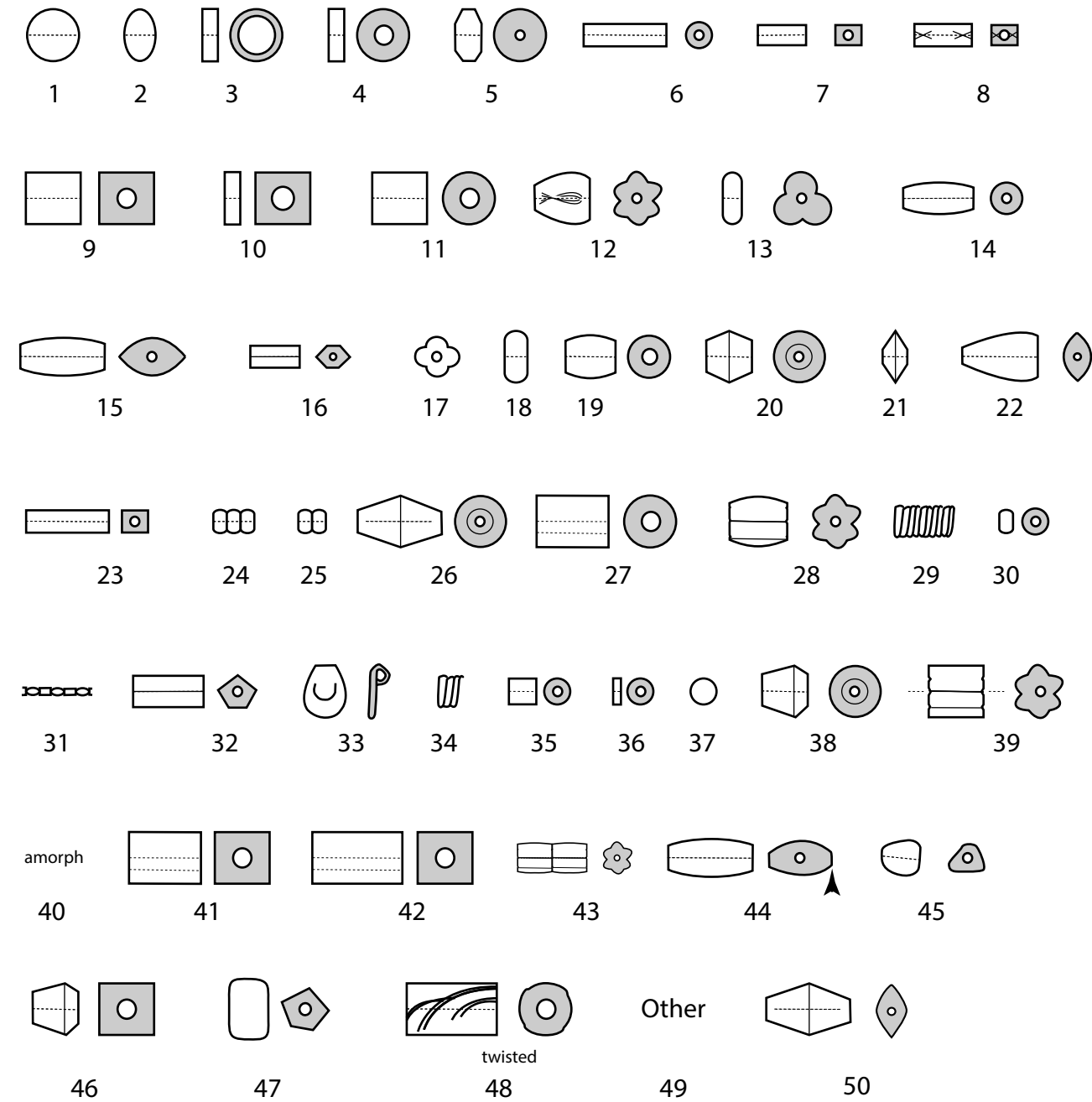


Fig. 4.25
Polychrome bead types (scale 1:1).



the single green bead is also opaque. The small transparent blue bead can be placed in Rhineland combination group A, and dates thus rather early, to 485-555.⁶⁸ In view of the relatively long date range of the orange beads it is rather difficult to date the grave on the basis of the beads alone. The blue bead will have been in circulation for some time before its deposition, but it remains uncertain whether the grave dates to the second half of the sixth century or to the seventh century.

The bead from grave 8

The single bead from grave 8 (8-1-1) is a blue monochrome transparent bead. A reopening pit disturbed a considerable part of the coffin and burial pit of this chamber grave. The bead was found outside the coffin, in the southern section of the chamber. The bead may have belonged to a larger ensemble of beads and probably moved from its original location, which was probably in the proximity of the former supposed position of the head in the southern section of the coffin. This section was completely disturbed. The other finds from this grave are a glass vessel and shoe fittings, on the basis of which the grave is dated to S-K IIIa (640/50-670/80). The blue bead is dated to 570-705; this date range covers the date range assigned to the grave. The bead might have been in circulation for some time before deposition, but not necessarily.

(68) Siegmund 1998, 70.

The beads from grave 11

Four strings with numerous and a wide variety of beads were found in this grave of a woman; they form an ensemble of approximately 728 beads (fig. 4.26). The complete collection consists mainly of common miniature yellow opaque beads. Their exact number was difficult to establish since some were coiled but it could not be determined whether this was their original condition, and some moved inside the openings of larger beads and could not be counted. The approximate number will, however, not be very different from the actual number. Next to the yellow and other monochrome beads 76 polychrome beads are present, of which some are rather rare specimens. They are discussed in detail in the following.

The beads from grave 11 are at present known to us as four strings. The beads were however recorded as one ensemble on the field drawing; it is not clear why it was decided to string them as four separate strings. Zoetbrood mentions that one of the strings was created during the excavation (current find numbers 1.4.1-1.4.36), and that the other three strings were created thereafter in the laboratory. The thesis mentions that the original compositions of these strings are not known to us. For now the beads are discussed per string without implicating that these single strings have any significance.

to each individual polychrome bead from Sittard. The highest number of polychrome beads is known from grave 11 (76 beads), among which some peculiar and rare beads can be found. The find locations of the bead strings are discussed in the following, as are the features of each string in more detail. Of concern are the dominant colours(s) and the distribution of polychrome, monochrome, opaque, transparent and amber beads.

Amber and amethyst beads

Sixteen amber beads are present in the collection and seven beads went missing after the excavation. The majority of the amber beads are almond or amorphous. The highest numbers (six) were found in grave 44, but these are not available anymore, and in grave 80 (also six). The string from grave 80 contains also a number

of red glass beads, which gives the string an overall red appearance. It is peculiar that from grave 11, with the highest number of beads, only one amber bead is known. The single amethyst bead from the cemetery was found in grave 16, in which also a number of unusual large decorated beads were found.

The beads from grave 2

2 (2-1-1.1; 1.2; 1.3)

The five beads from grave 2 were found in the southern section of the grave, at the supposed former location of the head of the now completely decayed body. This can be assumed to be their original location; it is however a low number for a necklace. Other finds are not known from this grave. Two of the beads are opaque orange, one blue bead is transparent and the other blue one opaque, and

Fig. 4.26
The beads from
grave 11 (scale 1:1).



The first string of beads (11-8-1.1-1.9) consists of approximately 175 beads, of which the majority consists of small yellow opaque monochrome beads. The seven polychrome beads are identified as five different types, of which one is a peculiar and rare one. This is a red opaque globular bead (11-1-1.9) with white combed/undulating bands and five raised blue dots with yellow eyes; it is a unique specimen in the Sittard cemetery. Similar beads are not known from the Rhineland, Schretzheim or Pleidelsheim but beads with raised eyes but different colour schemes are. The Sittard bead falls within the same 'tradition' and is dated accordingly (590/600-650/60). Another distinct but much smaller bead from this string is a white biconical bead with blue transparent crossing waves with red dots; similar beads are known from the other strings from grave 11. This type is known from Schretzheim and Pleidelsheim and classified as Koch-Schretzheim 1977 type 21,5 (565/60-600). The other polychrome beads are red beads with white crossing waves (Koch-Schretzheim 1977, type 34,11/34,12: 590/600-620/30), of which one is a double connected bead (S-Per35.8: 555-705). One polychrome bead is a white opaque bead with blue transparent crossing waves (Koch-Schretzheim 1977, type 34,7: 590/600-620/30).

The second string (11-8-1.2.1-1.2.11) consists of 139 beads and consists for its majority of small yellow opaque beads. Ten polychrome beads are integrated in this string, which are rather well known types. The most distinct bead is the large cylindrical red opaque bead with yellow and blue combed threads (11-8-1.2.2). Similar beads are not known from the Sittard graves, but it is similar to beads found in Schretzheim (Koch-Schretzheim 1977, type 49,15: 565-620/30). Another bead is the long cylindrical black opaque bead with a white spiral band. Similar beads are known from the cemetery of Pleidelsheim, but are not provided with a precise date range (Koch-Pleidesheim 2001, type 42,46). The other beads are red opaque beads with crossing white waves (Koch-

Schretzheim 1977, type 34,11/34,12: 590/600-620/30), of which one is a triple connected bead (Koch-Schretzheim 1977, type 34,16: 590/600-620/30).

The third string (11-8-1.3.1-1.3.14) consists of approximately 181 beads, again with a majority of small yellow opaque beads. The nine polychrome beads are rather common types known from Merovingian graves. As the first string from grave 11, this string contains a white biconical bead with blue transparent crossing waves with red dots (Koch-Schretzheim 1977, type 21,5: 565/60-600). It also has three red beads with white crossing waves (Koch-Schretzheim 1977, type 34,11 / 34,12: 590/600-620/30), of which one is a double connected bead (S-Per35.8: 555-705). One red opaque bead has a white spiral band (Koch-Schretzheim type 42,7: 565/60-600), and four red beads have yellow crossing waves of which one has additional yellow dots.

Of the fourth string (11-8-1.4.1-1.4.36) it is said that it was created during excavation; it remains however uncertain whether the original sequence of beads was maintained and what their relation with the other beads, now strings 1, 2 and 3, was. The string consists of approximately 231 beads, of which the majority is formed by the miniature yellow opaque beads. This string has forty-nine polychrome beads. The large blue transparent biconical bead with red, white, black and dark blue swirling bands is the most distinct bead; resembling beads, though not similar, are known from the cemetery of Schretzheim (Koch-Schretzheim 1977, type-group 50: 545-590/600). Another remarkable bead is the red opaque cubical bead with yellow opaque edge bands, white opaque combed bands and polychrome dots of yellow and green on each side. Comparable beads are known from Pleidelsheim (Koch-Pleidelsheim 2001, type-group: 60,1 / 60,2); they are not dated to a precise date-range. A long black cylindrical opaque black bead is also part of this string (Koch-Pleidelsheim 2001, type-group 42 (42,43?), and again, it was not dated to a precise date-range within the cemetery of Pleidelsheim. Two large red opaque beads are present: one thick cylindrical bead with white opaque swirling bands and yellow opaque edge and middle bands (Koch-Schretzheim 1977, type 58,1: 565-620/30), and one biconical bead with yellow, white and black opaque combed bands (Koch-Schretzheim 1977, type-group 48: 545-590/600). Another red biconical red opaque bead is decorated with white opaque crossing waves, a white horizontal middle band and white opaque dots (Koch-Schretzheim 1977, type 34,15: 590/600-620/30). Two colourless, transparent, thick, short cylindrical beads with yellow opaque edge band and zigzag band have exact parallels in the Rhineland (S-Per 2.1 / 2.2: 610-705). Apart from three black opaque cylindrical beads, of which two with white spiral bands and one with yellow spiral beads, which are difficult to date, the other polychrome beads from this fourth string are common in Merovingian graves. The single amber bead from grave 11 is also present in this string as is a complete blue Roman melon bead.

A half blue melon bead (11-7-6) was found apart from the ensemble of beads, in the southern section of the grave, in associa-

tion with a thick blue, probably Roman, glass fragment, a rectangular plate and a polished stone. They were presumably deposited as an ensemble in association with the small Roman beaker found on its side in the proximity of these finds.

The beads from graves 16, 43 and 44

Twenty-seven beads without find number are available as one string (fig. 4.27). The strings of beads from three graves (16, 43 and 44) are not present as they are recorded in Zoetbrood's thesis. The thesis mentions twenty-two beads from grave 16, eleven beads from grave 43, and twenty-nine beads from grave 44. The described beads from these three graves match with some of the twenty-seven beads present in the single available string, but the string itself does not match completely with one of the three described strings. It seems as if some of the beads from these three graves were brought together in the available string without find number. On the basis of the descriptions in Zoetbrood's thesis an effort is made to match the beads from the three graves with the single beads present in the available string.

The available ensemble consists of a wide variety of beads, namely eight polychrome beads, one amethyst bead and eighteen monochrome beads. The beads as described in Zoetbrood's thesis are listed in the following for each grave followed by a note indicating their probable presence in the available ensemble of beads without find number.

The beads from grave 16

A string of twenty-two beads is recorded in Zoetbrood's thesis:

- The single amethyst bead from this grave is present in the available ensemble since amethyst beads are not known from graves 43 and 44 (find number: 16-3-1.12).
- The blue transparent double connected bead recorded as find from grave 16 might be present in the available ensemble; however, a similar bead is also recorded as find from grave 43 (find number: 16-3-1.18).
- One red-brown opaque globular compressed to barrel shaped bead is mentioned in the thesis; it is present in the ensemble (find number: 16-3-1.7).
- The description of three yellow opaque, ring to barrel shaped beads, might refer to the three larger opaque yellow beads or to the three smaller opaque yellow beads in the available string (three beads are registered as find number: 16-3-1.2). However, three opaque yellow beads are also mentioned in grave 44 and two (although ring shaped) in grave 43. Since ring shaped beads are not present, the six yellow beads are considered to be possible finds from both grave 16 and grave 44.
- Of the three yellow connected opaque beads listed, one is present in the string. This seems to be the bead from grave 16 (find number: 16-3-1.1). The two other beads are not available anymore. Similar beads are not mentioned as finds from the other graves.

- The single orange opaque barrel shaped bead from grave 16 can be present in the string without find number (find number: 16-3-1.11); two are present, but two are also mentioned to have been found in grave 43 and one in grave 44.
- The single recorded white opaque globular to barrel shaped bead is present in the available string (find number: 16-3-1.3), but two similar beads are also mentioned to have been found in grave 44; one of the white opaque beads (which is more globular/barrel shaped than the other) is assigned to grave 16 and the other to grave 44.
- Of the polychrome beads the red opaque barrel shaped bead with white waves, crossing (find number: 16-3-1.16), the large red opaque biconical bead with a transparent blue single wave crossing white opaque spiral treads and with two yellow opaque edge bands (find number: 16-3-1.19), and the two double connected red opaque beads with white crossing waves (find number: 16-3-1.15), are certainly present in the available string since they are not mentioned in the other strings from graves 43 and 44.
- The red barrel shaped bead with yellow crossing waves (find number: 16-3-1.14), known from grave 16, is similar to a bead found in grave 43; the single available bead is for now considered to be a possible find from grave 16 or 43.
- Some of the polychrome beads mentioned in Zoetbrood's thesis are not present anymore: a biconical red-brown bead with white waves and three yellow bands, a red-brown bead with black waves and two yellow bands, a red-brown ring shaped bead with five white and blue eyes, five yellow dots, and two yellow bands, and a ring shaped bead with four white and green-blue eyes and white waves.
- Some of the beads in the available string are certainly not one of the beads from the string found in grave 16. These are the large biconical red opaque bead with swirling white and blue bands (either from grave 43 and 44), the black opaque bead with polychrome eyes (from grave 44), the white opaque bead with blue transparent waves (grave 44), and two blue opaque beads, one green opaque bead, one red opaque biconical bead, one ring shaped opaque white bead, and one white opaque barrel shaped bead; these are all recorded as beads of the string found in grave 44.

Altogether, seven of the twenty-two beads recorded as finds from grave 16 are certainly present in the available string without find number and eleven beads might be present in this string (similar beads were also found in the grave 43 and 44). The beads from grave 16 were found near the western wall of the coffin. The eastern middle half of the grave was disturbed by a pit in which charcoal remains were discovered. The western middle half of the grave, where the beads were found, seems to be undisturbed and the beads were recorded on the field drawing as one ensemble. They might have been deposited as a 'bracelet' worn around the left arm, or as the contents of a purse.

Fig. 4.27
The beads from graves 16, 43 and 44 (scale 1:1).



The beads from grave 43

Only the skull of the body buried in grave 43 was preserved. It was recorded that eleven glass beads were discovered just beneath this skull, which indicates that they were deposited around the neck. One bead was recorded detached from this ensemble. It is not certain which beads are gone, but their descriptions are available in Zoetbrood's thesis:

- Two single dark blue transparent beads are not present in the available ensemble without find number.
- The single double connected blue transparent bead recorded in the thesis is present, but a similar one is also listed as find from grave 16.
- One red/brown long cylindrical bead is not present in the ensemble.
- One yellow opaque ring shaped bead listed as find from grave 43 might be one of the six yellow opaque beads in the available ensemble, but none of these are clearly ring shaped. For now the six yellow beads are considered to be possible finds from grave 16 and 44.
- One white opaque long cylindrical bead is not present in the collection.

- One red-brown bead with yellow crossing waves is present, but a similar bead is also described as find from grave 16.
- One red/brown bead with white and green/blue swirling threads might be the large red opaque biconical bead with white and blue swirling bands. A similar bead was also mentioned as find from grave 44. The available specimen, however, has additional yellow opaque edge and middle bands, which are not mentioned to have been present on the bead from grave 43.

Altogether, four of the beads, described as belonging to the string from grave 43, might be present in the available string without find number. This is, however, not certain since similar beads were also found in graves 16 and 44. Grave 43 is dated to S-KIIIa (640/50-670/80) on the basis of some belt appendages; the beads could not contribute to this dating.

The beads from grave 44

The ensemble of beads from grave 44 is in the thesis of Zoetbrood recorded as a string consisting of twenty-nine beads. In the following it is suggested which of them might be present in the available ensemble without find number.

- Six amber beads were recorded; these are missing.
- Of the three transparent beads recorded one is dark blue and ribbed, one is violet/brown and ribbed, and one is green/blue and globular; these are not present in the collection.
- Of the twenty recorded opaque beads five are decorated: one red/brown bead is described as having three yellow bands (on the edges and in the middle) and blue/white swirling threads; a nearly similar one is (without the yellow bands) is also described as find from grave 43; it seems safe to suggest that the bead from grave 44 is the large biconical red bead with swirling white and green threads and yellow edge and middle bands.
- One yellow bead with red crossing waves is recorded; it is not present in the collection.
- One blue rectangular bead with red swirling threads is recorded; it is not present in the collection.
- One short cylindrical black bead with white and blue dots (eyes) and a white band along the edges is recorded; this one certainly matches with one present in the collection, also because similar beads are not described as finds from graves 16 and 43.
- One white, short cylindrical bead with blue crossing waves is recorded; this bead is certainly present.
- Of the opaque beads without decoration three are yellow and biconical to barrel shaped (they might be one of the six yellow opaque beads present), one is red-brown biconical (present), one is red-brown triple connected (not present), one is light blue, barrel shaped (not present), two are green-blue and biconical (they are present), one is ring shaped an olive green (present), and one is barrel shaped orange (present, but similar beads are also listed as find from graves 16 and 43), one is ring shaped and white (present), and two are white globular to barrel shaped (present, but a similar bead is also listed as find from grave 16).

Fig. 4.32
The beads from grave 71 (scale 1:1).



Fig. 4.33
The beads from grave 79 (scale 1:1).



Fig. 4.34
The beads from grave 80 (scale 1:1).



Altogether, eight of the twenty-nine beads from grave 44 are certainly present in the string without find numbers, and ten might be present (similar beads were also described as finds from graves 16 and 43). The find locations of the beads from grave 44 were not recorded on the field drawing, and other finds, except for a lime stone fragment, were not observed in grave 44. Bead 44-1-1.13 (the large red opaque, biconical bead decorated with edge and middle bands and swirling threads) is dated to Schretzheim phases 3-4 (565-620/30), and bead 44-1-1.17 (the white opaque, short cylindrical bead decorated with blue crossing waves) is dated to Schretzheim phase 4 (590/600-620/30), and some beads to considerably long date ranges, which are not indicative. It is decided not to date the grave on the basis of these dated beads alone, since bead typochronologies are not that straight forward; the evidence is too feeble.

The bead from grave 20

The single bead from grave 20 is lost. It was described in Zoetbrood's thesis as a black opaque globular compressed bead (Type BLO30/S-Per 3.1.1: 485-585). It was found in the grave of a man but its exact find location is not recorded on the field drawing. The other prominent finds from this grave are belt fittings, a seax and an axe, on the basis of which it is dated to S-KIIId (610/20-640/50). The bead might have been an intrusive find.

The beads from grave 23

The thirty-nine beads from grave 23 were found in the south-eastern section of the grave, close to the presumed former location of the head (fig. 4.28). In the thesis of Zoetbrood forty-three beads are listed; forty-two glass beads and one amber bead. The available ensemble of beads consists of one amber bead, which is damaged; the other beads are all opaque and without decoration. Twenty-one of the beads are yellow, nine are blue, five are white. The trans-

parent green bead mentioned by Zoetbrood is not available anymore, as are a number of the small opaque yellow beads. The cylindrical beads of different colours characterise the string. Other finds are not known from this grave and it is dated on the basis of the beads alone to S-K IIIb (640/50-c.750).

The beads from grave 25

The seven beads from grave 25 are all relatively small, monochrome opaque beads. Five of them are blue, one is yellow, and one is green. The beads were found in the southern section of the coffin, and were thus presumably deposited around the neck of the now completely decomposed body. A reopening pit was dug into the middle of the grave, but the beads seem to have stayed at their original location. The other finds from this grave are a pottery fragment and the arm of an equal armed brooch; the grave is dated on the basis of the beads and the brooch remnant to S-K IIIa (640/50-670/80).

The beads from grave 32

Two groups of beads were found in grave 32, which seems to be undisturbed; the ensembles were thus found at their original location. One group of five beads was found in the south-western corner of the grave, thus near the presumed former location of the head; it consists of four amber beads and one green long cylindrical opaque bead decorated with white threads. The other group of three beads was found in the middle of the grave, close to the presumed former location of the waist. One is yellow opaque ring shaped, one is transparent blue ring shaped, and one is ribbed and transparent brown/red. It might have been deposited as a bracelet. The other finds from this grave are a spouted pot and biconical pot and knife; it is dated, mainly on the basis of the pottery vessels to S-K IIb (565-640/50).

Fig. 4.28
The beads from grave 23 (scale 1:1).



Fig. 4.29
The beads from grave 46 (scale 1:1).



Fig. 4.30
The beads from grave 59 (scale 1:1).



Fig. 4.31
The beads from grave 60 (scale 1:1).



The bead from grave 45

The single bead from grave 45 is lost. It is described as a flat almond shaped amber bead. Only one find location of objects in this grave is recorded on the field drawing. The find was on the field drawing described as ‘iron’ and actually consists of belt fittings and a nail; maybe the amber bead was found at the same location (close to the eastern wall, in the middle of the grave) in association with these iron objects. Since this grave disturbed a large part of grave 46, which also contained beads, the amber bead might also have moved from its original location in grave 46. Grave 45 is dated to S-K IIIa (640/50-670/80).

The beads from grave 46

The ensemble of beads from grave 46 consists of eight beads, which were found in the middle of the grave, near the western wall of the coffin (fig. 4.29). The grave was for its larger part disturbed by grave 45, and whether this was the original location of the beads is therefore uncertain. If it was, the ensemble was deposited as a bracelet. One of the beads (an amber one) might have moved from its original location into grave 45 in which it is the only bead. The ensemble from grave 46 consists of one amber bead, five orange monochrome barrel shaped beads, and two polychrome red/brown beads with white crossing waves; the string has a red appearance. A pottery jug is also known from this grave, which dates it to S-K IIa (565-610/20). The ensemble seems to date around 600, and might even be younger, which indicates that the grave may date around 600 or thereafter and not as early as 565 or some time thereafter.

The beads from grave 59

The nine beads from grave 59 were found as one ensemble in the southern section of the grave and thus close to the presumed former location of the head of the now completely decomposed body (fig. 4.30). The ensemble consists of four polychrome beads of which one is blue, opaque, globular compressed with a opaque white band, one is red/brown, opaque, barrel shaped with yellow crossing waves and yellow opaque dots, one is black, long cylindrical with white/yellow spiral bands, and one is blue, opaque, barrel shaped with yellow, red and white dots. Of the five monochrome beads one is blue, opaque, barrel shaped, two are green, opaque, barrel shaped, one is blue, transparent, small, globular compressed and one is red, opaque, globular compressed. An earring and a simple ring (fastener of a purse) were also found in this grave, on the basis of which the grave is dated to S-K IIIb (640/50-c.750).

The beads from grave 60

The eight beads from grave 60 were found in the middle of the southern section of the grave, thus close to the presumed former location of the head (fig. 4.31). The ensemble consists of five monochrome beads and three more or less identical polychrome beads

(brown/red with yellow and green/blue dots (Koch-Pleidelsheim 11.11: 545/50-590/600). Other finds are not known from this grave and it was decided not to date the grave on the basis of the beads alone.

The bead from grave 64

An amber bead with a length of approximately 2.0 cm was found in the south-western corner of grave 64, thus close to the presumed former location of the head. Its large size might indicate a date in the seventh century. An equal armed brooch was found in its proximity. Other finds are not known from this grave. The grave is dated to S-K IIIb (640/50-c.750) on the basis of the equal armed brooch.

The beads from grave 71

Of the ten beads recorded in the thesis of Zoetbrood two were found detached from the other eight, which were found at the location of the neck of the skeleton, which was partly preserved. It is not clear where in the grave the other two beads were found. Only eight beads from grave 71 are currently available (fig. 4.32). This string consist of two identical polychrome beads (red/brown long cylindrical beads with white combed spiral threads, and six monochrome beads of which one is blue transparent double connected, one is orange opaque barrel shaped, one is white opaque double connected, one is blue transparent triple connected, one is small yellow opaque, and one is red opaque triple connected. The two beads found apart from the other eight were small yellow opaque beads, but these are not present anymore. The other finds from this grave are a biconical pot, a finger ring, a bracelet and a wooden box. The grave is dated to S-K IIc (580/90-640/50).

The beads from grave 73

The single bead from grave 73, which is also the single find from this grave, was not recorded on the field drawing; it is not known where in the grave this bead was found. It is an opaque black biconical bead; it may date the grave to S-K IIIb (640/50-c.750).

The beads from grave 79

Four beads are known from grave 79: two were found inside the coffin (in its southern section, which seems to be undisturbed), and two were found outside the coffin to its west. It was not recorded which bead was found where. Two of them are amber beads of which one is fragmented; one bead is a green transparent bead without decoration and one is a white opaque bead without decoration (fig. 4.33). A strap end was also found outside the coffin, also to the west of the coffin. The grave seems to have been disturbed, although the outline of the coffin shadow is intact; the possible reopening might not have reached the lowest part of the

grave. This possible disturbance moved some of the beads and the strap end from their original location. The grave is dated to S-K IIIb (610/20-640/50).

The beads from grave 80

The beads from grave 80 were found in the southern section of the coffin in a chamber grave of which the western half was disturbed. It seems as if they did not move from their original location, which indicates that they were deposited as a necklace. The string of twenty-three beads consists of six amber beads, six polychrome beads and eleven monochrome beads (fig. 4.34). The amber beads are of different shapes: three irregular shaped beads and two drop shaped beads. Only one of the monochrome beads is transparent; a blue cylindrical ribbed bead. The other eleven are opaque beads of different shapes and colours. Of the polychrome beads one is a small yellow opaque barrel shaped bead with red/brown crossing waves and the others are all large beads; one is red opaque with white waves and polychrome eyes (white dots with raised blue dots), one is a large red opaque cylindrical bead with yellow edge bands and black vertical bands, two are red opaque biconical beads with white waves and yellow edge and middle bands, and one is red opaque short cylindrical bead with yellow edge bands and polychrome eyes of white dots with blue raised dots in between yellow dots. Altogether, the string shows a diverse collection of relatively large polychrome beads and has a rather red appearance. The other remaining finds from this grave are a spindle whorl and a biconical pot. The grave, despite its exclusive decorated beads, could not be dated more precisely as to SKI-SK II (510/20-640/50).

The bead from grave 88

The single bead from grave 88 is a white, opaque, monochrome, biconical bead. It was found in the middle of the northern half of the grave, thus at the presumed former location of the upper legs. It might have entered the grave by accident, or it might have been carried in a purse. Some copper alloy mounts were found in its proximity; these might have been mounts of a leather purse. Apart from its north-eastern corner, the grave seems undisturbed. The grave could not be dated more precisely as to the entire Merovingian period on the basis of the mentioned finds and a biconical pot fragment.

Weapons

Arrowheads

38 (38-1-1⁶⁹; 38-2-1)

Two arrowheads (38-1-1 and 38-2-1) were found in the middle of the eastern section of grave 38, close to the presumed former location of the waist. The deposition of two arrows in a single grave, or sometimes more, is not unusual.⁷⁰ A pair of shears was also found in this grave of, in all probability, a man. Arrowhead 38-2-1 has a total length of 10.6 cm; the blade has a length of 9.0 cm and the socket, of which a part is broken off, a length of 1.6 cm. The socket basis is round and closed, and wood remains of the wooden shaft are preserved inside it. The arrowhead has an oval blade and the faint appearance of midribs might be a result of its rigorous restoration.

Arrowhead 38-1-1 is now missing from the Sittard collection. The documentation mentions that it was an arrow with an open shaft; nothing is mentioned about the shape of the blade. Arrowhead 38-2-1 with closed shaft is classified as L/P/V type 26, which dates to their phase MA1-MR1 (470/80-630/40).⁷¹ In their classification types 23 and 24 are arrowheads with open shafts (date range PM-MA3: 440/50-600/10).⁷²

Fig. 4.35
Seaxes; Schmalsaxe, graves 26, 39 and 41 (scale 1:4).



(69) No longer present in the collection. (70) Siegmund 1998, 96. (71) Legoux/Périn/Vallet 2004, 14, 24, 52 (type 26). (72) Legoux/Périn/Vallet 2004, 14, 24, 52 (type 23 and 24). (73) Siegmund 1998, 89, Tabelle 12.

Seaxes

14 (14-4-1); 20 (20-3-6.1); 26 (26-4-2); 27 (27-2-1); 30 (30-3-6); 31 (31-1-1); 37 (37-2-8); 39 (39-2-1); 41 (41-1-1); 84 (84-1-1; 84-1-2; 84-1-4; 84-1-5); 86 (86-5-1)

Seaxes are generally classified and dated on the basis of their blade length and the blade length/width index. However, the demarcating dimensions show discrepancies in the various available classification schemes.⁷³ The classification of the Franken AG is used for the classification and dating of the Sittard seaxes, and compared and complemented where necessary with the classification scheme of Siegmund (table 4.4). Ten seaxes were found in the Sittard graves, and one tip of presumably a seax (37-2-8). A number of seaxes that were uncovered from the cemetery are now missing, but are discussed on the basis of the available descriptions. Additional classifications and dates are provided by the various scabbard fittings such as rivets and scabbard edge reinforcements. These are discussed not as a separate category but in combination with the seax they were associated with. Their specifics are discussed below per seax type as identified by the Franken AG and Siegmund.

Seaxes: *Schmalsaxe*

26 (26-4-2); 39 (39-2-1); 41 (41-1-1)

Seax 26-4-2 has a blade length of 30.8 cm and width of 3.9 cm, which classifies it as *Schmalsax* according to the typologies of both Siegmund and the Franken AG (fig. 4.35). Some mineralised leather of the scabbard is still present on the blade. The seax was found in the re-opening pit of the grave, in which some articulated skeletal remains were preserved and recorded at presumably their original location. The seax was found alongside the left upper arm, and it can be assumed that it was originally deposited inside the coffin in chamber grave 26.

Small iron seax 39-2-1 is with its total length of 28.1 cm and blade length of 18.5 cm just a little bit larger than a large iron knife (the demarcation line between knives and seaxes is established at a blade length of 15 cm⁷⁴). The seax is heavily restored; remains of the scabbard and hilt are absent and grooves could not be observed (anymore) on the seax blade (fig. 4.35). It is not associated with a knife or seax scabbard fittings. It was found in the middle of wooden container grave 39 which was, in all probability, the grave of a child.

Table 4.4
Siegmund's (1998) and the Franken AG's (2003) classification schemes for seaxes.

General types	Type Siegmund	Blade length Siegmund	Blade width Siegmund	Type Franken AG	Blade length Franken AG	Blade width Franken AG
<i>Schmalsaxe</i>	Sax 1	<35	<4.1	Sax 1	< 31	≤4.0
<i>Leichter Breitsaxe</i>	Sax 2.1	>25	>3.3	Sax 2.1	≥29 - ≤35,0	>4.0
<i>Schwerer Breitsaxe</i>	Sax 2.2	>36.5	>5.0	Sax 2.2	>35 - <41	>4.0
<i>Kurzer Breitsax</i>	-	-	-	Sax 2.3	<29	≥4.5
<i>Langsaxe</i>	Sax 3	>40	L/W= 10-1	Sax 3	>41	-

Iron seax 41-1-1 from grave 41 has a total length of 41.1 cm, a blade length of 31.2 and a blade width of 3.9 cm (fig. 4.35). The seax is without traces of wood or scabbard remains and fittings. It is not possible to classify it unambiguously: according to Siegmund's typology it can be both a *Schmalsax* and *Leichter Breitsax*, but his solution to tell them apart identifies it as a *Schmalsax* (less than: 31.2 x -0.08 +6.1).⁷⁵ According to the classification scheme of the Franken AG the blade is 2 mm too long to be a *Schmalsax* and the blade width 1 mm too narrow to be a *leichter Breitsax*. Both classifications are therefore plausible. The seax was found in the centre of the possible chamber grave; it might have been deposited on top of the body or on top of the wooden container.

The Franken AG date *Schmalsaxe* (Sax 1) from the end of their phase 3 to the end of phase 7 (510-640/50) although predominantly to phases 4-5 (510/25-580/90).⁷⁶ Siegmund dates *Schmalsaxe* to Rhineland phases 4-7 (530-610). Seax 41-1-1 can also be dated as *leichter Breitsax* (Sax2.1) to Franken AG phases 6-7 (580/90-640/50).⁷⁷ Siegmund dates this type (Sax 2.1) from Rhineland phase 7 to the middle of phase 9 (585-655).⁷⁸

Seaxes: *leichter Breitsaxe*

14 (14-4-1); 27 (27-2-1); 30 (30-3-6)

Iron seax 14-4-1 has a small knife (14-3-1) attached to its tip due to corrosion. The knife was probably carried in a little scabbard that was attached to the scabbard of the seax. It is one of the rare examples with a (preserved) hilt knob (fig. 4.36). This boat shaped knob has an oval base and a height of 1.0 cm and a length of 4.7 cm. An iron band shaped elevation marks the transition from blade to hilt. The seax was found in approximately the centre of the southern half of the chamber grave with coffin; it was deposited on top of the upper body inside the coffin. The blade has a length of 31.2 cm and a width of 3.9 cm, and can on the basis of these dimensions be classified a *leichter Breitsax*, according to the typology schemes of both Siegmund and the Franken AG.

Iron seax 27-2-1 is heavily restored (fig. 4.36). Wood remains are preserved around the iron hilt core. The blade has a length 34.0 of and a width 3.9 cm on the basis of which it is classified as a *leichter Breitsax*. It has a find number which assigns it to grave 27, which was eventually discarded. It is not known to which grave this seax belonged.

Fig. 4.36
Seaxes; *Leichter Breitsaxe*, graves 14, '27' and 30 (scale 1:4).



Iron seax 30-3-6 from grave 30 has a total length of 41.3 cm, a blade length of 30.0 cm and a blade width of 4.0 cm (fig. 4.36). Wood remains around the iron hilt core are still present, as are some leather remains of the scabbard at the base of the blade. A band (of copper alloy?) is wrapped around the base of the seax blade. Considering the former presence of a leather scabbard this band might have been the mouth reinforcement of the scabbard. The seax was found close to the western wall of the coffin, in the southern half of the grave, and was thus presumably deposited to the left of the upper body. The dimensions of the blade make a classification of both a *Schmalsax* and *leichter Breitsax* possible, but Siegmund's solution for telling those apart makes it possible to classify it as a *leichter Breitsax*.⁷⁹

The Franken AG date *leichter Breitsaxen* (Sax 2.1) to their phases 5-8 (565-680), although predominantly to phases 6-7 (580/90-640/50).⁸⁰ Siegmund dates this type (Sax 2.1) from Rhineland phase 7 to the middle of phase 9 (585-655).⁸¹

(74) Siegmund 1998, 87 (75) Siegmund 1998, 92. (76) Müssemeier *et al.*, 2003, 45. (77) Müssemeier *et al.*, 2003, 45. (78) Siegmund 1998, 93-94. (79) Siegmund 1998, 92. (80) Müssemeier *et al.*, 2003, 45. (81) Siegmund 1998, 93-94.

Fig. 4.37
Seaxes; *Schwerer Breitsaxe*, graves 20, 31, 84 and 86 (scale 1:4).



Seaxes: *schwerer Breitsaxe*

20 (20-3-6.1; 6.2); 31 (31-1-1); 84 (84-1-1; 84-1-2; 84-1-3; 84-1-4; 84-1-5); 86 (86-5-1; 86-5-3; 86-5-4)

Some remains of the scabbard (20-3-6.2) are present at one side of the iron seax (20-3-6.1) from grave 20 (fig. 4.37); it is not clear whether these are wood or leather remains. The seax has a total length of 48.0 cm, a blade length of 35.0 cm and a width 5.5 cm, on the basis of which it is classified as a *schwerer Breitsax*. It was found in the middle of the southern half of the wooden container grave. The seax seems to have been deposited on top of the upper body inside the coffin.

Iron seax 31-1-1 has a total length of 51.5 cm, a blade length of 39.5 cm and a width of 5.0 cm (fig. 4.37). It has four grooves at one side of the blade and three grooves at the other side; the fourth groove might have disappeared due to corrosion or restoration. The seax was found in the western section of the southern half of

the chamber grave with coffin and was thus presumably deposited to the left of the upper body, inside the coffin.

With its total length of 52 cm the iron seax (84-1-1) from grave 84 is one of the largest of the Sittard collection (fig. 4.37). Wood remains are still present on the iron hilt core, as are leather remains of the scabbard (84-1-3) at one side of the blade. Grooves could therefore be observed only on the ‘clean’ side of the blade. The mouth reinforcement (84-1-5) of the seax scabbard is wrapped around the hilt; this location indicates the point to which the seax was originally covered with the scabbard. Other scabbard fittings are three copper alloy rivets (84-1-2), which served to fasten the edges of the leather scabbard. The rivets have a flat head and three perforations along their edges. Similar rivets are regularly associated with seax scabbards and are classified as Siegmund’s type Sax 4.1 (phases 8-9: 610-670)⁸² and L/P/V type 69 (LPV-MR2: 600-670).⁸³ Another small scabbard mount is attached to the base of the blade (84-1-4) and is a so called *tragbugel*; a narrow leather strap which attached the scabbard with seax to the waist belt was fixed with this mount.⁸⁴ The seax and its fittings were found in a chamber grave with coffin of which only the western segment was preserved. It was found in the southern half of this western section and was thus, assuming that the seax and fittings were still at their original position, deposited to the left of the upper body.

Iron seax (86-5-1) from grave 86 is with a total length of 53.0 cm the largest seax of the Sittard cemetery (fig. 4.37). Its blade has a length of 37.5 and width of 4.7 cm. Wood remains around the iron core of the hilt and leather scabbard remains (86-5-3) are preserved, although not as much as on the other large seax from grave 84. Two grooves could be observed on both sides of the seax blade and four copper alloy scabbard rivets (86-5-4) with a cast geometric decoration on their flat heads are attached to the scabbard remains. They can be classified and dated as L/P/V type 70 (on the basis of their decoration) and date to their phases LPV-MR2 (600-670).⁸⁵ A knife was also attached to the scabbard remains; it was probably carried in a small scabbard which was part of the larger seax scabbard. The seax and rivets were found in the southern half of the chamber grave with coffin, to the left of the skeletal remains of the upper body. The dimensions of this seax make a classification as both Siegmund’s types *leichter Breitsaxe* (585-655) and *schwerer Breitsaxe* possible, but for now the classification scheme of the Franken AG is followed, mainly because the rivets are regularly associated with the heavier seaxes.

The Franken AG classify *schwerer Breitsaxe* as type Sax 2.2, which dates to their phases 6-9 (580-710), although predominantly to the end of phase 7 and phase 8 (640-670/80).⁸⁶ Siegmund dates type Sax 2.2 to Rhineland phases 9-10 (640-705).⁸⁷

Seaxes: seax tip

37 (37-2-8)

The iron tip presumably of a seax (37-2-8) was found in a wooden container grave of which only the southern half was preserved. It seems to have been deposited on the upper body but it is likely that it moved from its original location in view of the severe disturbance of the grave.

Lance heads

5 (5-1-1); 14 (14-5-1); 24 (24-2-1); 26 (26-4-1); 28 (28-3-1); 29 (29-1-1); 29-1-2); 30 (30-1-1); 34 (34-1-1); 40 (40-1-1); 49 (49-2-1); 77 (77-3-1); 78 (78-1-1); 81 (81-3-1); 86 (86-1-1)

Fifteen lance heads were found in the Sittard graves, of which two were assigned to one context (context 29: assembly of finds without burial pit). Lance heads are generally classified on the basis of the shape and length of their blades, the index of the blade and socket length, and the shape of their sockets. The majority of the Sittard lance heads have closed sockets, which is a feature common for lance heads dating later in the Merovingian period. Long oval blade shapes are also a common feature of the Sittard lance heads. The lance heads are in the following discussed on the basis of a number of features identified by Legoux, Perin and Vallet and Siegmund. Legoux, Perin and Vallet classify lance heads, next to closed and open sockets, on the basis of a number of indexes: the location of the centre of the complete lance head (located at the blade or at the socket) and the length of the complete lance head (longer or smaller than 35.0 cm), together with some additional features.⁸⁸ Siegmund established an extended classification scheme for lance heads, based on the shape of the sockets (closed or open), the shape and length of the blade, and some additional features which identify specific types.⁸⁹ The Franken AG did not alter this scheme significantly.⁹⁰

Lance heads with open sockets

24 (24-2-1); 81 (81-3-1)

The iron lance 24-2-2 head from grave 24 has an open socket with wood remains preserved in its upper part and soil remains in its lower part (fig. 4.38). It has an oval blade (19.1 cm), which is just a little bit shorter than the socket (19.7 cm). The total length of the lance head is relatively large compared to the other lance heads from Sittard. The lance head was found in the north-eastern section of the grave, presumably near the right foot of the body, which left no traces. According to the classification scheme of Legoux, Perin and Vallet it is a long lance head (larger than 35.0 cm), with its middle point at the socket, and thus type L/P/V

33, which dates to their phases MA1-MA3 (470/80-600/10).⁹¹ Siegmund classifies similar lances as type Lan1.4 (which he identifies as lance heads with ‘short’ blades (smaller than 42.0 cm). This type dates to Rhineland phases 6-8A (570-625).⁹² The Franken AG maintained this type and date it to their phases 5-6 (565-620).⁹³

Iron lance head 81-3-1 from grave 81 has an oval blade, an open socket with wood remains and an iron pin, in vertical position within the socket (fig. 4.38). The total length of 40.0 cm makes it a relatively large lance head within the Sittard collection. The lance head was found in the north-eastern section of the chamber, outside the coffin, and thus presumably associated with the lower body. It is classified as L/P/V type 32, which dates to their phases MA1-MA3 (470/80-600/10), but can also appear sporadically in their phase PM (440/50-470/80).⁹⁴ This lance head is a type Lan1.4 according to Siegmund’s scheme; this type dates to Rhineland phases 6-8A (570-625).⁹⁵ The Franken AG maintained this type and date it to their phases 5-6 (565-620).⁹⁶

Lance heads with closed sockets and mid rib

5 (5-1-1); 26 (26-4-1); 34 (34-1-1); 77 (77-3-1)

An iron lance head (5-1-1) with mid rib and a closed socket, in which wood remains are preserved, has a total length of 26.6 cm, which is relatively small within the collection of lance heads from Sittard (fig. 4.39). It was found outside the coffin, in the north-eastern section of the chamber together with a biconical pot. An axe was also found outside the coffin, but in the south-eastern section of the chamber. Other, obvious ‘masculine’ objects were found inside the coffin. The skeletal remains inside the coffin indicate that the northern section of the grave was associated with the lower body.

Iron lance head 26-4-1 from grave 26 has a closed shaft, a small oval blade, and a mid rib on the blade (fig. 4.39). The wood remains in the socket were removed during its restoration. The lance head has a total length of 17.2 cm and is a relatively small lance head compared to the other lance heads from the Sittard cemetery. The lance head was found to the left of the upper left arm, and seems to have been deposited within the coffin, although this is not completely certain since a reopening pit disturbed the grave.

Iron lance head 34-1-1 from grave 34 has a relatively long oval blade with a mid rib, a closed shaft with wood remains preserved inside it, and organic (leather?) remains preserved on the outer surface (fig. 4.39). Its total length is 24.5 cm. It was found in the north-eastern section of a broad grave, presumably near the original location of the right foot of the body which is now completely gone.

Iron lance head 77-3-1 has a relatively long oval blade with an obvious mid rib. It has a closed shaft with wood remains preserved inside it (fig. 4.39). Its total length is 24.9 cm.

Fig. 4.38
Lance heads with open sockets, graves 24 and 81 (scale 1:4).



Fig. 4.39
Lance heads with closed sockets and mid rib, graves 5, 26, 34 and 77 (scale 1:4).



All the lance heads with closed sockets and mid ribs are classified as Siegmund type Lan2.1, which dates to Rhineland phase 7-8A (585-640).⁹⁷ The Franken AG maintained Siegmund’s type (S-Lan 2.1) and date it to their phases 5-6 (565-620).⁹⁸ The centres of all the lance heads discussed in this section are situated at the blade; they can thus all be classified as L/P/V type 38, which dates to their phases MA2-MA3 (520/30-600/10).⁹⁹

Lance heads with closed sockets: relative blade length short (< 0.52)

14 (14-5-1); 28 (28-3-1); 29 (29-1-2); 30 (30-1-1)

Iron lance head 14-5-1 is the longest of the cemetery (70.0 cm). It has a relatively narrow and long oval blade: the difference in width between the blade and the socket is small (fig. 4.40). The lance head has a closed socket with some wood remains preserved inside it. The base of the socket is covered with an iron band, which probably served to strengthen the connection between the socket and the wooden shaft. The lance head was found outside the coffin, in the north-eastern section of the chamber. It is classified as L/P/V

(82) Siegmund 1998, 94. (83) Legoux/Périn/Vallet 2004, 15, 28, 52 (type 69). (84) Dannheimer 1974, 133 abb. 1.2; 136 abb. 3; Ament 1993, 79-81, 80 abb. 68.8; Pescheck 1996, 57, Taf. 20, 1.2. (85) Legoux/Périn/Vallet 2004, 15, 28, 52 (type 70). (86) Müssemeier *et al.* 2003, 46. (87) Siegmund 1998, 94. (88) Legoux/Périn/Vallet 2004, 24-26, 52 (type 30-45). (89) Siegmund 1998, 97-105. (90) Müssemeier *et al.* 2003, 47-50. (91) Legoux/Périn/Vallet 2004, 14, 25, 52 (type 33). (92) Siegmund 1998, 101.

(93) Müssemeier *et al.* 2003, 48. (94) Legoux/Périn/Vallet 2004, 14, 25, 52 (type 32). (95) Siegmund 1998, 101. (96) Müssemeier *et al.* 2003, 48. (97) Siegmund 1998, 102. (98) Müssemeier *et al.* 2003, 48-49. (99) Legoux/Périn/Vallet 2004, 14, 26, 52 (type 38). (100) Legoux/Périn/Vallet 2004, 14, 26, 52 (type 36).

type 36 (longer than 35.0 cm, the centre of the lance head is situated on the blade, closed socket), which dates to their phases MR2 (630/40-660/70), and sporadically to the two phases before: MA3-MR1 (560/70-630/40).¹⁰⁰

Iron lance head 28-3-1 has a long oval/diamond shaped blade and a closed shaft with wood remains preserved inside it (fig. 4.40). The total length of the lance head is 43.5 cm; it is thus a relatively large specimen within the collection of lance heads from Sittard. It was found in the centre of a grave which is considerably disturbed; it is not certain whether this was its original location of deposition. According to the classification criteria of Legoux, Perin and Vallet this lance head is a type L/P/V 36: the middle point of the lance head can be found on the blade. The blade, however, is only slightly longer than the socket, and its classification on the basis of this criterion alone is somewhat arbitrary: it is nearly a type L/P/V 37. L/P/V type 36 dates to their phase MR2 (630/40-660/70), and sporadically to the phases before: MA3-MR1 (560/70-630/40).¹⁰¹

The second lance head (29-1-2) assigned to context 29 is complete (fig. 4.40). It has a total length of 28.4 cm, and is thus relatively small compared to the other lance heads from Sittard. It has a small oval blade, and the socket is closed and wood remains are preserved inside it. The centre of the lance head is situated on the socket. On the basis of this feature the lance head is classified as L/P/V type 35, which dates to their phases MA3-MR2 (560/70-660/70).¹⁰²

Iron lance head 30-1-1 from grave 30 has a small oval blade and a closed socket in which wood remains are preserved (fig. 4.40). Cut out lozenge shapes can be observed at two sides of socket base; it is not clear what their function was. The lance head is with its total length of 33.0 cm of an average length compared to the other Sittard lances. It was found outside the coffin, in the north-eastern section of the chamber, together with the shards of a biconical pot. It is classified as type L/P/V 35, which dates to phases MA3-MR2 (560/70-660/70).

Siegmund classifies lances with dimensions similar to the Sittard specimens discussed in this section as type Lan2.2 (relative blade length < 0.52), which dates to Rhineland phase 7 (585-610).¹⁰³ The Franken AG date type S-Lan2.2 to their phases 5-7 (565-640/50).¹⁰⁴

*Lance heads with closed sockets:
relative blade length long (> 0.52)*
40 (40-1-1); 49 (49-2-1); 86 (86-1-1)

Iron lance head 40-1-1 from grave 40 has a relatively long blade, with a lancet/oval shape (fig. 4.41). It has a closed socket with wood remains preserved inside it. With its total length of 36.2 cm it is an average lance head within the lance head collection from the Sittard cemetery. The lance was found outside the coffin, in

the north-eastern section of the chamber. No other finds were found in the chamber, and only a stone was found inside the coffin.

Iron lance head 49-2-1 from grave 49 is heavily restored (fig. 4.41). It has a long oval blade and a closed socket with wood remains preserved inside it. The total length of the lance head is 35.7 cm; it is thus of an average length. It was found in the north-eastern corner of the chamber grave, and was thus presumably deposited near the right foot of the now completely decomposed body. A ceramic beaker and biconical pot were also found in this segment of the grave. Other finds from this grave are a shield boss and belt fittings.

The iron lance head 86-1-1 from grave 86 has a total length of 37.6 cm, a long oval blade, and a closed socket with wood remains, of which approximately 4.0 cm is still present as an extension outside the socket (fig. 4.41). It was found in a chamber grave, outside the coffin, in the north-eastern section of the chamber, close to the eastern wall. A ceramic pot and shield boss were also found outside the coffin. A seax and belt fittings were found inside the coffin.

All the lance heads with closed sockets discussed in this section have blade lengths under 38.5 cm; they are classified as Siegmund's type Lan2.4, which dates to Rhineland phases 8B-10 (625-705).¹⁰⁵ The Franken AG date S-Lan2.4 to their phases 4-9 (510/25-710), thus to a date range which starts considerably earlier than Siegmund's date range.¹⁰⁶ The lance heads can also be classified as L/P/V type 36, which dates to their phases MR2 (630/40-660/70), and sporadically in the two phases before: MA3-MR1 (560/70-630/40).¹⁰⁷

Lance head: indeterminate
29 (29-1-1); 78 (78-1-1)

The blade of the first iron lance head from context 29 (29-1-1) is gone; the total length of the lance head cannot be established (fig. 4.42). The socket is closed, in which some wood remains are preserved. The socket has one rivet (iron?) attached to it, which probably fixed the wooden shaft in the socket. Generally two of such rivets are found attached to the socket; it can be assumed that this lance head originally had two rivets. Context 29 is an assemblage of finds without grave context and of which only one lance head is recorded on the field drawing. The second lance head assigned to this grave probably belongs to the grave inventory of another grave. It is not possible to classify this lance head precisely since it is incomplete, but lance heads with closed sockets are classified as Siemund's types S-Lan2.1-2.5 (7-10: 585-705).¹⁰⁸

Iron lance head 78-1-1 from grave 78 is severely corroded (fig. 4.42). It is conserved, but not restored. It cannot be determined whether the socket was closed or not due to the severe corrosion. Wood remains, however, can be observed inside the socket. The lance head has an oval blade of which the edges are severely cor-

Fig. 4.40
Lance heads with closed sockets: short relative blade lengths, graves 14, 28, 29 and 30 (scale 1:4).



14-5-1 28-3-1 29-1-2 30-1-1

Fig. 4.41
Lance heads with closed sockets: long relative blade lengths, graves 40, 49 and 86 (scale 1:4).



40-1-1 49-2-1 86-1-1

Fig. 4.42
Indeterminate lance heads, graves 29 and 78 (scale 1:4).



29-1-1 78-1-1

roded. Its total length is 26.1 cm, which is relatively small compared to the other lance heads from the Sittard graves. The lance head was found in the south-eastern corner of the grave which is a location deviant from the find locations of the other Sittard lance heads (predominantly north-eastern corners). The lance head is in spite of its condition classified as L/P/V type 30 or 34 (depending on the presence of a closed or open socket). Type 30 dates to their phases PM-MA3 (440/50-600/10)¹⁰⁹, and type 34 dates to their phases MA3-MR1 (560/70-630/40) and sporadically to the phases thereafter: MR2-first half MR3 (630/40-680/90).¹¹⁰ It can also be classified as Siegmund's type Lan1.4 (6-8A: 570-625)¹¹¹, and Franken AG type S-Lan1.4 (5-6: 565-620)¹¹², or Siegmund's type Lan2.4 (8B-10: 625-705).¹¹³

Shield bosses

Find numbers: 0 (0-0-0); 49 (49-4-1.1; 49-4-1.2); 86 (86-3-1; 86-3-2 (4x))

Three shield bosses were found in the Sittard cemetery. The wooden shields were not preserved, but the presence of the iron shield bosses and their associated grips and rivets (iron and iron plated with sheet copper alloy) indicate that complete shields were originally deposited.

An iron shield boss (49-4-1.1) and associated shield grip (49-4-1.2) with wood remains were found in grave 49 (fig. 4.43). The horizontal rim has a width of 2.8 cm, the wall is slightly oblique and has a height of 1.8 cm, the cone is convex, but relatively flat, and has a height of 1.8 cm, and the complete boss has a diameter of 17.8 cm. Four large flat iron rivets with a diameter of 2.0 cm are present on the rim; they attached the boss to the shield. The grip has a length of 13.2 cm, and wood remains of the shield are preserved at one of its sides. Remains of another sort of wood, different from the remains on the rest of the grip, seem to have been preserved at the extremities of the grip, which were formerly attached to the shield with two flat copper alloy rivets. Grave 49 is disturbed by a recent trench which intersects the middle section of the grave; the finds might have moved from their original location. The shield boss and grip were found in the northern half of the grave somewhat to the east of the middle of the grave; the shield could have been standing against the eastern wall (of a chamber?), and thus probably near the right leg of the deceased. The boss might have fallen on the ground of the grave after the shield and the walls and cover of the container decayed. The height of the wooden container must have been considerable for the shield being placed in vertical position inside the grave.

(101) Legoux/Périn/Vallet 2004, 14, 26, 52 (type 36). (102) Legoux/Périn/Vallet 2004, 14, 26, 52 (type 35). (103) Siegmund 1998, 102. (104) Müssemeier *et al.* 2003, 49. (105) Siegmund 1998, 102-103. (106) Müssemeier *et al.* 2003, 49. (107) Legoux/Périn/Vallet 2004, 14, 26, 52 (type 36). (108) Siegmund 1998, 102-103.

(109) Legoux/Périn/Vallet 2004, 14, 25, 52 (type 30). (110) Legoux/Périn/Vallet 2004, 14, 26, 52 (type 34). (111) Siegmund 1998, 101. (112) Müssemeier *et al.* 2003, 48. (113) Siegmund 1998, 102-103. (114) Siegmund 1998, 109. (115) Müssemeier *et al.* 2003, 52-53. (116) Legoux/Périn/Vallet 2004, 15, 29, 52 (type 80 and 85).

Fig. 4.43
Shield bosses, graves 49 and 86 (scale 1:4).



Siegmund classifies similar shield bosses as type Sbu5, which dates to Rhineland phase 8 (610-640).¹¹⁴ The Franken AG classify it as type Sbu5A (with a flat cone without knob), which dates to their phases 6-9 (580-710).¹¹⁵ Legoux, Perin and Vallet classify similar shield bosses as type 80 (LPV-MR2: 600-670), and the associated grip as type 85 (LPV-MR1: 600-640).¹¹⁶

Shield boss (86-3-1) from grave 86 is severely damaged; its original shape cannot be reconstructed (fig. 4.43). The cone of the shield boss is gone for its greatest part. The rim, on which two (iron, flat rivets) of the possible six iron rivets are preserved, has a width of 2.4 cm. This rim is not horizontal, but slightly oblique. The wall is also slightly oblique and has a height of 2.2 cm. The transition from wall to the cone is pronounced, but the top of the cone is gone and could not be reconstructed. The height of the complete boss cannot be established, the diameter of the complete boss is 16.3 cm. Eight additional fragments, four fragments of the grip and four rivets (86-3-2 (4x)) with a diameter of 2.5-2.6 cm, are associated with the incomplete shield boss. The shield boss had thus at least six, and maybe more, rivets attaching the boss to the shield. The wooden shield left an imprint or shadow which exceeds the outline of the chamber; this suggests that it was placed on top of the chamber cover. Because the cone shape cannot be reconstructed, an unambiguous classification of this shield boss is not possible. It can however be compared to other shield bosses on the basis of the pronounced transition from the wall to the cone.

A shield boss without find number is known as a find from Sittard; it has a slightly oblique rim and wall. The transition from wall to cone is pronounced, and the cone is relatively high and domed. Four domed iron rivets are still present on the rim. The boss has a diameter of 16.3 cm and a height of 7.5 cm. It is classified as type Siegmund Sbu5, which dates to phase 8 (710-640)¹¹⁷ and Franken AG type Sbu5B (higher cone), which dates to their phases 6-9 (580-710).¹¹⁸

Swords

26 (26-6-1); 31 (31-2-2)

Sword 26-6-1 from grave 26 is an iron sword with a simple blade and a copper alloy pommel (fig. 4.44). Organic (wood or/and bone) remains can be observed on the grip, and one of the blade sides is nearly completely covered with wood or/and leather scabbard remains. The copper alloy pommel is small and is trapezoid shaped on a rectangular base. The blade has a length of 72.0 cm and a width of 4.5 cm, the grip has a length of 11.5 cm, and the pommel a height of 1.3 cm and a length of 3.8 cm. Some copper alloy remnants can also be observed on the sword. An ancient reopening pit or post depositional intervention disturbed a considerable part of the coffin and its content inside chamber grave 26. Nonetheless, it seems as if the sword did not move from its original location in the coffin to the right of the presumed location of the now completely decayed upper body. The sword can only be classified and dated on the basis of its pommel. The majority of swords from fifth and sixth century contexts have relatively large pommels. The Sittard pommel is small; it is similar to the trapezoid copper alloy pommels in the sword pommel classification scheme of Menghin.¹¹⁹ He mentions that pommels of this type are hollow, and placed on a rectangular basis. The examples of the trapezoid pommel type Menghin discussed generally have a length of 2.0-3.5 cm and a height of 1.0-1.8 cm. The Sittard pommel is with its length of 3.8 cm only slightly larger; this might, however, be due to its corroded condition. This type of pommel is always undecorated, and only sporadically plated with silver or tin. Menghin dates the beginning of their regular appearance somewhere in his *Zeitgruppe* C (c. 520-580), after their sporadic appearance in *Zeitgruppe* B (c. 480-520). Their most frequent manifestation is dated around 600, which is Menghin's

Fig. 4.44
Detail of the sword from
grave 26 (scale 1:1).



Zeitgruppe D. Siegmund did not introduce a new typological ordering of swords from his research area, but classified them on the basis of already existing typologies of multiple characteristic such as the variety of sword scabbard mounts. The Franken AG, however, offer an alternative classification; the Sittard sword can be classified as Franken AG type Spa7E (copper alloy, trapezoid pommel), which dates to their phases 5-6 (565-610/20). Swords with similar pommels did not appear as early in the Rhineland as they appeared elsewhere according to Menghin.¹²⁰

Iron sword 31-2-2 is severely corroded or nearly completely covered with mineralised leather or wood of presumably the scabbard; this is difficult to establish. Wood remains can be observed on the iron hilt, and there seems to be a copper alloy fragment present at its extremity which might be a small remnant of a pommel. The blade has a length of 79.6 cm, and a width of 4.9 cm. The grip has a length of 12.3 cm. The sword was found inside the coffin in a chamber grave, close to the western wall of the coffin, and thus presumably to the left of the upper body, which has completely decayed. Because of the severe corrosion or mineralised leather covering the sword and the absence or fragmented condition of the pommel, this sword cannot be dated with the available typologies.

Axes

5 (5-3-1); 20 (20-2-1); 37 (37-1-1)

Three axes were found in the Sittard cemetery. They are distinguished from francisca's on the basis of the nearly straight upper edges of their blades and the slight concave shape of the lower edges of their blades; francisca's have edges which are more curved and pronounced.¹²¹

Iron axe 5-3-1 from grave 5 has a blade with a straight to a slightly curved upper edge and a concave lower edge (fig. 4.45). The cutting edge is convex and asymmetric (the imaginary horizontal axis of the blade divides the cutting edge in unequal parts). The shaft opening is oval, in which wood remains of the shaft are preserved. It has a diameter of 3-3.5 cm, and the diameter of the wooden shaft will have been comparable. The length of the blade (of the imaginary horizontal axis) is 19.5 cm, and the length of the cutting edge is 7.5 cm. The axe belongs to the grave inventory of a man, which also consists of a lance head and various utensils. It was found outside the coffin, in the south-eastern corner of the chamber. The skeletal remains in the coffin indicate that it was a south-north orientated burial; the axe was thus deposited in the section of the chamber grave associated with the upper body or head.

Iron axe 20-2-1 has a straight upper blade edge and a concave lower blade edge (fig. 4.45). The blade has a length of 17.3 cm (the

Fig. 4.45
Axes, graves 5, 20 and 37 (scale 1:2).



imaginary horizontal middle axis of the blade), the length of the cutting edge is 6.0 cm, and the diameter of oval shaft opening, and presumably also of the former wooden shaft (of which no remains are preserved in the shaft opening), was 2.5 cm. The axe was found to the right of the preserved skull; its location of deposition is thus similar to that of the axe from grave 5.

The iron axe 37-1-1 from grave 37 has a slightly curved convex upper blade edge (fig. 4.45). The lower edge of the blade is concave, and the cutting edge convex. The imaginary horizontal axis of the blade is 20.7 cm, the cutting edge has a length of 7.4 cm, and the back a length of 5.9 cm. The shaft hole, in which some wood remains of the shaft can be observed, has a diameter of 3.8 cm as presumably the former wooden shaft also had. The axe was found in the south-eastern corner of the grave. The northern half of the grave is gone, but the remaining part of the grave seems undisturbed. The find location of the axe in this corner of the grave sug-

(117) Siegmund 1998, 109. (118) Müssemeier *et al.* 2003, 52-53. (119) Menghin 1983, 76, Liste I, 3.1-82, Karte 4. (120) Müssemeier *et al.* 2003, note 171. (121) Siegmund 1998, 106. The common morphological feature which distinguishes francisca's from axes and broad axes is the obtuse angle between the horizontal middle axis of the blade and the axis of the shaft opening. Other features of francisca's are the S-shaped upper edge of the blade and the simple curve of the lower side of the blade. These and other features on the basis of which francisca's are classified are much more descriptive and therefore quite ambiguous. See Moosbrugger-Leu, Abb. 32; Dahmlos 1977; Hübener 1980.

gests that it was deposited near the head of the deceased since the majority of the burials in the Sittard cemetery have a south-north orientation. This find location is similar to those of the other two axes in the cemetery. Other masculine objects such as a seax and fire steel are also known from this grave.

The three Sittard axes are classified as Siegmund’s type FBA 2.1, which dates to Rhineland phases 6-7 (570-610).¹²² The Franken AG maintained this type and date it to their phases 5-6 (565-610/20).¹²³ This axe can be identified as L/P/V type 4, which dates to their phases MA2-MA3 (520/30-600/10).¹²⁴

Belt pendants, purses and utensils

The belt pendants from the Sittard graves are iron and copper alloy simple rings and a number of chain links. Simple bronze and iron rings of different sizes are quite common grave finds and are known from graves of both men and women. When they are found around the location of the pelvis or upper legs, it is assumed that they served as the fasteners of purses that were hanging down from the belt, or that the rings themselves were hanging down from the waist belt with a variety of objects as knives, combs, tweezers etc. attached to them.¹²⁵ Simple rings from the graves are of men are often identified as horse gear fittings. Various utensils, from knives to fire steel might have been attached to the waist belt or kept in a purse.

Simple rings, iron and copper alloy

11 (11-7-2); 59 (59-1-1); 87 (87-4-1.1; 87-4-1.2; 87-4-1.3; 87-4-1.4; 87-4-1.5; 87-4-1.6)

Corrosion attached the fragments of two iron rings from grave 11. Some additional, but indeterminate, material is also attached to the rings, as is a fragment of twisted iron wire. Both the ring fragments have a hollow circular section, which might be a result of corrosion. It was not possible to reconstruct their original diameter. The fragments were found in the mid western section of the grave. They were thus presumably deposited near the left upper leg of the now completely decomposed body. This is the position where belt appendages are generally found. The two rings belonged to the grave goods assemblage of a woman (identified on the basis of beads). The simple iron ring from grave 59 has a diameter of 2.5 cm. It was found in the middle of the grave, close to the eastern wall, which indicates that it was deposited to the right of the body, approximately at the height of the waist or upper leg. The beads in the southern part of the grave indicate that the grave was S-N oriented and identify it as the grave a woman.

A corroded ensemble of four simple iron rings, one copper alloy ring and a ring rod with loop were found in grave 87. The single copper alloy ring in this ensemble (87-4-1.1) is fragmented but a diameter of 2.5 cm can be established. This ring is attached to iron ring 87-4-1.2. This ring is rather thick and has a diameter

of 2.4 cm. This ring was also attached to iron rings 87-4-1.3 (diameter 2.4 cm), and 87-4-1.4 (fragment). It is not clear in which way simple iron ring 87-4-1.6 (diameter 1.8 cm) was attached to the rest. Loop 87-4-1.5 is the head of an iron ring rod; it is however not obvious which ring was attached to the ring rod. The ensemble was found in the northern half of the grave. In this section a copper alloy bracelet was also found, as was a small plate buckle. The north-eastern corner of the grave was obviously disturbed, but the rest of the grave might have also been disrupted since the mentioned objects seem to have moved from their original position. The grave is identified as the burial of a woman on the basis of the bracelet alone, which is in accordance with the general observation that girdle hangers are predominantly restricted to the burials of women.¹²⁶

Siegmund classifies small iron rings, similar to the ones from Sittard, as girdle hangers but does not date them to a specific phase, and neither do the Franken AG. Legoux, Périn, and Vallet classify simple iron rings as girdle hangers and date them to their phases MA2-MR1 (520/30-630/40).¹²⁷ The simple copper alloy rings are not classified or dated in the mentioned typo-chronology schemes.

Ring: iron

The iron fragment 77-4-1 from grave 77 is probably of a ring. It is not known whether it was a closed ring since the majority of this object is gone, but its rectangular section could be discerned. It was found in the north-western section of the grave, and was thus deposited near the presumed former location of the lower left leg. It might have been the fastener of a purse or a ring hanging down from the belt. A ring with rectangular sections at its extremities was found in grave 311 in the cemetery of Goudelancourt-lès-Pierrepont.¹²⁸ It is identified as a bracelet from the grave of a woman. The fragment from Sittard grave 77 was however found in the grave of a man (identified on the basis of a lance head); the identification of this fragment remains obscure. The ring from Goudelancourt is dated to MR1 (600/10-630/40).

Chain links

43 (43-0-3.2)

An ensemble of corroded objects from grave 43 consists of a number of iron chain links (next to a fragment of an equal armed brooch and a coin pendant). The iron links are considerably corroded and are only vaguely visible; their exact number cannot be determined. The ensemble was one of the finds discovered to the left of the former location of the body, although its exact position cannot be determined since the find numbers of the different finds were not administrated on the field drawing. The chain links, and the other objects in the corroded ensemble, were in all probability hanging down from the waist belt when deposited in the grave. The beads from this grave indicate that it was the burial of a woman.

Siegmund dates chain elements (Ggh6) to Rhineland phase 8 (610-640).¹²⁹ The Franken AG date chain links to their phases 6-8

(580/90-670/80).¹³⁰ Legoux, Périn and Vallet classify various sorts of chain links as one type and date them to their phases MR2-MR3 (630/40-700/10).¹³¹

Foldable knife

Find number: 53 (53-1-1)

Of all the iron knives from Sittard only one is a foldable knife, the others are common knives. The remainder of this knife is a rectangle strip, with a length of 15.5 cm, a width of 2.8 cm and a back width of 0.5 cm. The blade is stuck in the case, due to corrosion. It is the only find uncovered from this grave and it was found in the middle section of the grave, at the presumed location the waist of the now completely perished body; it might have been attached to the waist belt. Foldable knives are the only knife forms which can be dated to a restricted period. Siegmund classifies foldable knives as type S-Ger1.3 which dates to Rhineland phases 9-11 (640-740).¹³² The Franken AG maintained this type and date it to their phases 8-10 (640-750).¹³³

Knives

Find numbers: 3 (3-1-1); 5 (5-6-1); 14 (14-4-2; 14-3-); 20 (20-3-4; 20-3-5); 26 (26-1-1); 29 (29-2-2); 30 (30-3-5); 31 (31-1-2); 32 (32-3-1); 35 (35-1-1); 37 (37-2-7); 41 (41-2-1); 57 (57-1-1); 76 (76-5-2); 84 (84-1-10); 86 (86-4-5; 86-5-2)

The other 17 knives from Sittard are all common knives. The shape of their blades varies from those with straight backs to those with curved backs. Some of the knives have wood remains preserved around their iron hilt cores. Knives are difficult to date precisely; they are deposited in graves throughout the Merovingian period. Only knives with an angled back can be dated but these are scarcer than knives with straight or curved backs. The majority of the Sittard knives are (nearly) complete, of some only fragments were discovered.

The hilt and small part of the tip of the small iron knife (3-1-1) from grave 3 are gone. The blade of the knife has a curved back and cutting edge; the tip is approximately in line with the imaginary horizontal axis of the blade. The blade has a length of 8.0 cm and a width of 1.9 cm, the hilt has a length of 4.3 cm; it is the smallest knife of the Sittard collection. Grave 3 has an N-S orientation (deviant from the common S-N orientation in Sittard). The knife was found in the western middle section of the grave (to the right of the waist of the decomposed body). The burial can be identified as that of a woman, although only on the basis of a spindle whorl.

The iron knife (5-6-1) from grave 5 has a curved back side and cutting edge. The length of the blade is 8.6 cm. It was deposited along the left side of the upper body, together with a pair of shears, a fire steel, flint, an awl and iron strips of probably a wooden box.

The knife and other objects might have been the contents of the wooden box.

Two iron knives were found in grave 14. Knife 14-4-2 was attached to the tip of the seax from this grave. Half of the blade is gone; the remaining length is 6.3 cm. The hilt, with wood remains, has a length of 4.0 cm. The knife was probably carried in a small scabbard that was attached to the seax scabbard, which both, however, left no traces. The ensemble of seax and knife was found in the middle section of the grave and thus, considering the location of the skull in the southern part of the grave, at the initial location of the breast/waist of the now nearly completely decomposed body. The other knife (14-3-2) was found in the proximity of the seax and attached knife. This knife has a blade length of 11.6 cm and a hilt length of 6.7 cm, it has a nearly straight back (only slightly curved towards the tip), and the hilt is bent. Knife 14-3-2 seems to have been the larger than the other knife from this grave.

Two iron knives are known from grave 20. Knife 20-3-4 has a blade length of 12.9 cm and a hilt length of 7.3 cm, the back of the knife is slightly curved, and some wood is preserve around the hilt. Knife 20-3-5 is not complete; the majority of the blade is gone. The remaining length of the blade is 3.3 cm and the hilt length is 3.3 cm. The two knives were found in association with a seax in the middle section of the southern half of the grave. Since a skull was found in the southern end of the grave, the ensemble of seax with knives can be supposed to have been deposited on the breast of the now decomposed body.

Iron knife 26-1-1 from grave 26 has a blade length of 14.2 cm and a hilt length of 2.3 cm. The back of this knife is slightly curved. It was found in the north-eastern corner of the grave. The grave was disturbed by a reopening pit; the knife might have moved from its original location and was thus not necessarily deposited in the proximity of the right foot where it was found.

Only a fragment (5.1 cm) of the blade is left of iron knife 29-2-2 from find context 29 (ensemble of object without grave context). Some leather and textile remains are still attached to this fragment. It was found in association with a lance head, flint, belt fittings and a ceramic pot, but a grave structure was not observed.

The knife from grave 30 (30-3-5) is, apart from a small fragment of the tip, complete. The knife has a blade length of 11.5 cm, a hilt length of 5.8 cm, and a curved back and cutting edge. It has two grooves at one side of the blade, which resemble the grooves known from seax blades. The knife was found in association with a lance head in the south-western part of the grave, and was thus deposited, in view of the remains of the arms in this section of the grave, to the left of the upper body.

Iron knife 31-1-2 from grave 31 is one of the largest knives of the cemetery: it has a blade length of 11.5 cm and a hilt length of 5.9 cm. The knife has a curved back, and the tip of the blade is just

(122) Siegmund 1998, 107. (123) Müssemeier *et al.* 2003, 51. (124) Legoux/Périn/Vallet 2004, 14, 23, 52 (type 4). (125) Pescheck 1996, 42-44. (126) Siegmund 1998, 81-83. (127) Legoux/Périn/Vallet 2004, type 357, 19, 41, 54. (128) Nice 2008, 141. (129) Siegmund 1998, 83. (130) Müssemeier *et al.* 2003, 40-41. (131) Legoux/Périn/Vallet 2004, 19, 41, 54 (type 356). (132) Siegmund 1998, 112-113. (133) Müssemeier *et al.* 2003, 54.

beneath the imaginary middle axis of the blade. Some organic remains were still attached to one of the blade sides. The knife was found in association with a seax and belt fittings in the south western section of the grave. Skeletal remains are absent. In view of the common south-north orientations of the Sittard graves, the ensemble of seax, belt fittings and knife was deposited to the left of the upper part of the now completely decomposed body.

Knife 32-3-1 from grave 32 has a blade length of 11.7 cm and a hilt length of 6.7 cm. The back is slightly curved towards the blade tip. The knife was part of a woman's grave inventory, identified as such on the basis of multiple beads. It was found in the north-western section of the grave, probably near the left upper leg of the now decomposed body (considering that the grave has an S-N orientation in line with the majority of the Sittard burials). The knife was probably attached to a strap, or the content of a purse, hanging down from the waist belt.

A number of iron fragments (35-1-1) from grave 35 might have been of a knife. The blade length could not be reconstructed. The fragments were found in the middle of the grave, together with a flat black stone. The grave was only slightly disturbed by a recent trench; the iron fragments and stone do not seem to have moved from their original location. They might have been deposited in a purse attached to the waist belt.

The remaining blade length of knife 37-2-7 is 6.0 cm and the hilt length is 3.2 cm. It was found in the grave of a man, in association with a number of other utensils and belt fittings in the southern half of the grave. The northern half of the grave is gone: other objects might have been present in the grave.

The iron knife from grave 41 was found attached to iron shears and an iron buckle loop in the middle section of the grave (at the location of the waist of the now completely decomposed body). The objects were probably deposited together in a purse after which post-depositional corrosion had an effect on the distinct objects. The blade has a length of 11.7 cm, and the hilt a length of 2.8 cm.

Iron knife 57-1-1 from grave 57 is not complete; a significant part of the blade is gone and the remainder of the knife is considerably corroded. The remnant of the blade measures 2.9 cm, the complete hilt has a length of 6.4 cm. The iron band, originally wrapped around the base of the blade, is still attached to the knife. It is the only find from this grave and it was found in the south-western section of the grave (and thus probably alongside the left upper side of the now completely decomposed body).

A fragment of a knife (76-5-2) with corroded leather remains attached to it was found in association with a latch lifter key in the western middle section of grave 76; it was thus deposited to the left of the waist of the now completely decayed body. The knife and key might have been carried in the purse, of which a small strap end was found close to these two objects. The burial is identified as that of a woman on the basis of a finger ring.

Iron knife 84-1-10 from grave 84 has a blade length of 9.8 cm and a hilt length of 4.2 cm. The eastern half of this grave is gone. The knife was found in association with a seax with leather scab-

bard remains and metal fittings and some belt fittings, alongside the western wall of the grave.

Knife 86-5-2 from grave 86 was found attached to the seax from this grave. It was probably carried in a little leather scabbard fixed to the leather scabbard of the seax; remains of both the scabbards are absent. The knife has a blade length of 10.4 cm, and its hilt has a length of 4.0 cm. The ensemble of seax and knife, which identify the burial as that of a man, was found alongside the left side of the skeletal remains of the upper body, thus inside the coffin in this chamber grave. The other iron knife from this grave (86-4-5) has a blade length of 8.2 cm and a hilt length of 3.5 cm. It was found inside the coffin, on top of the pelvis, together with belt fittings and an iron awl. The knife and awl might have been attached to the waist belt with an additional leather strap or deposited in a purse.

The two indeterminate iron fragments 87-3-1 and 87-6-1 might be parts of knives, but this is certainly not a decisive identification. The fragments belong to a grave inventory of a woman (identified on the basis of a ring and a coin pendant). All the objects from this grave were found in its northern section, but this might be a result of an ancient disturbance of the grave. Fragment 87-3-1 is not cleaned or restored. Rectangular fragment 87-6-1 has a length of 5.5 cm and a width of 1.9 cm. It is also considerably corroded, and neither cleaned or restored.

Shears

Find numbers: 5 (5-6-4; 5-6-5); 37 (37-2-6.1; 37-2-6.2?); 38 (38-3-1); 41 (41-2-2)

The arms of the pair of shears (5-6-4; 5-6-5) from grave 5 were found detached from one another. Moreover, the pair of shears is not complete: the top bow is gone and the upper part of one of the blades is also gone. The length of the complete blade is 7.6 cm. The shears belong to the grave inventory of a man, identified on the basis of a lance head and an axe deposited in the north-eastern section of the chamber, outside the coffin. An ensemble of utensils, among which the shears, was buried inside the coffin as the contents of a wooden box to the left of the upper body.

The complete pair of iron shears (37-6-6.1) from grave 37 has a total length of 16.5 cm. It has a blade (37-6-6.2) of presumable another pair of shears attached to it. This blade is identified as part of a pair of shears since the transition from the blade to hilt is similar to those of complete shears and different from those of knives. A fragment of an iron plate (indeterminate) was attached to the other side.

The complete pair of shears (38-3-1) from grave 38 has a total length of 18.5 cm. It was found in the grave of a man, identified on the basis of two arrow heads, to the right of the presumed initial location of the head (the majority of the Sittard graves have a south-north orientation). Since the grave is not disturbed this find location might indicate that the body was buried with the head to the north: in that case the shears were deposited near the left foot. Since the middle or lower parts of the body are the 'usual' find location of shears, this might be a plausible suggestion.

The blades of the pair of iron shears (41-2-2) from grave 41 are still attached to each other despite the loss of the bow which connected them. The shears remains are part of an assembly of objects, connected through corrosion, which consists furthermore of a knife and buckle loop. The objects are heavily restored and completed, and it seems as if significant parts do not resemble the original. In view of this remark it is also possible to identify the half 'buckle loop' as the loop of the shears, which however remains speculative for now. The shears are part of a grave inventory of a man, identified as such on the basis of a seax. It was found in the middle section of the grave, and thus close to the former location of the waist of the now completely decayed body. The ensemble was probably attached to the waist belt, maybe as the contents of a purse.

Siegmund mentions that no clear correlation can be found between shears and gender identity in the Rhineland, although the number of shears associated with men is slightly higher.¹³⁴ Shears with a length of more than 20 cm, however, were in the Rhineland only found in the graves of men, smaller shears were found in the graves of both men and women. Siegmund does not date shears to a specific phase. The Franken AG did not identify this category of grave goods. Legoux, Périn and Vallet classify shears as type 355 and date them to their phases MA1-MR3 (470/80-700/10), which cover nearly the entire Merovingian period.¹³⁵

Latch lifter key

Find number: 76 (76-5-1)

The single latch lifter key from the Sittard cemetery was found in grave 76. It is an iron rod, heavily restored, with a single hooked extremity. The head is formed by a loop with a fragment of a suspension ring still attached to it. The latch lifter key has a length of 10.8 cm. The key was found together with a knife in the western middle section of the grave, thus probably to the left of the waist or left upper leg of the now completely decomposed body.

Martin suggests that these (iron) keys were not used for doors but for little wooden boxes in which a woman retained her personal possessions.¹³⁶ Pescheck also refers to these objects as keys of wooden boxes in which toilet utensils were kept.¹³⁷ The iron key from the cemetery of Kleinlangheim was found in a grave of a woman which dates to AM III (560/70-600). Koch identified similar objects from the cemetery of Pleidelsheim as hooked key's and part of decorative pendants, regularly worn in combination with two bow brooches and characteristic for the clothing of a woman.¹³⁸ The paired keys, found in graves 9 and 89 of Pleidelsheim, were kept together by a ring attached to the loops which form the upper extremities (heads) of the rods. In both these graves an additional leather strap with small belt fittings were found: they were probably part of the complete ensemble of decorative pendants and amulets. The two Pleidelsheim graves date to SD phases

5 (530-555).¹³⁹ In view of the looped head of the Sittard key and the suspension ring still attached to it, it can be assumed that it was also originally hanging down from the belt, probably together with the knife. Bow brooches, as in the Pleidelsheim graves, were however not found in Sittard grave 76, and this ensemble was thus less 'decorative' than the Pleidelsheim examples. Siegmund did not identify latch-lifter keys, nor did the Franken AG. Legoux, Périn and Vallet classify all the iron latch-lifter keys as type 351 and date them to their phases MA1-MA3 (470/80-600/10), although this is mentioned to be based on a small number of examples from their research area.¹⁴⁰ It seems plausible to date the latch lifter key after Koch to the second quarter of the sixth century.

Awls, iron

Find numbers: 5 (5-6-8); 86 (86-4-1)

The two iron rods from grave 5 and 86 are identified as awls on the basis of their pointed extremities and round shaft sections. The iron awl from grave 5 (5-6-8) has a length of 8.5 cm, its section has a diameter of 0.6 cm. It was found in the grave of a man together with other utensils as shears and a knife, to the left of the left upper arm. The ensemble of objects was probably deposited in a purse or box.

The iron awl from grave 86 (86-4-1) has a round section and its head is gone; it might thus also be an iron ring rod (see below). Its remaining length is 9.1 cm and its section has a diameter of 0.7 cm. This object was found in the grave of a man, on the pelvis of the nearly completely preserved skeleton (in a poor condition) together with a set of belt fittings. Awls cannot be dated precisely in the Merovingian period.

Ring rod, iron

Find numbers: 11 (11-7-4.4); 77 (77-2-1); 84 (84-1-6)

The fragment of a rod with incomplete ring from grave 11 is identified as the remainders of an iron ring rod (fig. 4.46). It was attached

Fig. 4.46
Comb with case, copper alloy strap end, iron loop and iron ring rod, grave 11 (scale 1:2).



(134) Siegmund 1998, 117. (135) Legoux/Périn/Vallet 2004, 19, 41, 54 (type 355). (136) Martin 1976, 89, 261-269. (137) Pescheck 1996, 46, Taf. 77,10. (138) Koch 2001, 204-205. (139) Koch 2001, 204-205, 228-232.

to an ensemble consisting of the remains of a comb with case, copper alloy strap end and iron loop. This ensemble was found in the grave of a woman, in the southern section of the grave, supposedly near the head. The remainder of the iron ring rod has a length of 4.5 cm and the ring has a width of 2.3 cm.

Iron ring rod 77-2-1 from grave 77 has a length of 15.5 cm. The top is bent and forms a loop, the extremity is pointed. The complete iron rod is restored. The ring rod was found in the south-western section of the grave. The body left no traces but, in view of the general S-N orientation of the Sittard graves, it can be assumed that the ring rod was deposited to left of the upper body. It belongs to a grave inventory of a man, identified as such on the basis of a lance head.

The iron rod 84-1-6 from grave 84 is incomplete. The tip is gone and its remaining length is 8.7 cm. The top is hollow and bent in way that a loop is formed. The rod with loop was found in association with a seax, and is thus part of a masculine grave goods ensemble. The grave is disturbed, but the seax and associated objects seem to be at their original position to the left side of the upper body.

Iron rings rod cannot be dated precisely in the Merovingian period.

Comb with case

Find number: 11 (11-7-4)

The only comb of the cemetery was found in grave 11 (fig. 4.46). It is a double-sided composite comb in a case, which is severely weathered and incomplete. Fragments of the case are still present on the comb and decoration traces can be observed on its surface. The decoration consists of an engraved or stamped in geometric pattern of dots-in-circles of various dimensions in between zones of four grooves along the edges of the connection plate of the case. The comb with case was attached to other objects, namely a copper alloy strap end and a fragment of an iron ring rod, which probably formed the contents of a purse. The copper alloy strap end was one of the fittings of a purse, together with another similar strap end and a plate buckle, which were not attached to this ensemble (see below).

Siegmund classifies combs with cases as type Ger3.23 and dates them to phase 4-7 (530-610).¹⁴¹ The Franken AG maintained this type but mention that it cannot be dated that precisely.¹⁴² Legoux, Périn and Vallet do not make a distinction between double-sided combs with or without case and classify both as type 324, which dates to their phases MA1-MR1 (470/80-700/10) or even later.¹⁴³

Dijkman and Eryvnc concentrate on the decoration patterns as chronological indicators. They observed that cases always show more decoration than the combs and argue that the more complicated decoration patterns are characteristic for the sixth century.¹⁴⁴ It can be argued that the double-sided comb with case from grave 11 dates to the sixth century.

Spindle whorls/large bead pendants

Find numbers: 4 (4-1-1); 17 (17-2-1); 80 (80-2-1)

Spindle whorl 4-1-1 from grave 4 is a ceramic, asymmetric biconical specimen. It is considerably worn and dark, and has a diameter of 3.1 cm and a height of 2.0 cm. The spindle whorl is the only find from this disturbed grave. It was recorded in approximately the middle section of the grave and might have been attached to the waist belt. It cannot be determined whether it was the grave of a woman or man.

The large symmetric biconical bead from grave 17 has a diameter of 2.8 cm and a height of 2.0 cm. The surface of the bead has a craquelé structure, which indicates that it may be of another material than pottery; amber is a plausible option. The large bead was found in the southern middle section of the grave, thus near the head of the now completely decomposed body (the majority of the Sittard graves have a south-north orientation). No other finds, apart from an indeterminate copper alloy fragment, are known from this grave, which makes it difficult to identify the large bead either as spindle whorl, sword bead or pendant. In view of the find location its identification as necklace pendant seems likely, although it might also be a spindle whorl.

The ceramic symmetric spindle whorl 80-2-1 from grave 80 is dark, and thus baked in a reduced atmosphere. It has a diameter of 3.4 cm and a height of 2 cm. It was found in the north-eastern section of the chamber grave, outside the coffin. The burial is identified as that of a woman on the basis of multiple beads at the location of the neck of the completely decayed body (considering the general south-north orientation of the Sittard graves). This indicates that the spindle whorl was, although deposited outside the coffin, placed in the grave section associated with the lower body or feet.

Legoux, Périn and Vallet classified spindle whorls of baked clay as type 347 and date them to their phases MA1-MR1 (470/80-630/40).¹⁴⁵ Both Siegmund and the Franken AG do not classify spindle whorls of baked clay.

Fire steels

Find numbers: 5 (5-6-7); 31 (31-3-1); 37 (37-2-5)

Three iron fire steels were found in the Sittard cemetery. Fire steels are generally associated with the burials of men and often found at locations in the graves associated with purses.

Iron fire steel 5-6-7 from grave 5 is not complete; nearly one half is gone. The shape of the fire steel can nonetheless be reconstructed: it is triangular with upward curved extremities. The length of the exact half of the fire steel is 4.4 cm: the reconstructed length of the complete fire steel is thus 8.8 cm. It was found in association with shears, an awl, a flint, a knife, and with some irons mounts which are probably the mounts of a wooden box. This indicates that the ensemble of utensils was deposited as the contents of a wooden box, deposited to the left of the upper body (of which the skeletal remains are preserved and at their original position).

Iron fire steel 31-3-1 from grave 31 is complete. It has a length of 10.3 cm and is thus slightly larger than the fire steel from grave 5. It is a triangular specimen of which the extremities are curved upwards. The extremities are only slightly more pronounced than those of the fire steel from grave 5. An iron fragment, which seems to be a rivet, is corroded and attached to the surface of the fire steel. It was found in association with various belt fittings to the right of the upper body. The seax from this grave confirms that the fire steel was part of a grave goods assemblage of a man.

Iron fire steel 37-2-5 from grave 7 has looped extremities, and is only slightly triangular. It has a length of 7.9 cm and a width of 1.6 cm. It was found in approximately the middle of the grave (of which the northern half is gone), together with a knife, shears, and a set of belt fittings. It was probably deposited in a purse, together with the other utensils.

Firs steels are difficult to date precisely; they were used as grave goods throughout the Merovingian period.

Flint

Find numbers: 5 (5-6-9.1; 5-6-9.2); 29 (29-4-1); 40 (40-2-1); 48 (48-2-1.1; 48-2-1.2); 63 grave reopening pit (63-1-1); 84 (84-1-7)

Nine flints were found in the Sittard graves of which pairs were found in two graves (grave 5 and 48). Flints are usually associated with fire steels; they form a set that enables the creation of sparkles and thus fire. Flints can be reused prehistoric implements, or they can have been created in the early medieval period. It seems as if the flints from the Sittard graves are all early medieval specimens. The two flints (5-6-9.1; 5-6-9.2) from grave 5 have a length of 4.0 cm and 2.5 cm. They belong to the grave inventory of a man and were found in association with a number of utensils, among which a fire steel, near the left upper body, probably as the contents of a wooden box.

Flint 29-4-1, from possible grave29, was not indicated on the field drawing but is ascribed to this ensemble of finds without grave context on the basis of the find number recorded on it. The find assemblage to which it belonged is clearly masculine, but a fire steel was not part of this ensemble. The flint has a length of 3.7 cm.

Flint 40-2-1 from grave 40 has a length of 5.3 cm. It is the single find from the coffin placed in this chamber grave. It was found in the western middle section of the grave, and was thus probably deposited to the left of the waist of the now completely decomposed body. A lance was found in the north-eastern section of the chamber: the burial can be identified as that of man.

Two flints (48-2-1.1; 48-2-1.2) are known from grave 48; they have a length of 2.5 and 2.9 cm. The grave inventory, except for the flints, is not exclusively masculine or feminine, and the flints are

thus not associated with a fire steel. The flints were found in the north-eastern section of the grave, probably near the upper right leg of the now nearly completely decayed body. This indicates that the flints could have been the contents of a purse, attached to the waist belt.

Flint 63-1-1 from grave 63 has a length of 6.3 cm. It was found outside the coffin, in the south-eastern section of the burial pit. Other finds are not known from this grave, of which the north-western corner is disturbed.

Single flint 84-1-7 from grave 84 was not indicated on the field drawing, but could be assigned to this grave on the basis of the find number recorded on it. It can be associated with a seax and belt fittings, which were found in the western middle section of the grave, of which the eastern half is gone. A fire steel is not known from this disturbed grave.

Iron loop

Find number: 11 (11-7-4.3)

An iron loop was found attached to an ensemble consisting of a comb with case, copper alloy strap end and iron ring rod (fig. 4.46). It was found to the left of the upper left leg in the grave of a woman. Its function is not clear, and it cannot be dated more precisely as to the entire Merovingian period.

Stones

11 (11-5-1); 35 (35-1-2); 44 (44-2-1)

An egg-shaped stone, grey, smoothly polished, was found in grave 11 of a woman, in the southern section of the grave near the initial location of the head. It was found in association with a small beaker, a glass fragment, half a melon bead and a fragment of an iron plate. It seems as if these objects were guarded and deposited in the small beaker. The objects may have rolled out of it by accident or on purpose, and moved a little away from it. It is not clear what the polished stone represented, and how it should be dated. The other finds associated with the beaker, as the beaker itself, date to the Roman period.

A flat black stone (35-1-2), with iron corrosion at one side, was found in the middle of grave 35. A recent disturbance intersects the grave; other finds apart from the stone and an indeterminate iron fragment might have been present. The remaining finds are insufficient for a gender identification of the deceased.

A grinding stone was found in grave 44, alongside the middle of the eastern container. It was found in the grave of a woman (identified as such on the basis of beads), and might have been the content of a purse.

(140) Legoux/Périn/Vallet 2004, 11, 19, 41 (type 351). (141) Siegmund 1998, 116. (142) Müssemeier *et al.* 2003, 55. (143) Legoux/Périn/Vallet 2004, 19, 39, 54 (type 324). (144) Dijkman/Eryvnc 1998. (145) Legoux/Périn/Vallet 2004, 19, 40, 54 (type 347).

Pottery: Merovingian

The condition of the pottery from the cemetery Sittard-Kemperkoul is relatively bad; nearly all the pots were found in fragmented condition. This is peculiar since pots from Merovingian graves are regularly excavated as complete or nearly complete specimens. The fragmented condition of the Sittard pots may be a result of the general use of coffins and/or chambers in this cemetery: after their disintegration, de pots (which might have been placed on the floor of the chamber, on top of the coffin cover, or inside the coffin) may have suffered from increasing pressure of intrusive soil which broke them. This does not happen when pots are placed in trench graves, which are filled with soil immediately after the burial or when coffins after burial were filled to some extent by seeping in water and soil which fixed the finds, as was observed in other cemeteries. Since the shards of single pots were regularly found in close association, as a heap of fragments, this seems a plausible explanation, but the fragmented condition of some pots may also have been caused by early grave re-opening (see chapter 3 for a discussion of re-opened graves) or they might have been deposited already in fragmented condition. Nearly all the fragmented pots were restored and completed. The current collection of pottery vessels from Sittard consists of twenty-one biconical pots, seven spouted pots, two jugs, two bowls, one beaker, one bottle, one egg shaped pot, one pot with a peculiar shape, a lid of a pot, and a number of fragments.

Fine pottery: bottle, orange

Find number: 39 (39-1-1)

The single bottle from the Sittard cemetery is of a fine burnished ware and was baked in an oxidised atmosphere: it is a bright orange bottle (fig. 4.47). The bottle was found in fragmented condition but is now restored. It seems as if its asymmetric appearance was an original feature: the widest part of the belly is at one side of the body considerable higher than at the other side. This points to a relatively less professional potter. The maximum height of the bottle is 24.0 cm and the belly diameter is approximately 17.1 cm. It cannot be concluded whether the largest diameter of the bottle was intended to be at the middle of the belly. The bottle has a straight bottom and the straight neck, with a simple outward bent rim, is relatively short compared to the body. The bottle was found with a knife in a rather small grave: it was in all probability the burial of a child. The bottle was found in the eastern middle part of the recorded outline.

Ceramic bottles are not often found in Merovingian graves but are neither extremely rare.¹⁴⁶ Not many are known from the surroundings of Sittard. One orange bottle was found in the cemetery

Fig. 4.47
Orange bottle, grave 39
(scale 1:4).



of Obbicht-Oude Molen (see the following section in this chapter), which shape is however rather different from the Sittard bottle. In the large ‘urban’ cemeteries of Maastricht, ceramic bottles are absent. The Sittard bottle resembles the bottle from Bergeijk-Fazantlaan grave 53¹⁴⁷, although the Bergeijk bottle is of a better quality, is not as asymmetric as the Sittard bottle and has grooves applied on its shoulder. The Bergeijk bottle is part of a combined vessel deposition, consisting of a beaker, coarse ware pot, biconical pot and palm cup (glass), whereas the bottle from Sittard is a single vessel deposition.

Koch provided an overview of ceramic bottle forms and mentions that they are difficult to date precisely; they can appear in the course of the sixth century but are mainly finds of the later Merovingian period.¹⁴⁸ The Sittard bottle can best be compared with Koch’s form D: the necks of these bottles are relatively short, the transition from body to neck is smooth, and their rims are bent outwards. Bottle form D was discovered in Pleidelsheim grave 174, a grave of a child, which is dated to SD phase 9 (620-650).¹⁴⁹ This is noteworthy since the resembling bottle from Sittard is also associated with a (possible) child’s burial. Other examples of this type (eight mentioned by Koch) know a rather extended distribution pattern: from Tournai to a number of find locations along the Rhine and two locations east of the middle Rhine area.¹⁵⁰

Siegmund mentions that Merovingian bottles can occur in the sixth century but that they generally date to the seventh century.

He proposed a classification of bottles on the basis of the neck/ bottom index and the shape of the body. This index is 0.50 for the Sittard specimen, what makes it a bottle with a narrow neck. Because of its globular body and straight bottom it can be classified as type Siegmund Fla1.1, which dates to Rhineland phase 8 (610-640). The Franken AG maintained Siegmund’s type, but state that the variation within this typological group is rather large. They date S-Fla1.1 to their phases 5-7 (565-640/50), thus to a date range which starts earlier. Following Koch and Siegmund, the Sittard bottle is dated to the first half of the seventh century.

Fine pottery: beakers, grey

49 (49-1-1); 3 (3-2-1)

The small dark grey-brown beaker from grave 49 was found in fragmented condition but is now restored (fig. 4.48). The original surface of the beaker is considerably weathered and shows the orange paste underneath, which indicates that it has a smoked surface. The beaker has a height of 9.9 cm and a belly width of 8.3 cm. It was found in the grave of a man (identified on the basis of a shield boss and lance head) in the north-eastern section of the grave, and thus near the presumed location of the right foot of the now completely decomposed body, in close association with a spouted pot. This beaker is difficult to classify since similar specimens were not found in the literature on other cemeteries; for now it is very roughly dated to the seventh century in line with other beakers known from Merovingian contexts.

Beaker 3-2-1 from grave 3 is a small dark grey beaker on a foot with a conical body with two horizontal ridges on the upper wall; it is a so-called ribbed beaker (fig. 4.48). The surface of the beaker is considerably weathered and the orange/red paste underneath the darker surface is visible. The beaker was baked in an oxidised

Fig. 4.48
Grey beakers, graves 3 and 49 (scale 1:4).



Fig. 4.49
Orange dishes/bowls, graves 81 and 82 (scale 1:4).



atmosphere with abundant smoke which left a thin dark top layer. It has a height of 10.9 cm and some rim fragments are missing. The beaker was found together with a spouted pot in the north-eastern section of the grave, thus near the presumed former location of the feet. Similar beakers are not identified in the research area of Siegmund and the Franken AG. Legoux, Perin and Vallet classify them as type 398 which dates to their phases MR1-MR2 (600/10-660/670).¹⁵¹

Fine pottery: dishes/bowls, orange

81 (81-2-1); 82 (82-2-2)

Bowl 81-2-1 from grave 81 was found in fragmented condition but is now restored; approximately 60% of the original bowl is present (fig. 4.49). The bowl is wheel thrown; it is of a fine burnished ware and baked in an oxidised atmosphere which produced an orange/brown surface (the completed parts of the bowl are grey). The interior surface of the bowl shows some wear traces: scratches and little cavities which were produced by pointed utensils as for example knives. The reconstructed height of the bowl is 8.5 cm, the mouth diameter 27.0 cm. The lower wall is slightly convex, the upper wall of the bowl is slightly bent outwards, and the rim is simple (not thickened) and also slightly bent outwards. The foot of the bowl is a foot stand although it tends towards a foot ring. The bowl was found in the north-eastern section of the chamber, outside the coffin and found in association with a lance head.

The bowl is classified as Siegmund’s type Sha2.21: bowls of fine burnished ware with thin rims and a foot stand. They are dated to Rhineland phase 5-8 (555-640). The Franken AG maintained this type but date it to their phases 4-7 (510/25-640/50). Classifying this bowl as Siegmund’s type Sha2.31 (bowl with stand ring) results in its dating to Rhineland phase 4 (530-555). For now it is dated to 510-650.

Only a bottom fragment is left of bowl 82-2-2 from grave 82, which is approximately 5% of the complete vessel (fig. 4.49). The bowl was baked in an oxidised atmosphere; it has an orange brown surface. The bowl is not decorated; the grooves that can be observed at the lower outer surface of the wall are production traces.

(146) Giesler 1983, 550-555; Siegmund 1998, 143-146. (147) Theuws/Van Haperen 2012, 102-103, fig. 6.35. (148) Koch 2001, 343-346. (149) Koch 2001, 346-347. (150) Koch 2001, 589, Liste 49 Keramikflaschen. (151) Legoux/Perin/Vallet 2004, 20, 46, 55.

The foot is identified as a foot stand with a diameter of 8.8 cm. The lower wall is convex. It was found in the north-eastern section of the chamber, outside the coffin. Other finds, apart from a number of shards (not of the bowl), are not known from this grave.

Foot stands are a feature of Siegmund’s bowls Shaz.2.1 and Shaz.2.2. Since type Shaz.2.2 consists only of coarse ware bowls, the bowl from grave 82 is classified as Shaz.2.1, which dates to Rhineland phases 5-8 (555-640) and phases 4-7 (510-650) of the Franken AG.

Fine pottery: biconical pots (general remarks)

5 (5-2-1); 6 (6-1-1); 9 (9-1-3); 11 (11-1-1); 13 (13-1-1); 14 (14-7-1); 28 (28-1-1); 29 (29-2-1); 30 (30-2-1); 31 (31-4-1); 32 (32-4-2); 33 (33-1-1); 34 (34-2-1); 36 (36-2-1); 47 (47-1-1); 48 (48-4-1); 50 (50-1-1); 71 (71-2-1); 80 (80-3-1); 81 (81-1-1); 88 (88-2-1)

Twenty-one biconical pots are present in the Sittard collection of pottery vessels. The majority was found in fragmented condition. Apart from pot fragments from five graves, the broken pots were restored and substantial parts were added to a number of the pots. The majority of the pots have dark (from brown to black) surfaces,

only four have an orange to red exterior. The pots with a dark exterior were not necessarily baked in a completely reduced atmosphere. The wall cores of a number of these pots were orange or much lighter than the surface. They were either baked in a mixed atmosphere or under conditions with abundant smoke which coloured the outer surface of these pots dark; they have a so called smoked surface. Of the sixteen (restored) complete pots two are without decoration and one has two ridges without additional decoration. Of the decorated pots three are decorated with grooves only, one with single stamp impressions combined with grooves, four with single-line roulette stamp impressions and five with multiple-line roulette stamp impressions.

Biconcial pots are common objects in Merovingian graves and many studies deal with this specific find group. The Sittard pots are classified and dated on the basis of the works of Siegmund and the Franken AG. Their research areas are not that far from Sittard and their typological schemes are relatively recent. Siegmund identified five basic form groups which have some chronological significance and which are further refined on the basis of specific features.¹⁵² The Franken AG modified this classification with the decoration patterns as point of departure.¹⁵³ Siegmund defined his five basic pot forms on the basis of proportional dimensions which represent a rough chronological development from open and squat to closed and elongated forms (table 4.5).¹⁵⁴

For sixteen of the twenty-one pots the basic form group could be established; for five pots this was impossible due to their incompleteness. Of these sixteen pots none were assigned to basic form group 1, the earliest form of biconical pots according to Siegmund’s classification scheme. Only two of the pots were identified as basic from group 2, and one as basic form group 3. The majority of the pots (eighth) were identified as basic from group 4, and three as basic form group 5 (table 4.6). This general development of basic form groups is refined with specific chronological features as the shape of the upper wall and decoration patterns (the chronological sequence of types).¹⁵⁵ These additional features defined four groups in addition to the basic form groups.¹⁵⁶ Especially group 2 and 3 are relevant for the Sittard cemetery (table 4.6). Group 2 is characterised by a straight upper wall, a well defined carination, the absence of ridges on the upper wall (which should not be confused with the frequent presence of ridges on the necks of the pots), and the absence of roulette stamp decorations. Group 3 is characterised by the same features, but the single stamp impressions are replaced by roulette stamp decorations and/or ridges on the upper wall. The fragmented condition of the remaining five pots made their assignment to one of Siegmund’s basic form groups impossible. They could, however, be classified on the basis of other features as is discussed below.

Fig. 4.50
Biconical pot type Siegmund Kwt2.31, grave 14
(scale 1:4).



Fig. 4.51
Biconical pot type Siegmund Kwt2.32, grave 80
(scale 1:4).



Fig. 4.52
Biconical pot type Siegmund Kwt2.33, grave 32
(scale 1:4).



Fine pottery: biconical pot of Siegmund’s type Kwt2.31
14 (14-7-1)

Biconical pot 14-7-1 from grave 14 is a bright orange pot with a light grey core (fig. 4.50). It is of a rather coarse ware but its surface is burnished. Its upper wall is decorated with shallow undulating grooves. Black stains, presumably fire (smoke) traces, can be observed on the carination. The pot has a height of 18.1 cm and a belly diameter of 23.5 cm. It is thus not only a large pot in group 2, but also one of the largest from the Sittard cemetery (table 4.6). The pot was found in the north-eastern section of the chamber (thus outside the coffin), in association with a copper alloy bowl and a lance head. The biconical pot was deposited in the grave of a man, based on the objects deposited inside the coffin. Because the pot was decorated with grooves only it is classified as Siegmund’s type Kwt2.31, which is identified as a form characteristic for Rhineland phase 5 (555-570).

Fine pottery: biconical pot of Siegmund’s type Kwt2.32
80 (80-3-1)

The grey biconical pot from grave 80 is nearly complete despite the fact that it was found in fragments (fig. 4.51). The fragments are glued together and only a few missing parts were filled up; approximately 90% of the original pot is present. The pot was baked in a reduced atmosphere what resulted in a dark coloured pot. The

upper wall is nearly completely covered with grooves. The pot has a height of 14.0 cm, what is approximately the average height of the biconical pots from Sittard. It was found in the north-eastern section of the chamber, thus outside the coffin in which a woman (identified on the basis of the beads) was buried. The pot is classified as Siegmund’s type Kwt2.32, which dates to Rhineland phases 4-5 (530-570), and as Franken AG type Kwt3A, which dates to their phases 4-5(6) (510/25-580/90(610/20)).¹⁵⁷

Fine pottery: biconical pot of type Siegmund’s type Kwt2.33
32 (32-4-2)

The biconical pot (32-4-2) from grave 32 was found in fragmented condition but is now partly restored; approximately 85% of the original pot is present (fig. 4.52). The surface of the pot is dark grey/ black, but the shards reveal a light brown core. It was thus baked in a semi reduced atmosphere with abundant smoke which caused the dark or smoked surface. This surface is now considerably weathered showing the lighter paste underneath. The decoration on the upper wall consists of two zones of four horizontal grooves. The pot has a height of 10.1 cm, which makes it one of the smaller pots from the Sittard graves. The shards were found in the middle of the northern section of the grave. The pot was deposited in between the presumed former location of the feet of the completely decomposed body. The beads from this grave indicate that it was a grave of a woman.

Table 4.5
Siegmund’s (1998) classification scheme for biconical pots.

	Belly/Height	Mouth/Belly	Basic Shape	Rhineland Phases
Basic group 1	≥ 1.27	≥ 0.85	Squat and open	3-7 (485-610)
Basic group 2	≥ 1.27	< 0.85	Squat and more closed	4-8 (530-640)
Basic group 3	<1.27 ≥1.07	≥ 0.85	Elongated and open	4-8 (530-640)
Basic group 4	<1.27 ≥1.07	< 0.85	Elongated and more closed	4-8 (530-640)
Basic group 5	< 1.07	-	Elongated	4-9 (530-670)

Table 4.6
The biconical pots from Sittard. H=Heigth, B=Belly diameter, M=Mouth diameter, BF=Basic Form, G=Group (Siegmund 1998).

Pot	H	B	M	BF	G	Type
14-7-1	18.1	23.5	15.5	2	2	Kwt 2.31
31-4-1	20.3	25.2	21.7	3	2	Kwt 2.41
80-3-1	14.0	15.7	11.3	4	2	Kwt 2.32
71-2-1	11.8	13.3	9.6	4	2	Kwt 2.42
34-2-1	16.4	19.7	13.8	4	2	Kwt 4.11/Kwt 2.12
32-4-2	10.1	9.0	5.5	5	2	Kwt 2.33
6-1-1	-	14.3	8.9	2/4	3	Kwt 3.12/3.11
50-1-1	12.0	15.3	10.0	2	3	Kwt 3.11
5-2-1	13.0	16.7	12.5	2	3	Kwt 3.22
13-1-1	10.2	12.6	8.9	4	3	Kwt 3.12
11-1-1	13.4	16.1	11.5	4	3	Kwt 3.22
81-1-1	12.6	13.7	11.1	4	3	Kwt 3.22
30-2-1	16.7	18.7	14.2	4	3	Kwt 3.22
28-1-1	11.2	11.8	8.9	5	3	Kwt 3.13
33-1-1	6.7	6.2	4.7	5	3	Kwt 3.23
47-1-1	9.9	9.4	6.6	5	3	Kwt 3.23

(152) Siegmund 1998, 121-134. (153) Müssemeier *et al.* 2003, 56-73. (154) Siegmund 1998, (155) Siegmund 1998, 120-135. (156) Siegmund 1998, 128. (157) Müssemeier *et al.* 2003, 59.

Siegmund classifies pots with similar dimensions and decoration as type Kwt3.33, which cannot be dated more precisely as to Rhineland phases 6-8 (570-640). The Franken AG classify pots with grooves as type Kwt3A (they do not distinguish between pot shapes), which dates to their phases 4 and 5 (510/25-565), which is considerably earlier than Siegmund's date range.¹⁵⁸

Fine pottery: biconical pot of Siegmund's type Kwt2.41
Find number: 31 (31-4-1)

Pot 31-4-1 is the largest biconical pot and one of the two undecorated pots from Sittard (fig. 4.53). It was found in fragmented condition (28 shards were available), but is now restored although not completed; approximately 75 % (together with the shards) of the original pot is present. It was baked in a reduced and smoked atmosphere, which resulted in the thin dark surface which is considerably weathered and shows the lighter paste underneath. Some of the shards were found inside the recorded outline of the coffin, and some outside this outline, and thus in the chamber. Other objects were not recorded in the chamber, but the contents of the coffin in the chamber are characteristic for graves of men. The shards were found at a higher level than the recorded coffin imprint. The pot was thus placed on top of it and it seems as if it was deposited already in fragmented condition (remnants of ritual feasting?). The pot or shards were placed in the north-eastern section of the grave and were thus associated with the section of the presumed former location of the feet. Its metric features and the absence of decoration on the pot classifies it as Siegmund's type Kwt2.41, which dates to Rhineland phase 4 (530-555)¹⁵⁹, and as Franken AG type Kwt4A, which dates to their phases 4-7 (510/25-640/50).¹⁶⁰ Both dates differ considerably. The pot may, according to the metric cri-



teria of Siegmund, also be a ground form 4, which makes it a pot of type Kwt.2.42 (Rhineland phase 7: 585-610). The grave is dated to 610/20-640/50, mainly on the basis of the belt fittings.

Fine pottery: biconical pot of Siegmund's type Kwt2.42
Find number: 71 (71-2-1)

The biconical pot from grave 71 was found in a nearly complete condition, some rim parts are completed, originally approximately 90% of the original pot is present. It is without decoration, and belongs, with its height of 11.8 cm, to the group of Sittard pots with average heights (fig. 4.54). The pot has a dark grey to brown exterior. Especially the upper part of the pot is weathered and is browner than the grey lower part of the pot, which shows the orange paste underneath. The pot was thus baked in an oxidised atmosphere with abundant smoke which caused its original darker coloured surface which can be observed at the lower part of the pot. The pot was found outside the coffin, but close to the right foot, in a chamber grave of a woman (identified on the basis of beads). It is classified as Siegmund type Kwt2.42, which dates to Rhineland phase 7 (585-610). The Franken AG classify similar pots as type Kwt4A, which dates to their phases 4-7 (510/25-640/50).¹⁶¹

Fine pottery: biconical pot of Siegmund's type Kwt 4.11/2.12
Find number: 34 (34-2-1)

Biconical pot 34-2-1 was found in fragmented condition and is now partly restored and completed; a large part of the wall is gone and approximately 55% of the original pot is present (fig. 4.55). The pot was baked in an oxidised atmosphere, which resulted in a brownish/red wall surface. The decoration applied on the upper wall consists of single stamp impressions of two zones of extended S-shapes in between zones of grooves beneath and below them. With its height of 16.4 cm the pot belongs to the group of large biconical pots from Sittard. The field drawing indicates that the fragments were found at two different locations inside the grave: some were found in the middle of the northern half of the grave and some along the western wall in the middle of this grave of a man (identified on the basis of a lance head). The pot was thus deposited in fragmented condition (the grave seems undisturbed), as was the pot from grave 31; the deposition of broken pots may have been a ritual act in this cemetery. The biconical pot may be classified as Siegmund's type Kwt4.11, on the basis of its rounded carination, which dates from the end of Rhineland phase 7 to phase 8 (c.600-640).¹⁶² The single stamp decoration in combination with grooves and ground form 4 also points towards a possible classification as Kwt2.12, which dates to Rhineland phase 4 (530-555),¹⁶³ or Franken AG type Kwt2A, which dates to their phases 4-5 (510/25-580/90).¹⁶⁴

Fine pottery: biconical pot of Siegmund's type Kwt3.11
Find number: 50 (50-1-1)

Approximately 25% is present of the brown biconical pot from grave 50 (fig. 4.56). The available fragments were glued together but the missing parts were not completed. The available bottom, wall and rim fragments made a complete reconstructed outline of the pot possible and its original height was 12.0 cm. The pot is of a fine burnished ware tempered with sand and pottery grid. Some dark stains are visible in its weathered surface; it might have been a pot with a smoked surface. It is decorated with single lines of rectangular roulette stamp impressions applied multiple times covering nearly the entire upper wall. The neck has a relatively well pronounced ridge. The exact find location inside the grave was not recorded for this pot. It is classified as Siegmund's Kwt3.11, which dates to Rhineland phase 6 and the beginning of phase 7 (570-600).¹⁶⁵ The Franken AG classify similar pots as type Kwt5A, which dates to their phases 5 and 6 (565-610/20).¹⁶⁶ The decoration pattern is classified as L/P/V type 414 (470-670).¹⁶⁷

Fine pottery: biconical pots of Siegmund's type Kwt3.12
Find numbers: 6 (6-1-1); 13 (13-1-1)

Biconical pot 6-1-1 from grave 6 is not complete; approximately 10% of the original pot is present (fig. 4.57, left). Two of the twelve available shards were glued together on the basis of which nearly the complete wall profile of the pot could be reconstructed, except for its base. It seems, however, that the carination was below the middle of the pot, and that the pot had a somewhat sagging appearance. The brown pot was baked in a reduced atmosphere and is of a fine burnished ware. The black stains might indicate that it had a smoked surface which is now considerably weathered. Single lines of rectangular roulette stamp impressions were applied multiple times on the upper wall covering nearly the entire upper wall. The height of the pot could not be reconstructed; the belly diameter was 14.3 cm and the mouth diameter 6.9 cm, on the basis of which it is identified as ground form 2 or 4. On the basis of the decoration the pot is classified as either Siegmund's type Kwt3.12, which dates to Rhineland phases 6-7 (570-610),¹⁶⁸ or type Kwt3.11 which dates to Rhineland phases 6-7 (570-610).¹⁶⁹ The pot, although not complete, is classified as Franken AG type Kwt5A, which dates to their phases 5-6 (565-610/20).¹⁷⁰ The decoration is classified as L/P/V type 414, which dates to their phases LPV-MR2 (470-670).¹⁷¹

Biconical pot 13-1-1 from grave 13 has a grey surface showing the lighter (brownish) paste underneath, which indicates that it was baked under circumstances with abundant smoke (fig.

Fig. 4.55
Biconical pot type Siegmund Kwt 4.11/2.12, grave 34 (scale 1:4).



Fig. 4.56
Biconical pot type Siegmund Kwt3.11, grave 50 (scale 1:4).



Fig. 4.57
Biconical pots type Siegmund Kwt3.12, graves 6 and 13 (scale 1:4).



6-1-1



13-1-1

4.57, right). It was found in fragmented condition but is now restored; it is a nearly complete specimen. The upper wall is decorated with single lines of rectangular roulette stamp impressions, applied 4 to 5 times. The pot has a height of 10.2 cm and a belly diameter of 12.6 cm. It was not recorded where in the grave the pot was found. It is, as far as it can be known (the northern part of the grave is gone) the only find from this grave. The pot is classified as Siegmund's type Kwt3.12 on the basis of its decoration; this type dates to Rhineland phases 6-7 (570-610).¹⁷²

(158) Müssemeier *et al.* 2003, 59. (159) Siegmund 1998, 130. (160) Müssemeier *et al.* 2003, 60. (161) Müssemeier *et al.* 2003, 60. (162) Siegmund 1998, 131-132. (163) Siegmund 1998, 129. (164) Müssemeier *et al.* 2003, (165) Siegmund 1998, 130. (166) Müssemeier *et al.* 2003, 60-61. (167) Legoux/Périn/Vallet 2004, 20, 47, 55 (type 414). (168) Siegmund 1998, 130. (169) Siegmund 1998, 130. (170) Müssemeier *et al.* 2003, 60-61. (171) Legoux/Périn/Vallet 2004, 20, 47, 55 (type 414). (172) Siegmund 1998, 130.

Fine pottery: biconical pot of Siegmund's type Kwt3.13

Find number: 28 (28-1-1)

Biconical pot 28-1-1 from grave 28 is with its height of 11.2 cm a relatively small pot (fig. 4.58). The pot originally had a grey surface which is considerably weathered and shows the orange past underneath. This indicates that it was baked in oxidised atmosphere, but under conditions with abundant smoke which covered the outer surface with a thin dark layer. The pot was found in fragmented condition, but is now restored although not completed. Approximately 85% of the original pot is present. The decoration consists of single lines of rectangular roulette impressions, applied multiple times covering nearly the complete upper wall. The pot was found in the north-eastern section of the grave and was thus probably deposited near the right foot of the now completely decayed body of a man (gender identification on the basis of a lance head). It is classified as Siegmund's type Kwt3.13, which dates to Rhineland phases 6-7 (570-610).¹⁷³ The Franken AG classify pot with single line roulette stamps as type Kwt5A, which dates to their phases 5-6 (565-610/20).¹⁷⁴

Fine pottery: biconical pots of Siegmund's type Kwt3.22

Find numbers: 5 (5-2-1); 11 (11-1-1); 30 (30-2-1); 81 (81-1-1)

Biconical pot 5-2-1 from grave 5 was found in fragmented condition but is now restored; approximately 60% of the original pot is present (fig. 4.59). The pot wall has a dark grey surface, and a grey/orange core, as the shards show, which implies that the pot was baked in semi-oxidised conditions with abundant smoke resulting in the thin dark upper layer. The pot is of a fine burnished ware and its upper wall is decorated with three zones of multiple lines of rectangular roulette stamp impressions. It is a relatively squat and wide pot. The pot was found outside the coffin, in the north-eastern section of the chamber, in association with a lance head. The Franken AG classify similar pots as type Kwt5A, which dates to their phases 5 and 6 (565-610/20).¹⁷⁵

Biconical pot 11-1-1 from grave 11 is a dark brown pot, baked in a reduced atmosphere or under conditions with abundant smoke leaving a thin dark top layer (fig. 4.59). The upper wall is decorated with two zones of multiple lines (six to eight) of rectangular roulette stamp impressions. Fragments of the rim are missing, and some parts of the pot are completed and glued together. Its shiny surface may be a result of recent treatment. The pot has a height of 13.4 cm and a belly diameter of 16.1 cm. It was found as a nearly complete specimen in the grave of a woman, in the north-eastern section and thus near the presumed former location of the right foot of the completely decayed body.

The biconical pot from grave 30 was found in fragmented condition (fig. 4.59). Approximately 75% of the original pot is present; the available shards were glued together, but the gaps not completed. The reconstructed pot has a height of 16.7 cm, which is relatively large compared to the other pots of the Sittard collec-

tion. The upper wall is decorated with multiple lines of rectangular roulette stamp impressions. The surface shows both dark grey and orange spots, which indicates that the pot was baked in an oxidised atmosphere with abundant smoke leaving a thin dark top layer which is now weathered and shows the orange paste underneath. The pot was found in a chamber grave of a man, outside the coffin, in the north-eastern section of the chamber in association with a lance head. The finds from inside the coffin are also characteristic for graves of men.

The biconical pot from grave 81 was found in fragmented condition (of which some were administrated as find number 81-1-6). The complete outline of the pot could be reconstructed on the basis of these fragments; approximately 10-15% of the original pot is present (fig. 4.59). The pot was baked under conditions with abundant smoke leaving a thin dark top layer which shows the lighter paste underneath. The upper wall is decorated with two zones of multiple lines (3) of rectangular roulette stamp impressions. The reconstructed height of the pot is 12.6 cm, which is rather average in the collection of biconical pots from the Sittard graves.

The four pots are classified as Siegmund's type Kwt3.22, which dates to the end of Rhineland phase 7 and the beginning of phase 8B (600-625).¹⁷⁶ The Franken AG classify pots similar to the last three discussed in this section as type Kwt5B, which dates to their phases 5-7 (565-640/50).¹⁷⁷

Fine pottery: biconical pots of Siegmund's type Kwt3.23

Find numbers: 33 (33-1-1); 47 (47-1-1)

Biconical pot (33-1-1) from grave 33 was found in fragmented condition but is restored; approximately 75% of the original pot is present (fig. 4.60). The pot was baked under conditions with abundant smoke leaving a thin dark top layer underneath which the lighter past is now visible. The pot is without decoration but has two slightly visible ridges on the upper wall, which is a relatively rare feature of pots from graves in the surroundings of Sittard. The third ridge in the neck of the pot is a common feature of biconical pots. The pot has a relatively well defined carination, a straight upper wall and a height of 6.7 cm. The biconical pot was the only find from this grave; it was found near the western wall in the middle of the wooden container. Siegmund classifies similar pots as Kwt3.23 (on the basis of the ridges), and dates them to phase 8 (610-640).¹⁷⁸ The Franken AG classify pots with two ridges on the upper wall as type Kwt6, which dates from the end of their phase 6 to phase 9 (600-710), but predominantly to phases 7-8 (610/20-670/80).¹⁷⁹

Biconical pot 47-1-1 from grave 47 (fig. 4.60) was baked in an oxidised atmosphere with abundant smoke leaving a thin dark top showing the red paste underneath. The upper wall is decorated with three zones of multiple lines (three to four, this is not clear) of rectangular roulette stamp impressions. The pot was found in nearly complete condition. It has a height of 9.9 cm and a belly diameter of 9.4 cm, and is thus a relatively small pot in the Sittard

Fig. 4.58

Biconical pot type Siegmund Kwt3.13, grave 28 (scale 1:4).



Fig. 4.60

Biconical pots type Siegmund Kwt3.23, graves 33 and 47 (scale 1:4).



Fig. 4.59

Biconical pots type Siegmund Kwt3.22, graves 5, 11 and 30 (scale 1:4).



collection of biconical pots. The biconical pot was the only find from this grave; it was found in the north-eastern section of the grave which is close to the presumed former location of the right foot of the now completely decomposed body. The pot is classified as Siegmund's type Kwt3.23 (on the basis of the roulette stamp decoration), which dates to Rhineland phase 8 (610-640).¹⁸⁰ The Franken AG classify pots with similar dimensions and decoration as type Kwt5C, which dates to their phase 7 (610/20-670/80).¹⁸¹

The largest biconical pots from Sittard are all classified as pots of Siegmund's group 2. Only one pot of group 3 (30-2-1) is relatively

large with its height of 16.7 cm, but not as large as the largest from group 2.

The smallest pots (of group 3) are both classified as type Siegmund Kwt3.23. Although not extremely obvious, it seems as if the younger pots are for the majority smaller than the older pots. This might indicate that the size of the pots is, although not that evident, a chronological feature of the Sittard pots.

(173) Siegmund 1998, 130. (174) Müssemeier *et al.* 2003, 60-61. (175) Müssemeier *et al.* 2003, 60-61. (176) Siegmund 1998, 131. (177) Müssemeier *et al.* 2003, 61. (178) Siegmund 1998, 131. (179) Müssemeier *et al.* 2003, 63. (180) Siegmund 1998, 131. (181) Müssemeier *et al.* 2003, 62-63.

Fine pottery: fragmented biconical pots
9 (9-1-3); 29 (29-2-1); 36 (36-2-1); 48(48-4-1); 88 (88-2-1)

The condition of five of the twenty-one biconical pots hindered the identification of their belly/height and the mouth/belly indexes; their ground forms cannot be established. The decoration patterns, however, offer some indications with regard to their possible date ranges.

The remnants of the biconical pot from grave 9 show that it was baked in an oxidised atmosphere, resulting in an orange-grey surface. The fragments were tempered with quarts and pottery grid. Approximately 30% of the pot is present (14 shards). The pot was not restored or completed but it was nonetheless possible to reconstruct a profile of the pot, although its height could not be reconstructed. It had a mouth diameter of 16.9 cm, which is relatively wide (nearly the widest mouth diameter of all the biconical pots of the Sittard collection); the complete pot will have been relatively large. The upper wall is decorated with two lines of interrupted complex roulette stamp impressions consisting of rectangular grids filled with four columns and three rows of small rectangular impressions alternating with grids filled with radial lines. The stamps are applied underneath the ridge and in between these two lines undulating grooves are applied. A zone of undulating grooves is also applied above the ridge. The shards seem to have been found in the south-western corner of the grave, but this is not clearly indicated on the field drawing. Next to two rivets and another shard, not belonging to this biconcial pot, no other finds are known from this grave. On the basis of the decoration the shards are classified as either type Kwt3.21/3.22/3.23 (although it is in all probability not an elongated pot): these types date to Rhineland phases 7-8 (585-640).¹⁸²

Biconical pot 29-2-1 from context 29 is fragmented and restored but not completed (fig. 4.61). Approximately 45% of the original pot is present. The upper part of the pot is gone; its mouth diameter and height could not be established. However, in view of the available outline the pot will not have been much higher than its remaining height of 12.0 cm. The pot is thus of average height in the collection of biconical pots from the Sittard graves. The pot was baked in a reduced atmosphere and probably under conditions with abundant smoke leaving a thin dark top layer which is now considerably weathered. The upper wall is decorated with grooves. It was found in association with a number of masculine objects, but an outline of a burial pit or another context was not discovered. Biconical pots with grooves can be classified as Siegmund types Kwt2.31 (phase 5: 555-570)¹⁸³, Kwt2.32 (phases 4-5: 530-570)¹⁸⁴ or Kwt2.33 (phases 6-8: 570-640)¹⁸⁵. The Franken AG classify pots with grooves as type Kwt3A, which dates to their phases 4-5 (510/25-580/90).¹⁸⁶ For now the fragments are dated according to the Franken AG scheme.

A considerable number of biconical pot shards were found in the middle of grave 36. The fragments are three rim fragments, one bottom fragment and twenty-one wall fragments. The frag-

ments showed that the pot was baked in a reduced atmosphere. The pot has a decoration of horizontal grooves applied on the upper wall. On the basis of its grooves it can be classified as Franken AG type Kwt3A (510/25-580/90).¹⁸⁷

A number of fragments from grave 48 form approximately 25% of a small biconical pot. The shards are three bottom fragments and seven wall fragments, of which one was a fragment of the carination (on the basis of which it is identified as a biconical pot). The pot was baked under conditions with abundant smoke since the outer surfaces of the fragments are dark and the cores are light brown. The pot was probably not decorated. Other dimensions, apart from the bottom diameter (3.9 cm), cannot be given. It is not possible to assign a type or date range to this pot.

Roughly 30% remains of the biconical pot from grave 88 (fig. 4.61). It was baked under conditions with abundant smoke resulting in a thin dark top layer which is now weathered and shows the lighter paste underneath. The upper part of the pot is lost and its height could not be established precisely but was approximately 12.0 cm, based on the surviving fragments. The belly diameter is 14.2 cm. Decoration was not observed on the shards and since is apparently not an elongated specimen the pot is classified as Franken AG type Kwt4A (4-7: 510/25-640/50).

Fine pottery: spouted pots

The discovery of seven pots with a handle and spout (also known as *Röhrenausgusskannen*) is in view of the complete absence of this form in the ‘urban’ cemeteries of Maastricht remarkable. With regard to the cemetery of Bergeijk it was already concluded that spouted pots seem to be common in the smaller, ‘rural’ and ‘poorer’ cemeteries, which is underlined with the finds from Sittard, and also Obbicht and Stein, where comparable numbers of spouted pots were found (see the following section on the finds from these cemeteries).

Spouted pots are in fact biconical pots with a spout and handle,

Fig. 4.61
Fragmented biconical pots, graves 29 and 88 (scale 1:4).



and are thus a special form within this group. The spouted pots all have approximately the same height and height/belly indexes and belong to the relatively large pots within the group of biconical pots from Sittard (table 4.7). The upper walls of all the seven pots are decorated with either grooves or roulette stamp impressions. The spouts of all the pots are attached to the upper wall, just beneath the rim, and to the opposite of the handle. They are baked in either an oxidised or reduced atmosphere. The carination of the pots can be rounded or well defined.

Fine pottery: spouted pots of Siegmund group 2 (with grooves)

24 (24-1-1); 49 (49-3-1)

The spouted pot from grave 24 is identified on the basis of a rim fragment with spout (fig. 4.62). A number of wall fragments are also present, but a complete profile of the pot could not be reconstructed. The wall fragments show that the upper wall was decorated with two zones of horizontal grooves. The pot was baked in an oxidised atmosphere; it was an orange pot with in all probability a smoked surface since some black weathered stains are present. The pot was wheel thrown, has a hard baked surface, and is of a fine burnished ware with pottery grit inclusions. The mouth diameter is 13.0 cm, which is in line with the dimensions of the other spouted pots from Sittard (table 4.7). The pot was found in the grave of a man (identified on the basis of a lance head), in the middle of the grave in a re-opening pit. It can thus be questioned whether the shards originally belonged to this grave. The pot may have been broken when the re-opening pit was dug and maybe some of the fragments were intentionally taken from the grave. Biconical pots with only grooves are classified a Siegmund types Kwt2.31 (phase 5: 555-570),¹⁸⁸ 2.32 (phases 4-5: 530-570)¹⁸⁹ or 2.33 (phases 6-8: 570-640)¹⁹⁰. The Franken AG classify pots with grooves as type Kwt3A, which dates to their phases 4-5 (510/25-580/90).¹⁹¹

Spouted pot 49-3-1 was found in fragmented condition but is now restored and completed; approximately 90% of the original pot is present (fig. 4.62). The outline of the reconstructed pot can be assumed to be rather close to its original shape, which is nearly globular; a vague rounded carination can be observed in the middle section of the pot. It is baked under conditions with abundant smoke leaving a thin dark top layer which is now considerably weathered showing the lighter paste underneath. The upper wall is decorated with one zone of three grooves and one zone of a single groove. The spout is present, but the handle is absent. A small bulb on the rim, however, indicates the former presence of the handle. An indentation for a lid can be observed inside the rim. The pot has a height of 20.6 cm, a belly diameter of 21.0 cm, and a mouth diameter of 15.5 cm; it is comparable to the dimensions of the other spouted pots of the Sittard collection. The pot was

Table 4.7
The spouted pots from Sittard. H=Heigh, B=Belly diameter, M=Mouth diameter, BF=Basic Form , G=Group (Siegmund 1998).

Pot	H	B	M	BF	G	Type
24-1-1	-	-	13.0	-	2	Kwt 2.31-2.33
49-3-1	20.6	21.0	15.5	5	2/4	Kwt 2.32 / Kwt 4.11 Fag Kwt 3A
33-1-2	-	-	15.1	-	3	Fag-Kwt 5D
86-2-1	17.4	18.7	12.3	4 (5)	3	Kwt 3.22 Fag Kwt 5B
3-1-1	18.1	19.8	14.0	4	3	Kwt 3.22 Fag Kwt 5B
32-4-1	20.0	20.0	14.0	5	3	Kwt 3.13 / Kwt 3.23
76-1-1	19.3	20.0	16.3	5	3	Kwt 3.23

found in the north-eastern section of the grave of a man (identified on the basis of a lance head and shield boss), and was deposited close to the presumed former location of the right foot.

Biconical pots with grooves only as decoration and basic form 5 are classified as Siegmund’s type 2.32 (phases 4-5: 530-570).¹⁹² The Franken AG classify pots with grooves as type Kwt3A, which dates to their phases 4-5 (510/25-580/90).¹⁹³ Based on the ‘rounded’ carination, it can also be a type Siegmund Kwt4.11 (end phase 7-8A: 600-625). Siegmund claims that spouted pots occur only in Rhineland phases 7 and 8 (585-640).¹⁹⁴ It is likely that the date range 600-625 (type Kwt4.11) is relevant for this pot. This choice implicates that the decorative elements (grooves), which are indicative for the dating of biconical pots, have no chronological significance with regard to spouted pots.

Fine pottery: spouted pots of Siegmund group 3 (roulette stamp impressions)

3 (3-3-1); 32 (32-4-1); 33 (33-1-2); 76 (76-1-1); 86 (86-2-1)

The upper wall of the spouted pot from grave 3 is decorated with two zones of multiple lines (3) of rectangular roulette impressions (fig. 4.62). The pot is nearly complete; only a tiny fragment of the spout is gone. The pot was baked in an atmosphere with abundant smoke which left a thin dark top layer now showing some spots of the orange paste underneath it. It is of a fine burnished ware, but tempered with pottery grit. The pot has a globular outline: the carination is rounded and the lower and upper walls are straight. Its bottom is plain to slightly concave. The pot has a height of 18.1 cm, a belly diameter of 19.8 cm, and a mouth diameter of 14.0 cm. It was found in the north-eastern section of the grave, together with a ceramic beaker. It cannot be established whether it was the burial of a man or woman; the only other find from this grave is

(182) Siegmund 1998, 130-131. (183) Siegmund 1998, 129. (184) Siegmund 1998, 129-130. (185) Siegmund 1998, 130. (186) Müssemeier *et al.* 2003, 59. (187) Müssemeier *et al.* 2003, 59. (188) Siegmund 1998, 129. (189) Siegmund 1998, 129-130. (190) Siegmund 1998, 130. (191) Müssemeier *et al.* 2003, 59. (192) Siegmund 1998, 129-130. (193) Müssemeier *et al.* 2003, 59. (194) Siegmund 1998, 133.

Fig. 4.62
Spouted pots, graves 24, 49, 3, 76
and 86 (scale 1:4).



a knife. The indexes of the pot and its decoration enable it to be classified as type Siegmund Kwt3.22, which dates to the end of Rhineland phase 7 and to 8A (600-625).¹⁹⁵ The Franken AG classify biconical pots with similar dimensions and decoration as type Kwt5B, which dates to their phases 5-7 (565-640/50).¹⁹⁶

The spouted pot from grave 32 consists of 3 joined fragments and 74 loose fragments. The spout is applied on the upper wall, just beneath the rim. The location of the handle could not be reconstructed. The pot was baked in an atmosphere with smoke, which produced a grey outer surface underneath which the orange

paste is visible. The upper wall is decorated with multiples lines (15) of rectangular roulette stamp impressions (it seems as if the decoration is applied with a stamp consisting of multiple lines given that the rectangles have a regular recurring pattern, although this conclusion is not conclusive). It is a relatively 'soft' pot, of fine burnished ware with some pottery grit inclusions. The pot has a rounded 'carination'; it is more a globular pot. The reconstructed height of the pot is 20.0 cm, the mouth diameter is 14.0 cm, and the belly diameter is 20.0 cm, which are comparable to the dimensions of the other spouted pots from Sittard. The pot was found

in the grave of a woman, in the middle of the northern section of the grave. It was found in association with the fragments of a biconical pot (32-4-2; see above). Depending on the decoration being either a single line roulette stamp or a roulette stamp of multiple lines, the pot is classified as Siegmund type Kwt3.13 (phase 6-7: 570-610)¹⁹⁷ or Kwt3.23 (phase 8: 610-640)¹⁹⁸. Considering the 'rounded' carination it can also be a type Siegmund Kwt4.11 (end phase 7-8A: 600-626).¹⁹⁹

The identification of pot 33-1-2 from grave 33 as spouted pot is not unambiguous. A considerable part of the pot is missing, and a complete profile of the pot could not be reconstructed. The pot wall has a grey surface and a lighter core; it was baked with abundant smoke which left a thin dark top layer showing the lighter paste underneath. The bottom is plain and the rim fragments show that a handle was attached to the pot: this indicates that the pot was a jar, jug or spouted pot. There are no indications for the former presence of a spout. However, a number of six wall fragments decorated with what seem to be multiple lines of triangular roulette stamp impressions were discovered. Since jars and jugs are often baked in a reduced atmosphere and are commonly of a coarse ware without decoration, it is for now decided to identify the fragments as those of a spouted pot. The pot consists of fifty-eight fragments, of which five are rim fragments, three are base fragments and six are decorated wall fragments. The fragments were found in the western middle section of the grave. Other finds are not known from this grave; it is thus not known whether it was the burial of a man or woman. The Franken AG classify pots with a decoration of multiple lines of triangular roulette stamp impressions as type Kwt5D, which dates to their phases 6-7 (580/90-640/50).²⁰⁰

The spouted pot with handle from grave 76 (76-1-1) is baked in an atmosphere with abundant smoke (fig. 4.62). The pot is now light brown, but the surface is considerably weathered, and was originally black or grey. The pot has a height of 19.3 cm, a mouth diameter of 16.3 cm, and a belly diameter of 20.0 cm. The upper wall is decorated with three zones of multiple lines of rectangular roulette stamp impressions. One decoration zone was applied above the ridge and two zones were applied underneath it. The pot was found in the grave of a woman, in its north-eastern section, hence close to the presumed former location of the upper right leg. The glass bell beaker from this grave was placed near the right foot; the two vessels were thus not deposited in each other's close proximity, which is often the case with multiple vessel depositions in one grave. The pot is classified as Siegmund type Kwt3.23 (phase 8: 610-640), on the basis of its basic form and roulette stamp decoration.²⁰¹

The orange spouted pot from grave 86 is a nearly complete pot (fig. 4.62). The pot is the smallest of the Sittard-Kemperkoul collection of spouted pots: it has a height of 17.4 cm, a belly diame-

ter of 18.7 cm, and a mouth diameter of 12.3 cm. It has a well-defined carination; the shape of the complete pot resembles the basic forms of biconical pots more than the other spouted pots from Sittard. Moreover, it has the most prominent decoration of all the spouted pots from the cemetery. The decoration is applied on the upper wall and consists of three zones of multiple lines of rectangular roulette stamp impressions, alternating with two zones of uninterrupted complex roulette stamp impressions (consisting of single elements of crosses, mirrored S-shapes, and rectangular grids formed by four rows and columns of small rectangular impressions). Pots with identical stamp impressions were found in the cemetery of Obbicht and Rhenen (see chapter 7). The spout is not attached to the pot anymore but it was applied on the upper wall, beneath the rim, opposite to the handle. The pot was found outside the coffin, in the north-eastern section of the chamber, in association with a lance head. Masculine objects were also found within the coffin. The indexes of the pot and its decoration enable it to be classified as Siegmund type Kwt3.22, which dates to the end of Rhineland phase 7 and to 8A (600-625). The Franken AG classify biconical pots of these dimensions and similar decoration patterns as Kwt5B, which dates to their phases 5-7 (565-640/50) or Kwt5F, which also dates to their phases 5-7 (565-640/50).²⁰²

Fine/coarse pottery: jugs

46 (46-1-1); 81 (81-1-2)

The two jugs from Sittard graves were both found in fragmented condition. Of partly restored jug 46-1-1 approximately 70% is present; the available shards are of the belly, rim and bottom, so a nearly complete outline of the jug could be reconstructed (fig. 4.63). Apart from the restored bottom part twenty detached fragments are also present. One of the rim fragments forms the small spout of this jug: it is too small to classify the jug as a tree-foil jug. The handle is lost, but left some traces where it was attached to the belly and rim. The decoration consists of three zones of horizontal grooves, and the handle covered a fraction of the applied grooves on the upper wall. The reconstructed silhouette of the jug demonstrates that it had a height of 23.3 cm, and that the belly had a diameter of 18.2 cm. The belly is relatively low, what gives the jug a sagging appearance. It has a relatively narrow neck and mouth. The jug was baked in an oxidised atmosphere with smoke; the fragments have a thin dark grey surface and an orange/grey paste underneath it. The jug was found in the grave of a woman (identified on the basis of beads), in the middle of the northern section of the grave and thus close to the presumed former location of the feet. Siegmund identified jugs with relatively narrow necks and jugs with extremely wide necks. The jug from grave 46 has a neck diameter of 8.7 cm and a belly diameter of 18.2 cm, which results in a ratio of 0.48 and a classification as Siegmund's

(195) Siegmund 1998, 131. (196) Müssemeier *et al.* 2003, 61. (197) Siegmund 1998, 130. (198) Siegmund 1998, 131. (199) Siegmund 1998, 131-132. (200) Müssemeier *et al.* 2003, 61-62. (201) Siegmund 1998, 131. (202) Müssemeier *et al.* 2003 61.

Fig. 4.63
Jugs, grave 46 (scale 1:4).

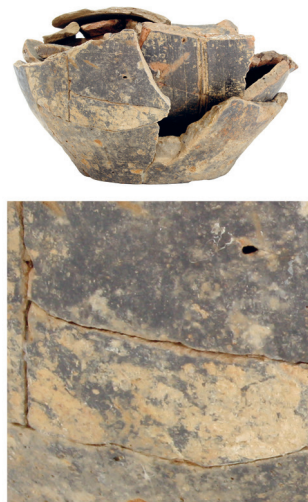


Fig. 4.64
Egg shaped pot, grave 16 (scale 1:4).



Fig. 4.65
Pottery lid, grave 26 (scale 1:4).



type Kru1.1, which dates to Rhineland phase 7 (585-610).²⁰³ The Franken AG maintained Siegmund's type, but date similar jugs on the basis of their associated grave inventories. This results in variable date ranges; the jugs are connected to grave inventories dated to Franken AG phase 4 (510/20-565) and to the transition from phase 5 to 6 (580/90).²⁰⁴

Jug 81-1-2 from grave 81 is incomplete; the remainder consists of only 5% of the jug in shards. The shards are identified as those of a jug; the handle (2 shards) is present, as is a rim fragment that forms a small spout (see also find numbers: 81-1-3 and 81-1-4). The jug was baked in a reduced atmosphere, which produced a black surface and core. It was not possible to reconstruct an outline of the jug on the basis of the remaining shards. However, the rim fragment with small spout indicated that it was not a trefoil jug; these have larger spouts. The rim fragments also indicate that the jug had a relatively wide mouth. On the basis of these features a classification as Siegmund's type Kru1.2 seems plausible. This type dates to Rhineland phases 1-2 (400-485), which is rather early in view of the other finds from the Sittard cemetery. An identification as Siegmund's Kru1.1 should probably not be dismissed.²⁰⁵

Pottery: egg shaped pot 16 (16-2-1)

The single egg shaped pot (more commonly known as *Wölbwandtopfe*) of the cemetery is baked in an atmosphere which produced a light brown surface. The pot has a height of 18 cm, a belly diameter of 16.2 cm, and a thickened outward folded rim (fig. 4.64). It is a wheel thrown pot of semi-coarse ware with volcanic

inclusions, which point towards a provenance in the Mayen production area. The pot is not complete (approximately 40% is present), and a considerable part of the bottom is missing. The base can nonetheless be identified as lenticular. The pot was found in a pit dug at the location of grave 16 of a woman (identified on the basis of beads). The indexes (the diameter of the bottom (7.5 cm) in relation to the height, and the diameter of the belly in relation to the height) make a classification as Siegmund type Wwt2.22 plausible. This type dates to Rhineland phases 10-11 (670-740).²⁰⁶

Pottery: lid 26 (26-2-1)

A cover of ceramic for a pot was found in grave 26 (fig. 4.65). Unfortunately no other pots are known from this grave, so it cannot be associated with a specific vessel. The lid is light brown/grey and of a coarse ware. The top of the lid is flattened and has a diameter of 3.6-4.0 cm. The maximum diameter of the base of the lid is 12.8 cm and it has a height of 3.8 cm. The inward folded base (which fits in indentation of a pot rim) is with a diameter of 10.8 cm narrower. A mineralised fragment is preserved on the inner surface of the lid. One of the sides of the outer surface is slightly darker and this stain was probably caused by smoke: the associated pot might have been used for cooking activities. The lid was found in the middle of the northern section of the grave of a man (identified on the basis of a lance head), just outside the outline of the re-opening pit. The pot to which it belonged might have been taken from the grave.

Pottery fragments

1 (1-1-1); 9 (9-1-4); 19 (19-1-1); 20 (20-1-1); 25 (25-1-1); 46 (46-1-2); 73 (73-1-2); 77 (77-1-1; 77-5-1); 81 (81-1-2; 81-1-3; 81-1-4; 81-1-5; 81-1-6); 82 (82-2-1); 83 (83-1-1)

Eight fragments (all recorded under find number 1-1-1) from grave 1 are the remains of a jug, jar or spouted pot. Three fragments are glued together and form a handle with three ribs. A rim fragment is also available. The fragments are of a wheel thrown pot of a fine burnished ware baked in an oxidised atmosphere. It cannot be classified or dated on the basis of these fragments alone.

Fragment 9-1-4 from grave 9 has a roulette stamp decoration of simple multiple lines (probably of a stamp of 4 lines) of rectangles, and is thus part of the Siegmund's late roulette stamp group (fig. 4.66). The fragment is probably of spouted pot or a jug (traces of the ear can be observed). It is of a fine burnished ware, it is tempered with pottery grid and its core is dark grey. The biconical pots with roulette stamp decoration of the late group are types Kwt3.21, Kwt3.22 and Kwt3.23, which date to Rhineland phases 7-8 (585-640).²⁰⁷ Jugs with late roulette stamp decoration date to Rhineland phase 11 (705-740).²⁰⁸

Wall fragment 19-1-1 from grave 19 can be of a wheel thrown biconical pot of fine burnished ware, baked in a mixed atmosphere with abundant smoke: the smoke left a thin dark top layer but the paste underneath is light yellow to grey (fig. 4.66). The decoration consists of single lines of long triangular roulette stamp impressions. It is classified as Franken AG type Kwt5E, which dates to their phases 5-7 (565-630/40).²⁰⁹ Another shard with a considerably weathered surface resembles the decorated fragment; the two fragments belonged to the same pot.

Fragment 20-1-1 is a small thin fragment of a pot baked in a reduced atmosphere, tempered with pottery grid and quarts. The find card mentioned that assigning it to grave 20 was the only remaining option after all the other finds had been ascribed to graves.

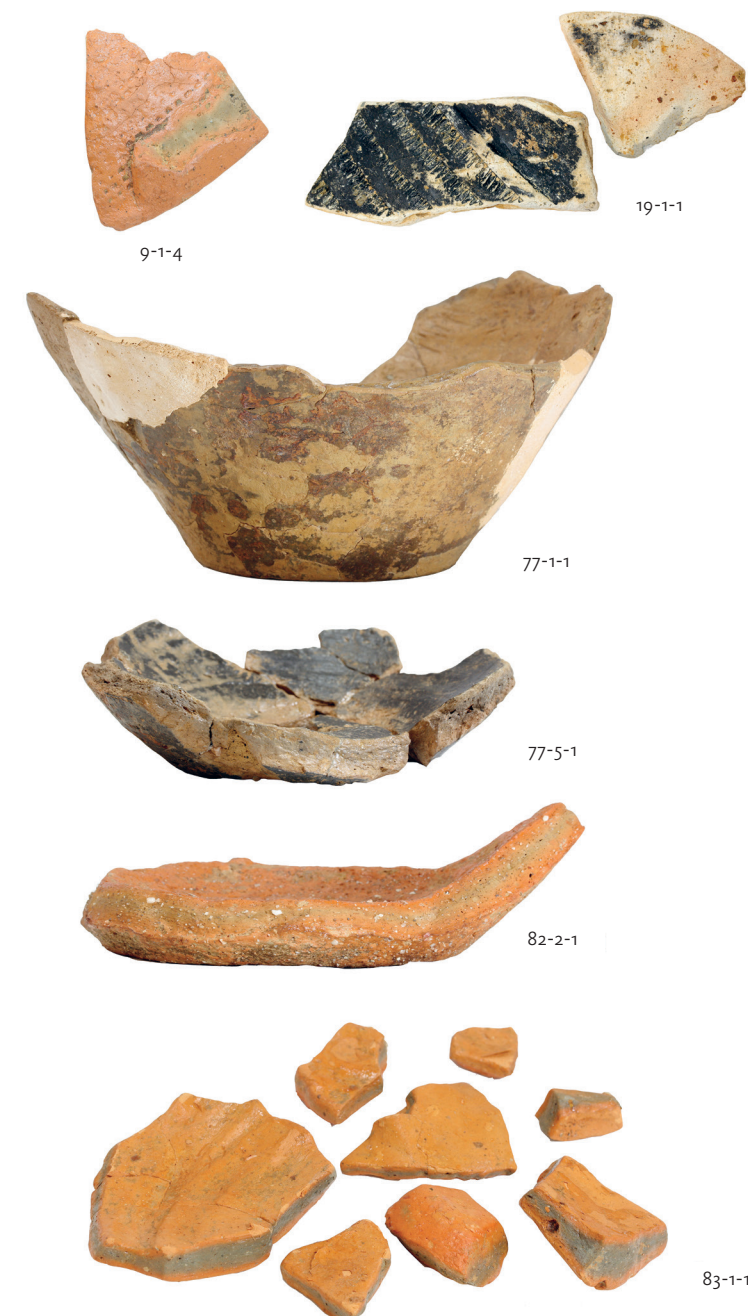
The grey/black fragment 25-1-1 from grave 25 is the base of a wheel thrown pot of a fine burnished ware tempered with pottery grid. The base has a diameter of 7.5 cm. It cannot be established what sort of pot the base was part of.

Two fragments (46-1-2) are known from grave 46. One is a brown wall fragment with two zones of four grooves and a ridge; it was part of a biconical pot. The other is a rim fragment of another pot of fine burnished ware, baked in a reduced atmosphere.

Fragment 73-1-2 from grave 73 is considerably weathered; it has a light brown surface and a dark grey core. It cannot be classified or dated.

Fragments 77-1-1 and 77-5-1 from grave 77 are of the bottoms of two pots. Fragments 77-1-1 form approximately 25-30% of a complete pot of fine burnished ware which might have been a

Fig. 4.66
Pottery fragments, graves 9, 19, 77, 82 and 83 (scale 1:2).



bowl or biconical pot (fig. 4.66). It was baked under conditions with probably abundant smoke since the surface shows thin dark top layer, now considerably weathered, with a lighter paste underneath it. The base has a diameter of 8.0 cm and the pot had a straight lower wall. The other fragments (77-5-1) are thick bottom fragments of a pot (approximately 5% of the original pot) with a grey surface (fig. 4.66). It was baked under conditions with abundant smoke which left a thin dark top layer. The grooves visible on its exterior are production traces. The plain, slightly convex bottom has a diameter of 12.5 cm. It cannot be classified or dated.

(203) Siegmund 1998, 146. (204) Müssemeier *et al.* 2003, 65. (205) Siegmund 1998, 146. (206) Siegmund 1998, 142-143. (207) Siegmund 1998, 130-131. (208) Siegmund 1998, 153. (209) Müssemeier *et al.* 2003, 62.

The numerous fragments from grave 81 are probably part of more than one pot.

Find number 81-1-6 consists of 20 fragments and 10 very small fragments. Four of them have a roulette stamp decoration (they belong to biconical pot 81-1-1, see above), four are fragments are of the carination of a biconical pot, one is a rim fragment, and eleven are not decorated.

The fragments recorded under find number 81-1-3 are also part of a biconical pot. They have a roulette stamp decoration of multiple lines of rectangles, which, however, do not match with the decoration on pot 81-1-1.

The fragments recorded as find number 81-1-4 are belly fragments of a black pot; they probably belong to biconical pot 81-1-1 and/or 81-1-3.

Find number 81-1-5 consists of six fragments of a biconical pot with an orange outer surface. Approximately 5% of the pot is present (no drawing available).

Fragments 81-1-2 are of a jug baked in a reduced atmosphere. Fragments 81-1-4 and some fragments of find number 81-1-6 belong either to this jug or to a biconical pot.

Bottom fragment 82-2-1 from grave 82 is of a red wheel thrown pot with thick walls and of coarse ware, tempered with white gravel (fig. 4.66). The pot has a plain straight bottom with a diameter of 17.3 cm. It cannot be classified or dated.

Fragments 83-1-1 were probably a pot with spout or a jug or jar (fig. 4.66). Eleven fragments were preserved of which one had remnants of a handle. The surface of the fragments is orange/red but their cores are grey.

Glass vessels

Palm cups

Siegmund established an index which separates the high, slim palm cups from the lower, broad palm cups.²¹⁰ The four Sittard specimens belong to the group of low and broad palm cups. Within this group Siegmund identifies palm cups with simple rims (slightly pronounced and not folded) as type Glaz.1, and those with broad and outward folded rims as type Glaz.2. This classification is sustained by the Franken AG,²¹¹ and Koch also makes this distinction.²¹² Maul presents an exhausting list of palm cups and identified two main groups, predominantly on the basis of the mouth/belly ratio.²¹³ Feyeux classifies palm cups as general types 55, 57 (palm cups) and 60 (palm cups with folded rim).²¹⁴ In these groups some sub-types are identified, mainly on the basis of the ornamentation.²¹⁵ Two types of low and broad palm cups can be identified in the Sittard collection on the basis of these classifications.

Palm cup: low and broad with rolled rim

8 (8-2-1)

Palm cup 8-2-1 from grave 8 is a light blue cup, rather asymmetric, with a maximum height of 5.9 cm and a mouth diameter of 10.6 cm (fig. 4.67). It can stand on its small flat indented bottom, which is unusual for palm cups: they are characterised by their rounded bottoms. The bottom of the Sittard cup is asymmetric, and probably it is an imperfect specimen of which the bottom was intended to be rounded. The cup is without decoration. The rim is thickened and rolled outward; some fragments of the rim and the wall

are gone which show that the rim was hollow. The palm cup is not of a high quality since numerous air bubbles are visible. This specimen was found outside the coffin, in the north-eastern section of the chamber, in which also beads were found (but these probably moved from their original position inside the coffin due to the re-opening pit which disturbed the coffin).

The Sittard palm cup cannot be classified with Siegmund's scheme: he only identified cups with broad outward folded rims and solid rounded rims.²¹⁶ The rim of the Sittard palm cup is obviously a form which fits somewhere in between these rim forms. According to the typology of Maul it is a type Tumbler B1a, which dates to 570-680.²¹⁷ According to Feyeux's classification it is a type 55.0, which dates to 550-620.²¹⁸ Altogether, a dating of this palm cup to 580/90-670/80 seems plausible.

Palm cups: low and semi-spherical with plain rim and ribs

15 (15-1-1); 16 (16-4-1²¹⁹); 26 (26-3-1)

Palm cup 15-1-1 from grave 15 was broken but is now in restored and in complete condition, apart from some tiny wall fragments (fig. 4.67).²²⁰ The cup has a height of 6.9 cm, is olive green and has twelve prominent vertical ribs. Eight of the twelve ribs start at the transition from sagging bottom to wall; they all vanish at approximately half of the wall. Four ribs start at the middle point of the bottom and as such form a cross covering the sagging bottom of the cup. The quality of the glass is not high; numerous air bubbles are visible. The cup was the only find from grave 15. It was found in the north-western corner of the grave and was thus deposited close to the presumed former location of the left foot of the now completely decomposed body.

Palm beaker 26-3-1 from grave 26 resembles the cup from grave 15; it is only slightly darker and higher (fig. 4.67). It is a brown-yellow cup with twelve vertical ribs, similar to the ones on the cup from grave 15. The cup has a height of 7.6 cm and a mouth diameter of 8.4 cm. Fragments of the rim and wall are gone and numerous air bubbles are visible. The cup was found in the chamber grave of a man (identified on the basis of a lance head), in the north-western section of the coffin which is near the presumed former location of the left foot.

A palm cup (16-4-1), nearly similar to the ones from graves 15 and 26, was found in grave 16 according to the listed finds in Zoetbrood's thesis. It was mentioned that this cup was yellow-green, had sixteen ribs of which four are prolonged forming a cross on the bottom of the cup, and had showed large air bubbles. This cup is now missing from the Sittard collection. The cup

was found in the north to north-eastern section of the coffin of a chamber grave of a woman (on the basis of beads), and was thus placed close to the presumed former location of the right foot or in between the feet of the now completely decayed body.

The two available palm cups, and probably also the missing one, with plain rims are remarkably similar. The two cups with twelve ribs might have been produced in the same mould. They are classified as Siegmund's Glaz.1, which is a rather general type of palm cup and which dates to Rhineland phase 7 (585-610).²²¹ Other typological studies identified more specific types. Feyeux for example classifies palm cups as the ones from Sittard as sub-group 55.3k (palm cups with vertical ribs), which he dates to the second half of the sixth century and the beginning of the seventh century.²²² The palm cups can also be classified as Maul type Tumbler A1b (half spherical with straight walls with a ribbed surface)²²³, which she dates to Stufe AM III-JM I (560/70-630/40).²²⁴ More specifically, Maul classified the patterns formed by the ribs on the bottoms of the cups. The Sittard cups are all classified as her bottom type KP1: cross/one point pattern.²²⁵ In view of these alternative classifications and associated date ranges it appears that Siegmund's criteria for these palm cups are coherent chronological indicators but that his date range is somewhat narrower than those of the other typo-chronologies.

Bell beakers

Bell beakers are quite common glass finds in Merovingian graves.²²⁶ Three different bottom shapes have been identified for such beakers, each with a distribution pattern of its own.²²⁷ The beakers with rounded convex bottoms are mainly restricted to the Rhineland. Rounded convex bottoms with a peak or pointed bottoms are mainly known from the Meuse region in France and those with a drop have their main distribution area in the Meuse region of Belgium. In Maul's recent work, however, only two types of bottoms are identified: those with a rounded convex bottom and those with a bulge (peaks and drops are regarded as one type).²²⁸ It can be assumed that the distinction between drops and peaks is not as unambiguous and that they should be regarded as one form, an opinion which is supported by Cabart and Feyeux.²²⁹ The general shape of bell beakers shows a general chronological development from short and squat with an s-shaped body to carinated body and finally to a more cylindrical body.²³⁰ The height of the beakers increases with time. In the Sittard cemetery three bell beakers were found: one complete one with a rounded or sagging bottom, one with a pointed bottom of which the upper part is unfortunately gone, and one of which only the upper part is preserved.

Fig. 4.67
Glass vessels, graves 8, 15, 16, 26, 76, 11 and 24 (scale 1:2).



(210) Siegmund 1998, 165-166. (211) Müsseseimer *et al.* 2003, 69-70. (212) Koch 1987, 253-257. (213) Maul 2002, 68-79. (214) Feyeux 2003, 21, 28, fig. 3. (215) Feyeux 2003, 21, 37, fig. 13, type 55, 38, fig. 14, type 57, type 60. (216) Siegmund 1998, 166. (217) Maul 2002, Band II, 253, 317. (218) Feyeux 2003, 37, fig. 13, T.55.0. (219) No longer present in the collection. (220) Unfortunately the photographs were taken with the cups standing upside down, although this must have been the way most of the time these beakers were stored and how they were seen in Merovingian times. (221) Siegmund 1998, 166. (222) Feyeux 2003, 37, fig. 13, T.55, T.55.3k. (223) Maul 2002, Band II, 253. (224) Maul 2002, Band I, 151-152. (225) Maul 2002, Band II, 258. (226) Maul 2002, 45. (227) Maul 2002, 46; Koch 1998, 160; Cabart/Feyeux 1995, 58. (228) Maul 2002, 44-45. (229) Cabart/Feyeux 1995, 58. (230) Böhner 1958, 228-231.

Bell beaker: applied glass threads, rounded or sagging bottom
76 (76-2-1)

Bell beaker 76-2-1 from grave 76 is an olive green/brown specimen, which is, apart from some missing bottom fragments, complete (fig. 4.67). The beaker has an incurved wall and a rounded to sagging bottom. The decoration consists of horizontal spiral threads of similar coloured glass applied underneath the rim. Vertical looped threads, also of similar coloured glass, are applied on the entire wall of the beaker; the tops of some of the loops are crossed by some of the lower horizontal threads. Numerous small air bubbles are visible, which indicates that it was low quality glass. The beaker was found in the north-eastern corner of the grave, and was thus deposited close to the presumed former location of the right foot.

The bell beaker is classified as Feyeux’s general type 53 and sub type 53.2fh on the basis of its convex bottom and looped and horizontal threads of glass.²³¹ This type is introduced in the second quarter of the sixth century, is predominant in the second half of the sixth century, and becomes rare in the beginning of the seventh century.²³² The Sittard beaker can thus be dated to 525-610.

Maul distinguishes between bell beakers with concave walls (A), conical walls (B) and cylindrical walls (D). The bottom forms she identified are rounded bottoms (1) and pointed bottoms (2).²³³ The Sittard beaker has a rounded bottom, but its wall shape is somewhat in between A and B, but probably more concave (A). The ground form is thus A1. Type A1 dates to the sixth century, the elongated specimens date somewhat later than the squat specimens.²³⁴ The elongated forms, of which the Sittard beaker is one, occur in the first half of the sixth century but are more frequent around the middle of the sixth century and the second half of the sixth century. The decoration of loops and horizontal threads are considered to be exceptional.²³⁵ Only three specimens with a similar decoration are discussed.²³⁶ The shapes of these beakers, however, are not similar to the Sittard beaker. They are from Coulommès et Marqueny (F), grave 89, from Fluy (F), and from Junkersdorf (G) grave 355,²³⁷ which is not far from Sittard.

Koch provided an overview of bell beakers with rounded or sagging bottoms. It clearly shows that the predominant occurrence of this bottom type is in the cemeteries along the river Rhine or adjacent areas.²³⁸ The Sittard beaker compares to her form type 6, although the specific decoration of glass threads on the Sittard beaker is not considered.

Siegmund identified four types of bell beakers on the basis of the relative diameter of their belly to avoid the subjectivity of descriptive criteria with regard to the shape of the wall.²³⁹ Siegmund did not consider the shape of the bottom and decoration as chron-

ological relevant criteria. The Franken AG changed this classification with the introduction of a less complicated arithmetic method, what resulted in five bell beaker types.²⁴⁰ Siegmund’s type Gla8B and 8C were distinguished on the basis of their height/bell width index, but date to the same phases and were ultimately regarded as type Gla8B/C. The specimen from Sittard can be identified as this Franken AG type Gla8B/C, which dates to their phases 4-6 (510/25-610/20), but predominantly to phase 5 (565-580/90).

Legoux, Périn and Vallet identified three types of bell beakers (*gobelets campaniforme*) on the basis of wall and bottom shapes. The Sittard beaker with rounded bottom can be classified as type 450 which dates from the second half of their phase MA2 to MR1 (520/30-630/40).²⁴¹ The Sittard beaker can thus be dated to the second half of the sixth century and beginning of the seventh.

Bell beaker: vertical ribs, pointed bottom
34 (34-3-1)

Bell beaker 34-3-1 from grave 34 is an olive green specimen with vertical ribs on the outer surface of the wall, starting at the ‘carination’. The upper part of the beaker is gone, and the bottom point is broken. The remainder of the beaker consists of eight wall and four bottom fragments. The beaker has an incurved wall profile and the bottom is pointed, with probably originally a bulge or drop. This bell beaker was found in the middle of the northern section of the grave of a man (identified on the basis of a lance head) and was thus deposited in between the presumed former location of the feet of the now completely decayed body.

This form, a pointed bottom with incurved wall, is similar to Maul’s general type B2. More specifically, it can be identified as form ‘Rosmeer’ within this group because of its elongated bottom.²⁴² Type B2 is a heterogeneous group, but type ‘Rosmeer’ dates relatively late, to the second half of the sixth century and beginning of the seventh century.

Koch shows that bell beakers with pointed bottoms are more frequently found along the Meuse and Northern Gaul than they are in the Rhineland.²⁴³ The Sittard beaker is comparable to form 5 of her overview of bell beaker bottoms, which also includes type Rosmeer. The distribution pattern of these beakers shows a concentration in the middle Meuse area. The Sittard cemetery falls thus rather well within the distribution pattern of similar beakers, and was thus probably obtained through the regional or local network of exchange.

This lower part of a bell beaker can be identified as type 449 of Legoux, Périn and Vallet; it dates from the second half of their phase MA2 to MA3 (540/50-600/10).²⁴⁴

Bell beaker: faint ribs, bottom shape unknown.
11 (11-10-1)

The upper part of a bell beaker was displayed in a showcase in museum ‘Het Domein’ (in Sittard) in which numerous objects from grave 11 were also on display (fig. 4.67). A find number was not recorded on the beaker; but it is supposedly the glass vessel (11-10-1) which is recorded on the field drawing of grave 11. It is the upper part of a light green incurved bell beaker. Vertical, or slightly diagonal, ribs can be observed on the outer surface of the glass vessel, although these are rather faint. The remains of the bell beaker are fragmented, but glued together, the rim is incomplete. The beaker was found in the middle of the southern section in the grave of a woman (identified on the basis of beads), and thus near the presumed position of the head of the now nearly completely decomposed body. It is difficult to assign a type to this beaker since it is for its greatest part gone.

Glass: fragments
11 (11-6-1); 24 (24-3-1); 32 (32-1-2); 43 (43-1-5)

Blue glass fragment 11-6-1 from grave 11 is rather thick and some production lines can be observed on its surface (fig. 4.67). It might be a fragment of a Roman glass bottle, which have relatively thick walls and bottoms compared to Merovingian glass vessels. It was found near the southern wall of the grave of a woman (identified on the basis of numerous beads), together with a number of other finds. It could have been stored in the small beaker, together with a polished stone and a half a blue Roman melon bead, as a sort of ‘amulet’ (see the section on containers below), since it was found in the beakers proximity which is also a Roman specimen. The finds may have been removed from the small beaker before deposition but placed in each other’s proximity.

From grave 24 two fitting glass wall fragments (24-3-1) are known (fig. 4.67). They are light green and show some air bubbles. It cannot be established to which form of glass vessel the fragments originally belonged. The fragments were found in the reopening pit in the middle of the grave. It is therefore not certain whether the fragments initially belonged to a vessel removed from the grave or that they entered the grave when the reopening pit was dug.

A find of seven glass fragments (32-1-2) in grave 32 is mentioned; they are now missing. The fragments are described as six wall fragments (5-20 mm) and one rim fragment (9 mm): they are olive green and thin and show some elongated air bubbles. They were found together with beads in approximately the middle of the grave.

Eighteen small glass fragments (43-1-15) were found in grave 43; they have diameters ranging from 3 to 11 mm. They are dark brown with applied threads of the same colour. The pattern of the threads cannot be reconstructed. It is not possible to identify the glass vessel to which they belonged. Altogether, the vessel types to which the glass fragments originally belonged cannot be reconstructed; they cannot be classified and dated.

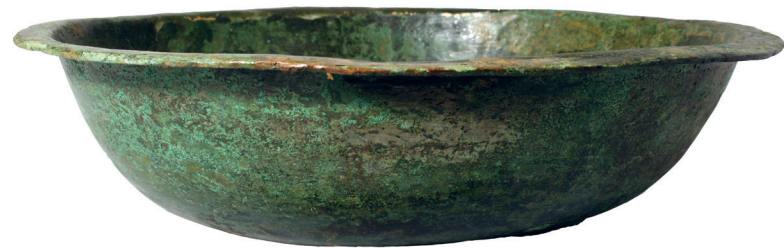
Bowl: copper alloy
14 (14-7-2)

One copper alloy bowl was found in the Sittard cemetery (fig. 4.68). Copper alloy bowl 14-7-2 from grave 14 is a simple bowl, without decoration. The bowl was also without handles or traces of their attachment to the bowl. The bowl has a height of 7.1 cm and a mouth diameter of 27.4 cm. It has an outward folded, horizontal rim, also without decoration. The bowl was found in the north-eastern section of the chamber outside the coffin; a lance head and a biconical pot were found in its proximity.

Copper alloy bowls are relatively rare finds from Merovingian grave contexts, but some were found in the surroundings of Sittard. A copper alloy bowl with two handles was found in the cemetery of Borgharen,²⁴⁵ and one, also with two handles, was found in the cemetery of Obbicht.²⁴⁶ Remains of one specimen were found in grave 45 of the Meerveldhoven cemetery, remains of one or two in the Lommel-Lutlommel cemetery.²⁴⁷ Copper alloy bowls were found in five out of the ten chamber graves in the Soest cemetery (Germany).²⁴⁸ Copper alloy bowls of fragments thereof were found in graves 503, 763 and 775 of the Rhenen cemetery²⁴⁹ It is peculiar that such bowls from the southern Netherlands were all found in cemeteries of the ‘countryside’, and not in the ‘urban’ cemeteries of Maastricht. The mentioned bowls, however, are all relatively simple specimens in the corpus of copper alloy bowls known from Merovingian Gaul. The more exclusive bowls have foot stands, elaborate handles and are decorated. The distribution map of copper alloy bowls presented by Peters and based on the older study by Schulze only shows one find spot in the Netherlands: Rhenen.²⁵⁰ Several new find spots can be added although we did not carry out a comprehensive survey.

The Franken AG’s classification of copper alloy bowls is based on Christlein’s classification.²⁵¹ Simple bowls of copper alloy sheet metal without decorated rim and without a foot stand are classified as Franken AG type BrgF, which dates to Franken AG phases 4-5 (510/25-580/90).²⁵² However copper alloy bowls in our region seem to date rather to the second half of the sixth and beginning of the seventh century.²⁵³

Fig. 4.68
Copper alloy bowl, grave 14 (scale 1:2).



(231) Feyeux 2003, 36, fig. 12. (232) Feyeux 2003, 119-120. (233) Maul 2002. (234) Maul 2002, 124-127. (235) Maul 2002, 59. (236) Maul 2002, 61. (237) La Baume 1967. (238) Koch 2001, 264-265, abb. 111, 569, Liste 27. (239) Siegmund 1998, 170-172. (240) Müssemeier *et al.* 2003, 71-72. (241) Legoux/Périn/Vallet 2004, 21, 50, 55 (type 450). (242) Maul 2002, Band II, 252. (243) Koch 2001, 248, Abb. 103. (244) Legoux/Périn/Vallet 2004, 21, 50, 55 (type 499).

Containers: wood and ceramic

Apart from the purses, of which the leather is completely decayed but which are identified on the basis of their presumed contents, mounts and location in the graves, other sorts of ‘containers’ were also detected in the Sittard cemetery. These are three wooden boxes and a ceramic beaker, which seems to have been used as a container for substances other than food or liquids.

Iron mounts and wood shadows

Find numbers: 5 (5-6-2; 5-6-3; 5-6-6); 14; 16 (16-5-1; 16-5-2; 16-5-3.1; 16-5-3.2; 16-5-4; 16-5-5; 16-6-1; 16-6-2); 71 (71-10-10)

A number of metal strips and rivets were identified as the mounts of now completely decayed wooden boxes on the basis of their shape and location in the grave. The imprints or shadows of decayed wooden walls of presumably boxes were observed in two graves (14 and 71).

In grave 5 a bent iron strip (5-6-2) was found to the left side of the upper body, as was an iron band/rod with a copper alloy rivet with a diameter of 1.4 cm (5-6-6), and an indeterminate triangular iron plate (5-6-3). A number of utensils, which are generally known as the contents of purses, were found in the proximity of the mounts. The iron strip, however, with its length of 5.3 cm and width of 1.5 cm, can be identified as a plate that fixed the corner of a wooden box, as can the other strip and plate. Unfortunately, other mounts were not uncovered. It is not absolutely certain whether the mounts were of a wooden box since traces or shadows of its walls or bottom were not observed.

Four corner mounts and two additional hinged mounts were found in grave 16 of a woman (identified as such on the basis of the beads). Of the four corner mounts two are complete (16-5-1; 16-5-2), one is without its bent extremity (16-5-3.2), and one is without a part of its bent extremity (16-5-3.2). It can be assumed that these incomplete mounts originally resembled the two complete mounts. The three mounts for which it can be established all have one part varying from 7.9 to 8.0 cm. The other parts of the complete mounts are 7.3 and 7.7 cm. One iron nail is preserved on only one mount. Similar nails probably fixed the extremities of all the four mounts to the wooden box. Two rectangular plates with looped extremities attached to one another (16-5-4) were found in the proximity of the described mounts. The plates might have functioned as a sort of hinge of the wooden box. They were attached to the wooden box with iron rivets. Two iron links (16-5-5), attached to one another, were also found in association with the described mounts. It remains uncertain what their function was. Two small sheet copper alloy fragments with engraved or stamped in decoration (16-6-1 and 16-6-2) were also found in this grave, although at some distance from the other mounts; they may have been fragments of the copper alloy decoration of the box. Shadows or imprints of the walls of a wooden box were not found in this grave. The mounts were also found at different locations inside

Fig. 4.69
Container: ceramic pot with possible contents, grave 11 (scale 1:4 and 1:2).



the grave. A rectangular pit was later dug in the eastern section of the grave. The pit contained charcoal and burned loam, and an egg shaped pot was also found in it. The mounts of the wooden box were found beneath and at some distance from the rectangular pit. The mounts might have moved from their original location when the pit was dug; it is thus not certain where in the grave the box was placed.

In grave 14 only the shadows or imprints of the walls of a former wooden box were found in the southern half of the chamber grave, to the right of the coffin. The box was thus placed in the section of the grave associated with the upper part or head of the body of a man (identified as such on the basis of a seax and a lance head). Contents which belonged to this box were not found; they might have been of organic materials (textiles?) which were not preserved. It seems as if belt fittings (plate buckle with counter plate) were deposited on top of this container, since their find locations are not recorded inside the outlines of the box or coffin. This suggestion is in line with the find depth of these belt fittings compared to the other finds in its surroundings: they were recorded at a higher level within the chamber grave.

The imprints or shadows (71-10-1) of the walls of a nearly square wooden box (28.8 x 31.2 cm), now completely decomposed, was observed in the north-eastern segment of grave 71. It was deposited to the right of the right lower leg in a broad grave of a woman (identified as such on the basis of beads, a bracelet and a finger ring). Contents of the box were not found. It might have contained organic objects or food, which left no traces.

Wooden boxes are not uncommon in Merovingian graves. They are mainly identified on the basis of mounts (see graves 5 and 16), but also on the basis of decorated copper alloy sheet metal which covered them. Koch provides an overview of wooden boxes identified on the basis of their copper alloy plating.²⁵⁴ Two plated wooden boxes were found in Pleidelsheim graves 128 and 140, both of women. The associated distribution pattern shows that the majority of wooden boxes with copper alloy plating were found in cemeteries along the river Rhine, although some deviant location can

be found in the Ardennes and northern France. Finds of similar boxes were not recorded along the river Meuse.

However, boxes without sheet (copper alloy) metal might have been deposited in graves rather frequently, also in cemeteries along the river Meuse. Their identification depends on the preservation of wood or the shadows they left behind. In the cemetery of Mungersdorf for example two wooden boxes were identified on the basis of imprints only and one on the basis of wood remains and copper alloy sheet metal. In grave 63 a wooden box of 40.0 by 60.0 cm was deposited in the south-western corner of a chamber grave.²⁵⁵ In grave 91b a smaller box of 12.0 by 14.0 cm was deposited.²⁵⁶ Copper alloy sheet metal with wood remains was found in grave 57. The analysis of the wood revealed that the box was made of softwood. It was deposited near the feet.²⁵⁷ Boxes can be part of lavishly furnished graves (mostly boxes covered with copper alloy sheet metal or antler plates²⁵⁸), and of less copious graves as the ones in Sittard-Kemperkoul; the wooden boxes in less lavishly furnished graves are probably often those without decorative elements of sheet metal.²⁵⁹

Container: ceramic pot

Find number: 11 (11-2-1)

A fine burnished, bright orange beaker is known from grave 11. It is a Roman beaker: it resembles the small egg shaped terra sigillata beakers known from the fourth century to some degree.²⁶⁰ It has an extended narrow foot and a spherical body, it has a height of 6.0 cm and a belly diameter of 6.8 cm. The top/neck of the beaker seems to be missing, but the surface of the fracture is rather smooth; it might be an old fracture (fig. 4.69). The beaker was found in the grave of a woman, in the southern section of the grave, presumably near the head. This deviant find location (compared to those of Merovingian pottery), the Roman origin of the beaker, the smooth surface of the mouth fracture, and the fact that a number of objects, generally known as the content of purses, were found in its proximity, are all strong indications that it was used as a ‘container’. The objects which might have been kept in the beaker are a thick blue fragment of Roman glass, a smoothly polished stone, a rectangular iron plate (unidentifiable object), and half of a blue Roman melon bead, which was not associated with the extended collection of beads known from this grave. Altogether, the objects seem to form a special set. It can be assumed that this collection was kept in the beaker but that the objects fell out or were taken out of it when it was placed in the coffin; the field drawing shows that the beaker was found lying at its side.

Mounts / plates: various

Find numbers: 88 (88-1-1.1; 88-1-1.2; 88-1-1.3)

Three resembling thin copper alloy plates with rivet holes are known from grave 88. The rivets are not preserved. One of the plates is complete: it is a rectangular plate with four rivet holes. Two of the plates are damaged; parts of them are missing and they show only two of the original four rivets holes. Similar plates are identified as thin plates attached to the back of back plates: the leather belt went through the open space in between the thin plate and the more robust back plate at the face side of the belt. However, back plates or other belt fittings, indicating the former presence of a belt, are not known from Sittard grave 88.

Rivets

Find numbers: 9 (9-1-1; 9-1-2); 34 (34-2-3; 34-2-4; 34-2-5); 43 (43-1-2)

The majority of the single rivets are discussed in combination with the objects they originally belonged to (seaxes, belt fittings, shield bosses, wooden boxes). The other single rivets could not be associated with a matching object, and are here discussed as separate category.

The two copper alloy rivets (9-1-1; 9-1-2) from grave 9 were the single metal finds from this grave. One of the domed rivets has a carved rim; a similar rim was probably also present at the base of the other rivet. The heads of both the rivets have a diameter 1.6 cm. The rivets were found in the north-eastern section of the grave, together with a biconical pot in fragmented condition.

Iron rivet 34-2-4 from grave 34 is plated with copper alloy. It has a domed head, and a diameter of 2.1 cm. Wood remains could be observed at its backside: it was thus probably of a wooden box or shield boss. Two other rivets (34-2-3 and 34-2-5) were also found in this grave of a man (identified as such on the basis of a lance head and flint) along the middle section of the western wall or in the middle of the grave (this find number was recorded twice on the field drawing).

Rivet (43-1-2) from grave 43 is a copper alloy rivet with organic material preserved at its back side, probably bone. The other objects from this grave are not indicative for its original function. It was found in the grave of a woman.

(245) Lauwerier *et al.* 2011, 95. (246) Beckers/Beckers 1940. (247) Verwers 1978, 295, fig. 48, k/l; Van Bostraeten 1965, 65-67, afb. 15, 98. (248) Peters 2011, 137-141. (249) Wagner/Ypey 2011. (250) Peters 2011, 138, Abb. 95. (251) Müssemeier *et al.* 2003, 92, note 251 (Christlein 1968: Qualitätsgruppen unter der Grabausstattungen des 6. und 7. Jahrhunderts aus Süd- und West-Deutschland, Diss. Freiburg 1968, 176-185). (252) Müssemeier *et al.* 2003, 73. (253) Peters 2011, 140. (254) Koch 200, 241-244, abb. 99, 563, liste 22. (255) Fremersdorf 1955. (256) Fremersdorf 1955. (257) Fremersdorf 1955. (258) Dijkman/Ervynck 1998, 42-43. (259) For a discussion and overview of wooden boxes see De Haas/Theuws 2013, 123-125. (260) Pirling/Siepen 2006, 47, Gellep 14.

Iron: indeterminate fragments

Find numbers: 8 (8-5-4); 11 (11-4-1); 30 (30-3-4); 37 (37-2-4); 48 (48-1-2); 49 (49-3-2; 49-3-3; 49-3-4; 49-3-5; 49-3-6); 71 (71-4-1); 85 (85-1-1); 87 (87-3-1; 87-6-1)

A small iron pointed fragment (8-5-4), which might be the tip of an iron knife or strap end was found in the northern section of grave 8, in association with iron shoe belt fittings with inlay. It has a length of 2.0 cm and a width of 1.5 cm. Since it does not resemble the strap end from this grave, it is for now not identified as such. It remains uncertain what this fragment represents.

A rectangular iron plate (11-4-1) was found in association with a Roman melon bead fragment and a thick blue glass fragment, probably also Roman. They were found in association with a Roman beaker; the indeterminate rectangular plate might be part of this ‘exotic’ collection.

In grave 30 an iron band fragment, slightly bent (30-3-4) was found together with various belt fittings and a seax in the south-western segment of the grave. It must have been deposited in association with these finds, but its exact function is not clear. It has a length of 5.1 cm and a width of 1.9 cm.

An iron fragment (37-2-4), slightly bent, with a length of 3.8 cm and a width of 1.0 cm was found together with belt fittings, a pair of shears, knives in the middle of a disturbed grave of a man. It is for now not known what this fragment was part of and what its function was.

An indeterminate iron fragment (48-1-2) was found in grave 48. It can be the pin of a second iron nail, or a fragment of a knife hilt. The fragment was found in association with a nail fragment (48-1-1), close to the shadow left by a wooden construction, maybe the floor of the chamber.

In grave 49 five indeterminate corroded iron fragments were found. One of the fragments has a rounded extremity with remnants of a copper alloy rivet. An X-ray photograph is unfortunately not available; they might be fragments of belt fittings.

In grave 71 a flat iron strip with one iron rivet attached to it (71-4-1) was found at the left side of the pelvis, in the grave of a woman. The strip has a length of 5.8 cm and a length of 0.9 cm. It is heavily restored, but its function remained unknown.

A fragment of copper alloy sheet material (85-1-1), with a diameter of 2.5 cm, with bone material attached to it was found in grave 85. It was the only find from this grave, but unfortunately, its function remains obscure.

Two indeterminate iron fragments (87-3-1), not cleaned or restored, were found in the south-western section of grave 87, which was probably a woman. Another indeterminate corroded iron fragment, not restored (87-6-1) is also known from this grave.

Large iron nails

Find numbers: 20 (20-3-3); 45 (45-1-1); 48 (48-1-1)

A small number of large iron nails is known from the Sittard cemetery. Similar nails are generally identified as coffin nails. In view of the low number uncovered and their find locations in the graves it seems unlikely that the nails were used as coffin nails.

Nail 20-3-3 from grave 20 is a large iron nail of which a small fragment of the tip is missing. The nail has a domed head, with a diameter of 1.8 cm. The length of the nail is 5.9 cm, the pin is slightly bent. The nail was found in association with a seax and belt fittings, on the breast of the now nearly decomposed body.

Large iron nail 45-1-1 has a domed head with a diameter of 2.1 cm. The pin of the nail is for the larger part gone, the remainder has a length of 3.8 cm. The nail was found in association with belt fittings in the middle section of the eastern half of the grave. The location of the nail is rather peculiar. Did it move from its original location after the decomposition of the wooden coffin, or was it deposited together with the belt fittings?

Iron fragment 48-1-2, which might be the pin of an iron nail, was found outside the coffin in the eastern part of the chamber, in association with the shadow of a wooden construction (the floor of the chamber?). The fragment was thus probably the pin of a large nail used in the wooden construction of the chamber.

Organic remains: unidentifiable

Find numbers: 8 (8-4-2); 16 (16-1-1); 43 (43-1-3.4); 87 (87-5-1)

Organic fragments (8-4-2) from grave 8 were probably wood or bone remains. One fragment has a length of c. 2.5 cm, the other a length of 1.0 cm. The fragments were found in the north-eastern segment of the grave, in association with a copper alloy strap end. This strap end was different from the ensemble of shoe fittings also known from this grave, and was probably used differently. The wood or bone remains, however, do not clarify its function.

In grave 16 remnants of charcoal and burnt loam (16-1-1) were found in the middle of the grave, inside the recorded outline of a pit: the charcoal and loam remains are distributed throughout this pit in which also a pottery vessel was found. Other objects found in or in the proximity of the pit were various mounts identified as the mounts of a wooden box. The pit is recorded as a later intrusion.

Some textile remains (43-1-3.4) are possibly present in a corroded ensemble of objects. This ensemble consists of various girdle hangers; the textile remains may be the remnants of a leather purse or of a leather strap that attached the girdle hangers to the waist belt.

Textile fragment (87-5-1) from grave 87 was found in association with a plate buckle in approximately the mid eastern side of the grave. The plate buckle was in view of its dimensions and find location identified as a possible fastener of a purse. The textile remains might either be remnants of the purse or a leather strap.

Human remains

Find numbers: graves 5 (0-0-0); 11 (11-9-1); 14 (0-0-0); 20 (0-0-0); 26 (0-0-0); 30 (0-0-0); 43 (43-1-2); 48 (48-6-1); 71 (71-6-1; 71-7-1; 71-9-1); 80 (80-4-1); 82 (0-0-0); 85 (0-0-0); 86 (0-0-0)

Skeletal remains were poorly preserved in the Sittard graves. Fragments or imprints of the skeletons were recorded only in thirteen graves. The recorded remains were in such a bad condition that they could not be retrieved from the graves and cleansed and preserved for further analysis. The few remnants (predominantly teeth) that were excavated and preserved were not analysed yet.

In grave 5 the articulated remains of the lower body and arms were recorded and excavated. They are not analysed by physical anthropologists. It is identified as the grave of a man on the basis of the grave finds (axe and lance head).

From grave 11, the grave of a woman with an extended ensemble of beads and also other objects, some teeth (11-9-1) were recorded in the southern section of the grave. They indicate that the body was buried with the head in the south. The teeth were possibly preserved, but are not available anymore. They were thus not analysed by physical anthropologists.

The imprint of a skull was recorded in grave 14. The field drawing also mentions remnants of a skull: they are excavated but not analysed yet. The skull was found in the southern section of the grave; it was thus with certainty a south-north orientated burial. It was identified as the burial of a man on the basis of the grave finds (lance head and seax)

In grave 20 the imprint of a skull in the northern half of the grave was recorded, as is the imprint of one of the arms. It is the only grave from Sittard for which a north-south orientation (deviant from the general S-N orientation) could be established unambiguously. It was identified as the burial of a man on the basis of grave finds (axe and seax).

The imprints of the pelvis and the left upper arm were recorded in grave 26. The locations of the imprints indicate that it was an S-N burial. It was the grave of a man, identified on the basis of the associated lance head, seax and sword. Skeletal remains were not excavated or preserved.

The imprints of the two upper arms were recorded in the southern half of grave 30. It was thus an S-N orientated burial of a man (identified on the basis of lance head and a seax).

In grave 43 the imprint of skull (43-1-2) was discovered in association with beads in the southern half of the grave. It was thus the burial of a woman.

The imprint or shadow of presumably the upper right leg (it was recorded in approximately the middle of the grave along the eastern wall) was recorded (48-6-1) in grave 48. The notes on the field drawing indicate that the upper leg was observed as an imprint; skeletal remains were thus not excavated and preserved.

In grave 71 a nearly completely articulated skeleton was recorded. Only the right leg (71-6-1), the jaw (71-7-1), and the skull (71-9-1) were excavated and preserved. The burial can be identified as

an S-N orientated burial on the basis of the remains, and of a woman on the basis of the associated finds (beads, bracelet and a finger ring).

Teeth (80-4-1) were found in grave 80 in the south-eastern corner of the coffin, in the proximity of beads. It was thus an S-N orientated burial of a woman.

In grave 82 the imprint of a leg was recorded in the middle of the grave. The only other finds from this grave were a plate buckle and pottery fragments.

The shadows of the articulated skeletal remains of the lower body were recorded in grave 85. The field drawing, however, mentions that only the imprint of the feet was observed and recorded. Skeletal remains were not excavated and preserved. On the basis of the recorded imprints it can be identified as an S-N orientated burial. Gender specific finds are not known from this grave.

In grave 86 a skull and complete articulated lower body were observed. It could be identified as the burial of a man on the basis of a lance head, shield boss and seax. Skeletal remains from this grave were not excavated or preserved.

Missing objects: not available anymore, no description/drawing/photograph available

Find numbers: 17 (17-1-1); 36 (36-3-1); 48 (48-3-1); 71 (71-1-1)

Fragment 17-1-1 from grave 17 is described as a copper alloy fragment on the field drawing, but the object is not available anymore, and neither is a drawing or photograph. It was found in the middle of the southern half of the grave; it was thus presumably deposited on the breast of the deceased. A spindle whorl of amber was also found in this grave (although the field drawing mentions that is entered the grave through the underground passage of a mole.

Find number 36-3-1 on the field drawing refers to an iron object found in the south-western segment of the grave. This object is not available anymore. In the thesis of Zoetbrood this find number refers to an unidentifiable iron object.

Find number 48-3-1 refers to a copper alloy fragment which is not available anymore. This number refers to an unidentifiable object in the thesis of Zoetbrood. Drawings or photographs are not available.

Find number 71-1-1 refers to an iron object found on the left lower leg (skeleton remains were preserved). This object is not available any more. Three finds numbers from this grave, which are not available anymore, are described in Zoetbrood’s thesis but are not recorded on the field drawing. These are an iron plate buckle with two copper alloy rivets (c), an iron knife (g), and an indeterminate iron object (h). It is not clear to which find numbers on the field drawing these objects refer. Find number 71-1-1 probably was the iron knife, since an object in the shape of a knife was drawn on the field drawing as find number 71/1.

Belt fittings

Plate buckle: iron, broad triangular plate, without decoration
40 (40-7-1); 51 (51-4-1; 51-5-1; 51-6-1)

Only the plate is left of the iron plate buckle from grave 40 (fig. 4.70). The broad plate base shows remnants of the construction that attached it to the buckle loop, which is now gone, the type of construction cannot be determined. A wrapped and slotted construction is most likely. Two rather large domed copper alloy rivets are present. A rivet hole is visible at the other extremity of the plate; it can be assumed that a similar rivet was originally present here. The iron plate has a profiled outline. The maximum width of the plate is 6.4 cm, and the associated leather belt probably had the same width. The plate was found at a depth of 1.30 m in a so-called double grave, together with a sword and seax. On the basis of its find depth it is ascribed to the lower grave in which also two biconical pots, a seax, lance head, shield boss and sword were found. Waist belts with widths comparable to the width of the belt from grave 40 are frequently associated with swords or seaxes since these heavy items were often attached to it with some additional straps.

The plate buckle (51-4-1) and back plates (51-5-1 and 51-6-1) from grave 51 were found together, but do not seem to form a match (fig. 4.70). The plate buckle is complete but heavily restored. Its exact details and construction cannot be identified. The remnants of one copper alloy rivet can only with difficulty be

identified on the extremity of the plate. It is likely that two similar rivets were originally present on the base of the plate. The buckle loop is oval and has a D-shaped section, and an iron shield tongue is attached to the loop. The buckle loop had an outer length of 3.9 and an inner length of 2.5 cm. The base of the plate has a width of 2.6 cm and the plate has a length of 7.2 cm. The plate buckle probably served as the fastener of a waist belt with a width of approximately 2.5 cm. Two back plates were found in association with the plate buckle. One is an iron back plate (51-5-1) with four copper alloy rivets; it was found close to the plate buckle. It was a fitting of a belt with a width of approximately 5.3 to 5.6 cm, which is not in line with the dimensions of the reconstructed leather belt width on the basis of the plate buckle. Three, of original four, rivets, in a poor condition, can be identified. These are copper alloy rivets with a domed solid head, executed with a horizontal extended rim, also of copper alloy, in which, although this is difficult to establish, small stripes or dots are carved. It is possible that these rims were originally inlaid with silver and/or copper alloy. A copper alloy stripe with small cut out dots is present on the plate; it might be a remnant of the original decoration of the plate or a remnant of one of the rivets rims. The other back plate and smaller additional plate (51-6-1) from this grave were also found close to the plate buckle. The back plate has a length of 6.3 cm, a width of 4.9 cm, and has four domed copper alloy rivets. Leather remains are preserved on its back. The additional plate is thinner; it might be an additional belt fitting of the waist belt. The plate buckle and two back plates were found in a grave with two superimposed burials; they belong to the inventory of the lower burial. It was recorded that the three belt fittings were found in close association, close to the hilt of a seax, in the middle of the grave but it is

difficult to match the two back plates with the plate buckle since their dimensions are rather different. The belt associated with the plate buckle would have been too narrow for the two plate buckles; it might have belonged to an additional strap which attached the seax from this grave to the waist belt. The two large back plates and additional plate might have been part of this waist belt.

The large plate buckle from grave 40 is classified as Siegmund's type Gür4.5, which dates to Rhineland phase 8 (610-640).²⁶¹ The two large back plates from grave 51 are classified as fittings of a belt of which it is presumed that it originally had a large iron plate buckle, and thus also as type Gür4.5. The smaller plate buckle is classified and dated in line with the associated waist belt fittings.

Plate buckle: iron, broad plate
35 (35-2-1)

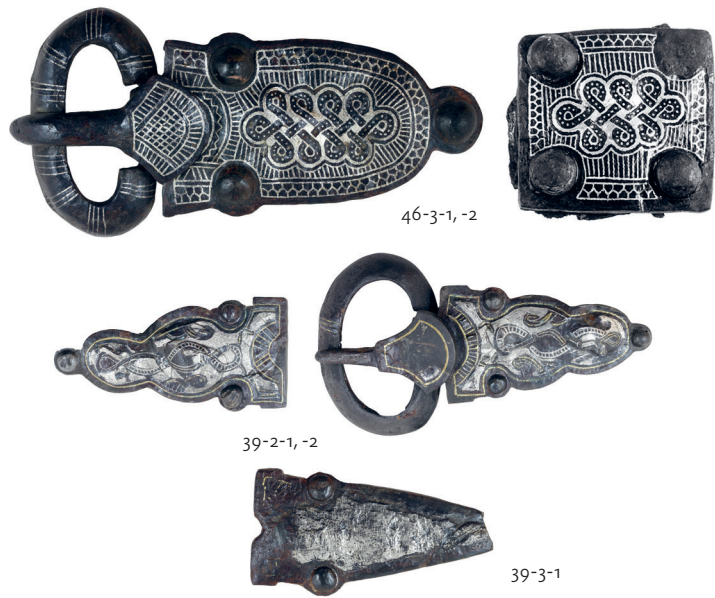
The plate of the iron plate buckle from grave 35 (35-2-1) is nearly completely gone; its original shape cannot be identified but it was a relatively broad plate, and it was certainly not round (fig. 4.70). Two small copper alloy rivets are still present. The plate is attached to the rod of the oval buckle loop with a wrapped and slotted construction. The oval buckle loop has a D-shaped section and a shield tongue which is attached to the rod with the loop at its back side. The buckle loop has an outer length of 3.7 cm and an inner length of 2.6 cm, the base of the plate has a width of 4.2 cm; the plate buckle was thus attached to a belt with a width of approximately 4.2 cm, which was probably narrower towards its end so that it could pass through the buckle loop. The plate buckle was found in the middle of the grave close to the western wall, which is in accordance with its deposition as waist belt fitting. The other finds from this grave are a biconical pot, a simple ring and a number of beads; it was thus in all probability the burial of a woman.

Despite the incompleteness of the plate the belt fitting it can be classified as Siegmund's types Gür4.3-4.7 (broad iron plate buckles with triangular to trapezium shaped plates, with or without decoration), which date to Rhineland phases 7-9 (585-670).²⁶²

Plate buckle, iron: tongue shaped, geometric silver inlays
46 (46-3-1; 46-3-2)

The iron plate buckle and back plate from grave 46 form a set of matching belt fittings (fig. 4.71). The plate buckle is tongue shaped and has three domed copper alloy rivets of which one is present on the protruding extremity of the plate and two are on the base of the plate. The length of the plate is 8.4 cm and its width 4.6 cm. Some leather remains are preserved on its back. The attached buckle loop with shield tongue has a D-shaped section and is attached to the plate with a wrapped and slotted construction. The buckle loop has an outer length of 6.1 cm and an inner length of

Fig. 4.71
Iron belt sets with inlay, graves 46 and 39 (scale 1:2).



4.0 cm. The matching back plate has a length 5.2 of and a width 4.8 cm; the fittings seem to have been attached to a belt with a width of c. 4.6 cm, which might have been narrower at its end to let it pass through the buckle loop. On the back plate three of the original four iron rivets, identical to the ones on the plate buckle, are present. The plate buckle and back plate were found in association, close to the seax. They have nearly identical geometric decoration schemes of silver inlay. The outer edges of the decoration fields consist of single honey comb bands that follow the edges of the plates. The middle fields are filled with single braided bands which intersect the silver plating and which themselves are filled with silver dots. The braided bands on the two plates are bordered with straight stripes. A combination of straight and undulating stripes is applied on the base of the plate of the plate buckle; they follow the curve of the shield tongue. The loop of the buckle is decorated with zones of four or three stripes; the shield base of the tongue is decorated with a raster of stripes.

The belt fittings were found close to the seax, which was found 110 cm from the western wall and 80 cm from the southern wall, in association with a knife. It were fittings of the waist belt to which the seax was attached with additional straps.

Large belt fittings with geometric monochrome inlays are classified as Siegmund's type Gür4.6, which dates to Rhineland phase 8B (625-640).²⁶³

Fig. 4.70
Iron belt fittings, graves 40, 51 and 35 (scale 1:2).



(261) Siegmund 1998, 31-32. (262) Siegmund 1998, 31-32. (263) Siegmund 1998, 32.

Plate buckle, iron: triangular, silver and copper alloy inlays, geometric pattern with animal style elements
39 (39-2-1; 39-2-2; 39-3-1)

Iron plate buckle 39-2-1 forms a belt fitting set with matching counter plate 39-2-2; they were found in a cremation vessel with some other finds and cremation remains (fig. 4.71). The plate of the plate buckle and the counter plate are triangular with undulating edges and protruding extremities. Three copper alloy rivets with domed heads are present on both plates. Both plates have one loop at their back, at the same location as one of the rivets on the front of the plates; it can be assumed that both plates originally had three loops at their back matching with the locations of the rivets. The surfaces of the plates are nearly completely covered with silver plating. The silver plated fields are bordered with single copper alloy threads which follow the curves of the plate edges, and with a copper alloy semi-circular band filled with horizontal stripes at the base of the plates. The semi-circular band on the counter plate is somewhat broader than the one on the plate of the plate buckle. It also shows two stripes that form a triangle; this feature is not present on the plate buckle. The silver plated surfaces of the two plates are intersected by cut out spaces in which single braided bands are applied. Half of the braided band on each plate is a silver ladder band and the other half is filled with a single copper alloy thread following the direction of the braid and which seems to end in a degenerated animal head, but this is not certain. Curling copper alloy bands are applied in cut out spaces in the middle of the plated fields and the extremities of the plated fields; these might also be identified as degenerated animal style elements. The buckle loop and shield tongue show traces of what was probably a more extended decoration scheme: one zone of three copper alloy threads can be discovered on the buckle loop, which was probably covered with additional zones of threads, and a copper alloy thread follows the edges of the shield of the shield tongue on which also some traces of a silver thread are preserved. The buckle loop has an outer length of 5.0 cm and an inner length of 3.5 cm. The plate of the plate buckle has a width of 3.2 cm and a length of 5.5 cm. The counter plate is somewhat longer; it has a length of 6.3 cm and a width of 3.1 cm. The plate buckle and counter plate were attached to a belt with a width of approximately 3.3 cm.

Belt fittings with polychrome inlays of a degenerated animal style are classified as Siegmund Gür4.8, which dates to Rhineland phase 9 (640-670).²⁶⁴

A second belt fitting (39-3-1), probably a counter plate, with a different appearance was also found in the cremation vessel of grave 39 (fig. 4.71). It is a triangular plate with originally a silver plated middle field; the silver was attached to the plate with the help of numerous disorganised scratches in the iron plate in which silver remains are still present. The surface of the plating is weathered and reveals these scratches. Some remnants of copper alloy threads can be observed at the base corners of the plate.

Fig. 4.72
Simple copper alloy decorated buckle with hollow loop, grave 10 (scale 1:1).



The extremity, with probably a rivet, is gone. Two iron rivets are present on the base of the plate; they are small rivets with domed heads and with silver threads applied around their base. In the base of the plate a small cut out space for the tongue of a plate buckle (not present) is present. The plate has a length of 6.4 cm and a width of 3.1 cm. Its dimensions are comparable to the other belt fittings from this grave but they are clearly of different belt sets. This second counter plate is classified as either Siegmund Gür4.7 or Gür4.8 (depending on the original decoration scheme of the copper alloy threads, which is not clear anymore). Nonetheless, both types date to Rhineland phase 9 (640-670).²⁶⁵ According to the Franken AG it is a type Gur4.8A (silver plating), which dates to their phase 8 (640/50-670/80).²⁶⁶ The other finds from this cremation vessel grave are a copper alloy rivet and an oil lamp (missing); the finds were not burnt and were thus placed in the cremation vessel after the body was cremated.

Plate buckle: broad plate

5 (5-3-1; 5-4-1)²⁶⁷

A broad plate buckle with shield tongue with round base and with three copper alloy rivets and a back plate with four copper alloy rivets were in the catalogue of Beckers and Beckers recorded as finds from grave 5, but they are now no longer present in the collection. It was not mentioned whether it were iron or copper alloy belt fittings. They were found close to the middle of the seax, which was found close to the northern wall of the grave. Nothing was mentioned about the shapes of the plates, but it was recorded that the length of the plate buckle was 10.0 cm and its width 7.0 cm. Assuming that it were broad iron belt fittings the possible types are Siegmund Gür4.1-4.7 (with or without decoration), which date to Rhineland phases 7-9 (585-670).²⁶⁸

Simple buckles: iron

18 (18-2-1); 20 (20-12-1.3); 37 (37-7-1; 37-8-1; 37-11-1); 45 (45-1-1); 50 (50-3-1; 50-4-1); 58 (58-3-1)

The catalogue of Beckers and Beckers mentions that an iron buckle (18-2-1) was found in grave 18, but its exact find location was

not recorded. The recorded ‘width’ of the buckle is 4.5 cm. A large corroded oval buckle with a find number matching with grave 18 is present in restoration laboratory Restaura. It is not certain whether it originally belonged to a plate buckle; for now it is considered to be a large oval buckle with an outer length of 4.6 cm and an inner length of c. 2.5 cm. It was found in a grave which also contained a spouted pot.

An iron rectangular buckle with a fragment of a simple iron tongue and remnants of the leather belt, which is fixed with two iron rivets, was found in grave 20. The maximum length of the loop is 3.8 cm. It is one of the finds found dispersed throughout this richly furnished grave of a man.

The iron buckle from grave 37 (37-7-1) has an oval loop with round section and a simple straight iron tongue. It has an outer length of 4.9 cm and an inner length of 3.5 cm; it was thus attached to a belt with comparable width. The second simple iron buckle (37-8-1) from this grave has a rectangular loop and a straight iron tongue. It is somewhat smaller with an outer length of 3.9 cm and an inner length of 2.9 cm. The two buckles were found at a depth of 1.50 m, near the lance head which was found alongside the long southern wall of the grave in association with a knife and arrow head. The other finds from this grave are a biconical pot, a glass vessel, another knife, and a bead. One of the buckles might have been attached to the waist belt; the other might have been attached to an additional strap. An additional triangular object (37-11-1) of three connecting plates, fixed with three small nails, was also found in this grave, although it was not recorded where exactly. One side of the triangle consists of two plates, leaving a space in between for perhaps a strap. It has a length of 3.3 cm. Its function remains uncertain, but for now it is assumed to have been associated with the two buckles and their straps/belts.

The iron buckle from grave 45 (45-1-1) has an outer length of 5.6 cm and an inner length of 3.6 cm: it probably belonged to a belt with a width of approximately 3.6 cm, and is, on the basis of these dimensions, identified as a waist belt fitting. Some remnants of mineralised textile or leather can still be observed on the surface of the buckle. The buckle has a D-shaped loop, a round section and a straight simple iron tongue. It was not recorded where in the grave it was found. The other finds from this grave are a knife and indeterminate iron fragments; it can thus not be decided whether it was the burial of a men or women.

Two simple iron buckles with straight iron tongues were found in grave 50. Buckle 50-3-1 has an outer length of 3.6 cm and an inner length of 2.4 cm; it was thus attached to a rather narrow strap, which nonetheless might have been used as a waist belt. It is a buckle with an oval loop and round section and has a straight simple iron tongue. The second buckle (50-4-1) also has an oval loop

with a round section and a straight simple iron tongue. It has an outer length of 3.3 cm and an inner length of 2.3 cm; it was thus attached to a strap of this width. The two buckles were found in the proximity, but a little more to the middle of the grave, of the knife which was found close to the northern wall and 70.0 cm from the western wall. This find location is more or less in accordance with the presumed location of a waist belt. The other finds from this grave are a part from a knife, a pottery fragment and beads, which indicates that it was the grave of a woman.

The iron buckle from grave 58 has an outer length of 4.9 and an inner length of 3.4 cm; it was thus attached to a belt with a width of approximately 3.4 cm. The buckle has an oval loop with a round section and a straight iron tongue. It is not recorded where in the grave the buckle was found. In view of its dimensions it might have been the fitting of a waist belt. The other finds from this grave are wood remains and an indeterminate round iron fragment. Simple iron buckles can date to the entire Merovingian period.

Simple buckle: copper alloy, hollow loop, decorated

10 (10-3-1)

A single simple copper alloy buckle was found in grave 10 (fig. 4.72). The loop is hollow and oval and has a rod. The copper alloy shield tongue is attached to the rod with its loop at the back. The shield tongue is without decoration, but is slightly profiled. The buckle loop is decorated with two grooves, alternating with three lines of stamped in dots. The loop has an outer length of 4.5 cm and an inner length of 3.2 cm; it was thus attached to a belt with a width of approximately 3.2 cm, which could have been used as a waist belt. The buckle was, however, found in the proximity of the biconical pot, which was found 30.0 cm from the short eastern wall in the middle of the grave, thus close to the presumed former location of the lower legs, in association with a brooch. The buckle and brooch were probably moved from their original location. The brooch indicates that it was the burial of a woman.

A similar specimen is classified by Böhner as type A6 which dates to his Stufe III (525-600).²⁶⁹ Legoux, Périn and Vallet classify decorated copper alloy hollow buckles as type 114, which dates to their phase MA2 (520/30-560/70) and sporadically to phase MA3 (560/70-600/10).²⁷⁰ Siegmund classifies simple copper alloy buckles with an inner width of more than 2.5 cm as type Gür2.7 which dates to Rhineland phase 5 (555-570), and mentions that they are predominantly known from the graves of women.²⁷¹ The Franken AG classify similar buckles as Gür2.6/7D (mushroom shaped tongue base) which belongs to their phase 5 (565-580/90).²⁷² A close parallel is known from grave 85 in the cemetery of Rübenach (Germany).²⁷³ This grave belongs to phase A3/

(264) Siegmund 1998, 32-33. (265) Siegmund 1998, 32-33. (266) Müssemeier *et al.* 2003, 21. (267) No longer present in the collection. (268) Siegmund 1998, 30-32. (269) Eisenach grave 07/10 (Böhner 1958, 181-183, Taf. 36). (270) Legoux/Périn/Vallet 2004, 15, 30, 52 (type 114). (271) Siegmund 1998, 24. (272) Müssemeier *et al.* 2003, 17, Abb. 6 (Schilddornschnalle). (273) Rübenach grave 85 (Neuffer-Müller/Ament 1973, Tafel 6, 85.33).

B1-2 (c. 525/35-600).²⁷⁴ The elaborately decorated bronze buckle from grave 224 from the cemetery of Kleinlangheim dates to Stufe AM III (560/70-600).²⁷⁵ Dating this Obbicht buckle to 565-580/90 seems a plausible option.

Plate buckles: iron, folded rectangular plates

4 (4-2-1; 4-2-2); 29 (29-5-1; 29-6-1); 45 (45-1-3)

From grave 4 a rectangular iron plate, wrapped around a rod, probably of a buckle is known. A cut out space, leaving space for a tongue, can be observed in the middle of the plate where it is wrapped around the rod. Remnants of two rivets are visible at the extremity of the plate. One side of the plate is covered with mineralised leather/textile, probably of a belt. This plate was probably the plate of a plate buckle. It has a length of 3.4 cm and a width of 3.3 cm. Other remnants (4-2-2) from this grave seem to form an iron buckle loop. It might be the buckle loop originally attached to the plate (4-2-1) described above. Its length cannot be determined.

Two buckles, one with shield tongue and one with a rectangular plate, were found in grave 29. Buckle 29-5-1 is an iron oval buckle with shield tongue and D-shaped loop section. It was found with iron fragments dispersed throughout the grave; its exact find location is not known. It has an outer length of 3.0 cm and an inner length of 2.1 cm; it was thus attached to a strap of c. 2.1 cm. The other buckle has an oval loop without tongue and a rectangular plate, wrapped around the loop. A rivet hole is present at the extremity of the plate, visible at its front and back side. It was also recorded to have been found with the iron fragments found dispersed throughout the grave. The loop has an outer length of 3.3 cm and an inner length of 2.3 cm; it was attached to a strap of c. 2.3 cm. The length of the plate is 2.5 cm and its width 1.7 cm.

The two (plate) buckles might have been associated with the horse bridle found in this grave.

Simple iron buckles with tongues with round bases and rectangular plates are classified as type 137 of Legoux, Périn and Vallet (identified as small shoe plate buckles) and dated to their phases MA3-MR1 (560/70-630/40).²⁷⁶

An iron plate buckle with remnants of a small folded rectangular plate with one rivet hole was found in grave 45 in association with a simple buckle and back plate. It belonged to a strap with a width of c. 3 cm. Their function remains uncertain.

Back plate: iron

45 (45-1-2)

A small iron rectangular back plate (2.8 x 2.3 cm) with four rivet holes and one rivet pin visible at its back was found in grave 45, in association with simple buckles. It is not known where exactly it was found in the grave, and its function remains therefore obscure.

Strap end: copper alloy

48 (48-2-1)

The copper alloy strap end from grave 48 is tongue shaped, has a length of 5.4 cm, a width of 2.1 cm and two domed copper alloy rivets going through the base of the plate, which is not split. The rivet pins are visible at the back of the plate. It is decorated with two lines of engraved short stripes along the edges of the plate and some on the middle field of the plate. It was attached to a strap of approximately 2.1 cm. It is difficult to identify its function since its find location was not recorded and other finds, apart from some indeterminate iron fragments, are not known from this grave. Legoux, Périn and Vallet classify similar strap ends as type 199 which dates to their phases MA1-MR1 (470/80-630/40).²⁷⁷

Plate, iron

31 (31-7-1)

A corroded rectangular plate with shadows of rivets and a rounded elevation is assigned to grave 31. It might be a back plate of a belt. The rounded elevation seems to be a rod shaped remnant, but it is not clear of which object. The X-ray photograph shows that the plate was without decoration. It might thus be an iron back plate, part of a belt set of broad iron fittings.

Plates, copper alloy: various

38 (38-3-1); 47 (47-2-1)

The catalogue of Beckers and Beckers mentions that two small indeterminate copper alloy fragments and one copper alloy lozenge shape plate (38-3-1) with four small rivets in each corner were found in grave 38. In the collection only the lozenge shaped plate is present. The plate has a length of 4.1 cm and a width of 2.7 cm. It has three (of originally four) small domed copper alloy rivets, in each corner one. The pins of the rivets are visible at the back of the slightly hollow plate. Such lozenge fittings are usually part of an ensemble of sword belt fittings.²⁷⁸ The other finds from this grave are fragments of a biconical pot and some iron nails.

The copper alloy plate from grave 47 is severely corroded, and its edges are weathered. The original shape of the plate is difficult to reconstruct, but it may have been triangular. At the base of the plate two copper alloy rivets are present. They attached the plate, probably a belt fitting, to a belt or additional straps. A third rivet might have been present at the other end of the plate. The remaining length of the plate is 1.9 cm and the base of the plate has a length of 1.9 cm. On the basis of the two rivets on the base of the plate it can be suggested that it was attached to a strap or belt with a width of c. 2.0 cm. The belt fitting was found in the middle of the grave, which matches with the presumed former location of a waist belt or purse. The only other find from this grave is a fragmented biconical pot.

Plate buckles: copper alloy, purse/shoe fittings

1 (1-3-1)

The copper alloy plate buckle with fixed plate (1-3-1) from grave 1 has a diamond-shaped plate with protruding extremity. Remnants of rivets could not be observed on the plate, but two loops are present at the back of the plate. The plate has a length of 2.2 cm and a maximum width of 1.2 cm. The rectangular buckle loop with simple straight copper alloy tongue has an outer length of 1.7 cm and an inner length of 1.2 cm; it was thus attached to a strap of approximately 1.2 cm. The plate buckle was found on the bottom in the middle of the grave; this might indicate that it was a purse buckle. Other finds from this grave are a biconical pot and spindle whorl, which indicates that it might have been the grave of a woman. Similar plate buckles are classified by Legoux, Périn and Vallet as type 130, which dates to their phases MA2-MR1 (520/30-630/40).²⁷⁹

Plate buckles: missing

30 (30-2-1); 49 (49-3-1)

A part of a plate buckle was recorded as find from grave 30; a corroded plate with a rivet, probably a belt fitting, is present, but it is not certain whether it is the find referred to in the initial catalogue. The other finds from this disturbed grave were a sword, a seax, an umbo and an axe. An iron buckle with a square iron plate with four copper alloy rivets was recorded as a find from grave 49; it is no longer present but on the basis of the available description it can be identified as a plate buckle. It was found in the middle of the grave. Further information is not available. The other find from this grave were a red bowl, a biconical pot and beads.

Possible large simple buckle: iron

19 (19-2-1.1; 19-2-1.2)

The catalogue of Beckers and Beckers mentions indeterminate iron fragments (19-2-1.1), among other finds, as finds from grave 19. In the restoration laboratory a corroded large ring shaped object is stored as find number VIB 45, which matches with the original find numbers assigned to this grave. It is therefore identified as one of the ‘indeterminate iron fragments’. It might be a large buckle with a simple iron tongue, considerable larger than the width of the buckle. The ring or loop has a length of c. 6 cm. Other iron fragments from grave 19 (19-2-1.2) were stored in another box in the laboratory. The other finds from this grave are beads and fragments of a biconical pot.

Jewellery

The range of jewellery finds from the Obbicht graves is limited compared to other cemeteries; only one Merovingian brooch, one Roman brooch, a gold finger ring and beads from nine graves were discovered (of which the beads from three grave are now no longer present in the collection). Grave 36 is the single richly furnished grave of a woman in the cemetery.

Brooch: composite, filigree and isolated cells with glass and garnet

36 (36-3-1)

The single Merovingian brooch known from the cemetery was found in grave 36, a richly furnished grave of a woman. This filigree brooch is a composite specimen: it consists of a copper alloy ground plate and a silver/gold upper plate (fig. 4.73). The brooch is in a bad condition; a considerable part of the upper plate is gone and the fastener, originally present on the back of the brooch, is completely gone. The two plates of composite filigree brooches are generally connected with five to six small nails integrated in the overall decoration of which the heads are visible along the edges on the front of the brooch. On the Obbicht specimen these nails are gone, but two rivet holes can be observed in the outer zone of the upper plate. There will have been more, but these are not visible or present anymore. One hole can also be observed on the elevated inner zone of the upper plate, but this is in all probability damage and not a rivet hole. The upper plate of the brooch consists of two zones and a middle field. The outer zone is flat, the inner zone and middle field are elevated. The surface of the outer zone is severely damaged but its original appearance can nonetheless be reconstructed on the basis of the available parts. The outer zone was decorated with drop-shaped singular cells alternating with zones of four S/8-shaped filigree ornaments. The two remaining singular cells held inlays of garnets, and two similar ones will have been, in all probability, present on the locations opposite to the two surviving cells. In between the two surviving cells four complete filigree ornaments are present, which indicates that an additional number of twelve similar ornaments were originally present. The surface of the inner zone survived in its original state and is decorated with four drop-shaped singular cells with garnet and glass inlays, alternating with zones of two S/8-shaped filigree ornaments. Two of the singular cells held a garnet (although these might also be red glass inlays: this is difficult to establish with certainty without scientific analysis), and two held inlays of transparent white glass. The middle field consists of a central fitting of domed blue transparent glass. The brooch has a diameter of c. 3.5 cm and a height of 0.85 cm. The other finds from this grave are a string of beads, a gold finger ring, decorative mounts, a bucket and a biconical pot. The brooch was found in close association with the beads, close to

(274) Wieczorek 1987, Abb. 25. In his classification the buckle has code 75 (see Abb. 7-75). (275) Pescheck 1996, 48, 252, Taf. 51.2. (276) Legoux/Périn/Vallet 2004, 16, 30, 53 (type 137). (277) Legoux/Périn/Vallet 2004, 17, 34, 53 (type 199). (278) Menghin 1983. (279) Legoux/Périn/Vallet 2004, 16, 30, 53 (type 130).

Fig. 4-73
Finds from grave 36 (scale 1:1).



the western wall in the middle of the grave, and thus near the presumed former location of the head.

Filigree brooches are discussed by Graenert whose typology is based on the construction of the brooches (connected specimens (Serie A) or box form (Serie B)), on their form and size and on the various decoration patterns of filigree and isolated cells with various inlays.²⁸⁰

The Obbicht brooch is round and consists of a ground plate and decoration plate. The decoration plate is placed directly, without leaving some space, on top of the ground plate and together they form one connected specimen (Serie A).²⁸¹ The ground plate is of nonferrous metal, the decoration plate is of silver/gold. The two plates were originally fixed with nails which might have been silver. Graenert created, apart from ‘Serien A and B’, three typological groups. The Obbicht brooch can be placed in group 1,²⁸² on the basis of its size, the shape of the filigree ornaments and the pattern formed by the cells with inlays (of various materials).²⁸³

The Obbicht brooch has a diameter of 3,5 cm and belongs thus to the smaller filigree brooches.²⁸⁴ Graenert mentions that filigree refers to a decoration technique which is not unambiguously described; it can consist of threads of different construction and appearance.²⁸⁵ The Obbicht brooch shows two different ‘filigree’ techniques: the thread applied along the edge is a twisted thread, and the S/8-shaped ornaments are constructed with a smooth thread.²⁸⁶ Graenert established a classification scheme of single filigree ornaments and 4 groups of ornament patterns. The Obbicht brooch shows one filigree ornament: S/8-shapes of single smooth thread regularly applied and intermingling with isolat-

ed cells with stones covering the entire surface. This is a pattern is classified a Graenert’s group F2.²⁸⁷ The last typological element of the Obbicht brooch is the pattern formed by the isolated cells, all with garnet or glass inlays, which are applied on the two zones. The four cells of the inner zone are drop shaped, with their tips pointing to the middle of the brooch. The two (of originally four) cells on the outer zone are also drop shaped. Graenert mentions that isolated cells with stones on filigree brooches always form crosses, and that more than one cross can be present on a single brooch. The Obbicht specimen shows one cross formed by the stones on the outer zone (a), and one cross formed by the stones on the inner zone (b); they are thus types S1a and S1b.²⁸⁸

The brooches of Graenert’s research area are dated on the basis of the results of a seriation of the brooch characteristics. The results are verified with the associated dated finds. The Obbicht brooch is on the basis of all its elements classified as Graenert type A1F2, which dates to phases AMIII-JMI (560/70-630/40).²⁸⁹ Similar brooches are classified as Siegmund’s type Fib2.3; filigree brooches with elevated middle fields. This type dates predominantly to Rhineland phase 7 (585-610).²⁹⁰ The Franken AG maintained this type, and date S-Fib2.3 to their phase 6 (580/90-610/20).²⁹¹

Brooch: missing

10 (10-2-1)

In the catalogue of Beckers and Beckers a fragment of a copper alloy brooch (10-2-1) was recorded as find from grave 10. It was found in

the proximity of the biconical pot and a decorated loop of a copper alloy buckle, in the middle of grave, approximately 30.0 cm from the eastern wall, which is in the proximity of the presumed former location of the feet. The brooch fragment is not available anymore, and it cannot be established what sort of brooch it was on the basis of the descriptions in the original catalogue alone.

Brooch fragment: missing

Find number: 8 (8-3-1)

A fragment of a brooch was recorded as find from grave 8 in the catalogue of Beckers and Beckers. It is not present in the current collection, and specifics were not given in the first catalogue. The iron fragments, among which the brooch fragment, beads and pottery fragments were found scattered throughout the grave, which indicates that it was reopened.

Coin pendant: copper alloy

8 (8-5-2)

A copper alloy ‘coin’, severely corroded, with a suspension hole was found in grave 8. The letters observed at one of the edges are: HINOP. The original catalogue refers to finds with similar inscriptions from the cemeteries of Abenheim, Nieuwerden and Sigmaringen.²⁹² The coin pendant was found in the proximity of the beads, and was thus probably attached to this necklace. The coin pendant is no longer present; other details cannot be given.

Finger ring: gold

36 (36-8-1)

The gold finger ring from grave 38 consists of a closed band shaped ring with a bezel (fig. 4-73). The bezel is made of a round gold setting which consists of a ground plate with upward standing rim, holding a Roman red carnelian stone with an engraved image of two men wrestling. The diameter of the ground plate of the bezel is 1.3 cm; the outer diameter of the stone with rim is 1.2 cm and the diameter of the red stone alone is 1.1 cm. The maximum diameter of band shaped ring is 2.0 cm. The ring is part of the richest grave inventory of a woman in the Obbicht cemetery. It was found close to the long northern wall, somewhat to the east of the middle of the grave. This find location indicates that it was worn on the left hand at the time of deposition. The other finds from this grave are a string of beads, a filigree brooch, decorative mounts, a bucket and a biconical pot.

Engraved carnelian stones are known from the Roman period.²⁹³ They were set in rings, but the reuse of such gems in Merovingian

Table 4.8
Number of beads per Obbicht grave.

context	#	missing	monochrome	polychrome	amber
8	34	2?	29	1	4
19	23	?	22		1
35	63	?	44	16	3
36	32	41	29	1	2
49	21	19	21		
57	4		2		2
27	?	?			
37	1		1		
50	-	20			
total	178	82	148	18	12

jewellery, especially finger rings, is not unusual.²⁹⁴ A bezel with engraved carnelian was found in Pandhof-Maastricht grave 11260 (373-2)²⁹⁵, and a complete ring with a carnelian with engraved bird was found in Pandhof-Maastricht grave 10021 (90-1*)²⁹⁶; it is not known whether they were deposited in Merovingian or late-Roman grave contexts. The Obbicht ring is however clearly part of a Merovingian grave inventory, but it remains uncertain whether the stone was reused in a Merovingian ring or that the ring itself was also from the Roman period.

Beads

8 (8-5-1.1-1.3); 19 (19-1-1.1-1.3); 27 (27-2-1); 35 (35-5-1.1-); 36 (36-1-1.1-1.8); 37 (37-2-1); 49 (49-2-1); 50 (50-5-1); 57 (57-2-1.1-1.4)

In total 178 beads are available from six Obbicht graves (table 4.8). The beads recorded as finds from graves 27 and 50 are no longer present in the collection, and their descriptions in the original catalogue provide insufficient information for an unambiguous analysis. In total eighty-two recorded beads are no longer present in the collection; some of the strings present are thus neither complete. Of the beads present 148 are monochrome, eighteen are polychrome, and twelve are amber beads. Table 4.9 shows the variety of monochrome beads and the twelve amber beads (cells with orange shade); the yellow, blue and red beads are predominant, as are the small miniature and the globular to globular compressed bead shapes. The identified types can be compared with the Siegmund types in table 4.2; it shows that not all the monochrome beads could be classified and dated with Siegmund’s typo-chronology of the Rhineland beads. The Obbicht beads are analysed as explained in the section on the Sittard-Kemperkoul beads. In the following the beads are discussed per grave; this description will provide an overview of the variety of beads per string and grave.

(280) Graenert 2007. (281) Graenert 2007, 14-17, Abb. 3. (282) Graenert 2007, 43, 51-55. (283) Graenert 2007, 35-43, Abb. 21, 23 (typological scheme). The various characteristics as defined by Graenert form a typological scheme of which all elements are depicted in Abb. 21 and 23. (284) Graenert 2007, 35, Abb. 18. (285) Graenert 2007, 23-28. Filigree should not be confused with ‘granulation’, which is a different decoration technique although it can have the same appearance as filigree, especially when pearl thread is used. (286) Graenert 2007, 24, Abb. 12.13, 26, Abb. 13.6, 27, Abb. 14. E. (287) Graenert 2007, 36-38. (288) Graenert 2007, 42-43, Abb. 22. (289) Graenert 2007.

(290) Siegmund 1998, 48. (291) Müsseseimer *et al.* 2003, 26-27. (292) Beckers/Beckers 1940, 321-322. (293) See for example Henkel (1913), who offers an elaborate overview of Roman rings with gems, or Guiraud (1988: Intailles et camées de l’Epoque romaine en Gaule). (294) Ament 1991, 401-402. (295) Ypey/Glazema 1955, 65; Kars 2011, 298. (296) Ypey/Glazema 1955, 48-49; Kars 2011, 298.

Shape Colour	Red opaque	Red translucent	Green opaque	Green translucent	Yellow opaque	Yellow translucent	Blue opaque	Blue translucent	Orange opaque	Orange translucent	Black opaque	Black translucent	Brown opaque	Brown translucent	White opaque	White translucent	Colorless transparent	Silver Überfang perle	Gold Überfang perle
	RO	RT	GO	GT	YO	YT	BO	BT	OO	OT	BLO	BLT	BRO	BRT	WO	WT	CT	SU	GU
1																			
2	4			1	2		2				1				1				
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11	1						1												
12																			
13																			
14																			
15																			
16																			
17																			
18	1																		
19	2						3		8						2				
20	7		6					3	1						3				
21																			
22																			
23																			
24	3		2																
25	2		1		3		4												
26																			
27																			
28																			
29							1												
30				6	7 ¹														
31																			
32																			
33																			
34																			
35							4												
36																			
37																			
38																			
39																			
40																			
41																			
42																			
43																			
44					1		1												
45																			
46																			
47																			
48																			
49																			
50																			
# shapes	7	0	3	2	5	0	7	1	2	0	1	0	0	0	3	0	0	0	0
# beads	20	0	9	7	77	0	16	3	9	0	1	0	0	0	6	0	0	0	0

Cristall	Amethyst (various forms)	Shell discs	Opaque general	Translucent general	Amber	# colors	# beads	Shape
C	AM	S	OG	TG	A			1
						6	11	2
								3
								4
								5
								6
								7
								8
								9
								10
						2	2	11
								12
								13
								14
								15
								16
								17
						1	1	18
						4	15	19
						5	20	20
								21
					1			22
								23
						2	5	24
						4	10	25
								26
								27
								28
						1	1	29
						2	77	30
								31
								32
								33
								34
						1	4	35
								36
								37
								38
								39
					1			40
								41
								42
								43
					7	2	2	44
								45
								46
								47
								48
					3			49
								50
0	0	0	0	0	4			
0	0	0	0	0	12			

Table 4.9
Classification of the monochrome beads from Obbicht.

The beads from grave 8

8 (8-5-1.1-1.17)

The beads from grave 8 were found scattered throughout the western part of the grave, thus in the grave section associated with the presumed original location of the upper body. The beads recorded in the catalogue of Beckers and Beckers are small yellow beads, small white/brown beads, and three amber beads with a length of 2.0 cm, of which one is described as cylindrical, one as almond shaped, and one as diamond shaped. The available collection of beads assigned to grave 8 is more divers; it consists of thirty-four beads of which one is decorated, twenty-nine are monochrome, and four amber beads (one, integrated in the string of glass beads, was not counted by Beckers and Beckers) of different shapes are present (fig. 4.74). The single decorated bead (8-5-1.8) is a red, opaque, globular compressed bead with white crossing waves (Schretzheim Stufe 4: 590/600-620/30). Of the twenty-nine monochrome beads eight are blue, of which six opaque and two transparent beads, of six different shapes. One is globular compressed (8-5-1.1), two are transparent biconical (8-5-1.7), classified as S-47.3 (8-10: 610-705), one is twisted (8-5-1.10), classified as Siegmund form group 47.4 ((555-670) 610-705), one is opaque and short cylindrical (8-5-1.12), three are short cylindrical (8-5-1.16), and one is double connected, classified as S-Per 37.2 (555-705). Seven of the monochrome beads are green; four beads are opaque and biconical (8-5-1.6), one is opaque and consists of four globular compressed connected beads (8-5-1.9), one is opaque and globular compressed (8-5-1.11), one consist of three connected globular compressed beads (8-5-1.11), and one is opaque and consists of two connected globular compressed beads (8-5-1.13); the green beads could not be classified and dated on the basis of Siegmund’s classification scheme. Apart from the green and blue beads the string consists of five red beads (8-5-1.2); they are all are opaque, biconical beads and classified as S-Per 35.6 (570-640) 610-705). Another two ochre beads (8-5-1.4) are also present; they are opaque and barrel shaped and classified as S-Per 34.1 (570-640) 610-705). Five are white: two are opaque and biconical (8-5-1.5) and classified as Siegmund Per32.3 (570-640 610-705), two are opaque and barrel shaped (8-5-1.14) and might be classified as S-Per32.3 (610-(640) 705), and one is opaque and globular compressed (8-5-1.15). Of the monochrome beads two are yellow (8-5-1.17); they are opaque and globular compressed.

All over, the string has a red to green/blue appearance. The yellow/white beads are not that prominent. The dated beads fall within the range 555-705 and are predominantly dated around 600. The grave is dated on the basis of a biconical pot to O-OM IIa (565-610/20). The date range assigned to the decorated bead matches neatly with this burial phase. The other beads are dated to longer date ranges, but can date before 610/20.

Fig. 4.74
The beads from graves 8, 19, 27,
35, 36, 49 and 57 (scale 1:1).



The beads from grave 19

The catalogue of Beckers and Beckers mentions that twenty small yellow beads, one large green bead, and a square amber bead were found in the middle of the western section of the grave, to be precise 40.0 cm from the short western wall. The beads were thus found at the presumed former location of the head. Of the available collection of beads twenty-three are assigned to grave 49 (fig. 4.74). Of these beads one is actually the large, nearly square, amber bead (19-1-1.3) as recorded in the catalogue of Beckers and Beckers; it is a rather peculiar shape for an amber bead and it is

in all probability worked and polished. Nineteen small yellow opaque beads are also present (19-1-1.1). Of the other three beads one is blue opaque with faint red threads (19-1-1.2), one is green transparent (19-1-1.4), and one is black opaque (19-1-1.5). The string has an overall yellow appearance, since the majority of the beads are the common miniature yellow beads. The beads are difficult to date; only the small yellow beads are known from the available typo-chronology schemes but dated to a relatively long period (Rhineland date range: 485-705). The other finds from this grave are a buckle, some indeterminate metal fragments and frag-

ments of two pottery vessels on the basis of which the grave is dated to O-OM IIb (565-640/50).

The beads from grave 35

In the catalogue of Beckers and Beckers a large number of beads of various shapes, dimensions and colours are recorded as finds from grave 35. They were found close to the western wall of the grave, thus at the presumed former location of the head. Sixty-three beads are currently present (fig. 4.74); the string consists of sixteen polychrome beads, forty-four monochrome beads and three amber beads. Of the amber beads one is almond shaped (35-5-1.1), one is broken (35-5-1.2), and one is flat almond shaped (35-5-1.12). This string is the only one from Obbicht with a considerable number of polychrome beads. Of these sixteen polychrome beads one is white, opaque and globular compressed with blue crossing waves (35-5-1.5); it is classified as type Koch-Schretzheim 34.7 and dated to 590/600-620/30. Two of the polychrome beads are yellow opaque globular compressed with black/red crossing waves (35-5-1.13), one is yellow opaque globular compressed with red crossing waves (35-5-1.14), three are red opaque globular compressed with yellow crossing waves (35-5-1.6: Koch-Schretzheim 34.18/19 (590/600-620/30)), one is red opaque and consists of triple connected beads with yellow crossing waves (35-5-1.10), six are red opaque double connected beads with yellow crossing waves (35-5-1.11), and two are red opaque with white crossing waves (35-5-1.15: Koch-Schretzheim 34.11 (590/600-620/30)). Of the forty-four monochrome beads thirty-seven are small yellow opaque (35-5-1.8), two are yellow opaque double connected beads (35-5-1.7: Siegmund Per33.6 (570-705)), three are orange opaque barrel shaped (35-5-1.3: Siegmund Per34.1 (570-640) 610-705)), one is red opaque short cylindrical (35-5-1.4: Siegmund Per35.6 (570-640) 610-705)), and one is a red opaque globular compressed bead (35-5-1.9).

The decorated beads of this string are rather simple compared to the decorated beads found in the cemetery of for example Sittard-Kemperkoul. Together with the undecorated beads the string has an overall yellow/red appearance. The majority of the decorated beads date to 590/600-620/30. The monochrome beads are dated to longer date ranges, but their date ranges start for the majority in the second half of the sixth century; the string can be dated to 550-650. The other finds from this grave are a biconical pot (570-640), a plate buckle (585-670), a simple iron ring (520/30-630/40) and some indeterminate metal fragments; the grave itself is dated to O-OM IIb (565-640/50).

The beads from grave 36

In the catalogue of Beckers and Beckers twenty yellow, twenty-eight green, one large red, three large orange, one large decorated, one cylindrical green, fifteen small cylindrical and three flat amber beads were recorded as finds from grave 36. They were found close to the short western wall of the grave, thus at the presumed former location of the head (fig. 4.73). Four to five teeth of an in-

fant were also found in association with the beads (this was also the case in Sittard grave 11); these are no longer present in the collection (or they might be the four teeth now assigned to grave 4, but from which no such finds were recorded). The string of beads currently present consists of thirty-two beads, not all the beads recorded in the catalogue are present in the available string. Of the thirty-two beads, one is decorated (36-1-1.7); it is a white opaque bead with blue bands and red dots. One (36-1-1.10) is an amber almond shaped bead, and one (36-1-1.11) is also an amber bead, but amorphous. The third amber bead is no longer present in the collection. Of the twenty-nine monochrome beads twelve are the common small yellow ones (36-1-1.1: S-Per33.3 (485-705)), three are blue, opaque, short cylindrical, double connected beads (36-1-1.3: S-Per37.2 (555-705)), one (36-1-1.5) is blue opaque short cylindrical and consist of four connected beads, three beads (36-1-1.6) are blue opaque, barrel/short cylindrical (S-Per37.1: (610) 670-(640) 705)), one (36-1-1.9) is blue opaque large cylindrical (type S-Per37.1? ((610) 670-(640) 705)). Of the monochrome beads six are green (36-1-1.2) transparent short cylindrical beads. Of the monochrome beads one (36-1-1.4) is red, opaque, biconical and classified as S-Per 35.6 ((570) 610-(640) 705), and two are orange (36-1-1.8); orange, opaque, barrel shaped classified as S-Per34.1 ((570) 610-(640) 705). The string has a rather green/blue and yellow appearance. The date ranges of the dated beads cover the period 485-705, but date predominantly to 600-700. Grave 36 is the richest grave of a woman of the cemetery. The other finds are a filigree brooch, a gold finger ring, some girdle hangers/ belt pendant and a biconical pot and a bucket. The grave is dated to burial phase O-OM IIb (565-640/50), which matches with the date ranges assigned to the datable beads.

The bead from grave 37A

The catalogue of Beckers and Beckers mentioned that one bead (37-2-1) was found close to the southern and eastern walls of grave 37, in which also a knife and copper alloy plate are found. A small white, short cylindrical bead is actually present. It is not clear whether it originally belonged to a more extended ensemble of beads.

The beads from grave 49

Forty beads were mentioned to have been found in the proximity of skull remnants, 40 cm from the short western wall and 50 cm from the long northern wall, in grave 49. Twenty-one beads are currently present in the string assigned to grave 49; they are all monochrome beads (fig. 4.74). Of these twenty-two beads two are green opaque and biconical (49-2-1.1). One is orange opaque and biconical (49-2-1.2) and classified as S-Per34.1 (570-640) 610-705), one is red, opaque and biconical (49-2-1.3) and classified as S-Per 35.6 (570-640) 610-705). One opaque blue bead is also biconical (49-2-1.4) and classified as type Siegmund Per37.1 (610-640) 670-705), and two are yellow, opaque and stretched biconical/almond (49-2-1.5). Two are red, opaque and barrel shaped (49-2-1.6) and might be classified as Siegmund Per35.6 (570-640) 610-705). Of the yel-

low beads two are opaque and globular compressed (49-2-1.7) and classified as Siegmund Per33.3 (485-705), and one is opaque and is a globular compressed double connected bead (49-2-1.8) classified as Siegmund Per33.6 (570-705). Of the red beads one is red and consists of four connected globular compressed beads (49-2-1.9), one is red-brown, opaque and consists of three connected globular compressed beads (49-2-1.10) and is classified as Siegmund Per35.7 (610-705), four are opaque and globular compressed (49-2-1.11) and classified as Siegmund Per35.6 (570-640) 610-705), two are opaque, globular compressed, double connected beads (49-2-1.12) and classified as Siegmund Per35.7 (610-705), and one is opaque and consists of three connected globular compressed beads (49-2-1.13) and is classified as Siegmund Per35.7 (610-705). One bead is grey, opaque and biconical (49-2-1.14) and classified as Siegmund Per32.3 (570-640) 610-705). The string has an overall red/orange appearance.

The single dated find from this grave is a red bowl which is dated to 555-640 on the basis of which the grave is dated to burial phase O-OM IIb (565-640/50). The datable beads have for the majority longer date ranges assigned to them but they match nonetheless with the date range of the bowl and thus the grave.

The beads from grave 57

In the catalogue of Beckers and Beckers it was recorded that four large beads were found in the middle of the western section of the grave, 50 cm from the western wall; the beads were thus found at the presumed former location of the head. Four beads are actually present in the available collection of beads from Obbicht (fig. 4.74). One bead is orange opaque and barrel shaped (57-2-1.1) and classified as S-Per34.1 (570-640) 610-705). One is blue opaque and almond shaped (57-2-1.2). One is an amber almond shaped bead (57-2-1.3), and one is an amber, irregular shaped bead (57-2-1.4). The ensemble has a red appearance, but this number of beads is low for a string deposited as necklace. The single other find from this grave is a red pottery bottle, dated to 600-650, on the basis of which the grave is dated to O-OM IIc (610/20-640/50).

Beads: missing

27 (27-2-1); 50 (50-5-1)

The catalogue of Beckers and Beckers mentions that a large number of various beads were found close to the western wall in the middle of grave 27, thus at the presumed former location of the head. Recorded were green, yellow and brown glass beads as were amber beads; the exact number of uncovered beads was not given. The beads are no longer present in the collection.

The catalogue of Beckers and Beckers mentions that twenty beads of different colours and shapes (50-5-1) were found in the middle of grave 50, 30 cm from the western wall, thus at the presumed former location of the head. A note in a box stored in restoration laboratory Restaura refers to the former presence of two ochre beads; they are now gone.

Weaponry

The weaponry from Obbicht consists of a rather high number of shield bosses and seaxes, but lance heads, arrowheads and swords are also known from a number of graves. This section is concluded with the discussions of some axes and a horse bridle.

Shield bosses

4 (4-4-1); 20 (20-2-1.1; 20-2-1.2; 20-2-1.3); 29 (29-3-1.1; 29-3-1.2); 30 (30-3-1.1; 30-3-1.2; 30-3-1.3); 53 (53-1-1; 53-1-2)

Beckers and Beckers refer to iron shield boss parts with two copper alloy rivets found in grave 4. In the restoration laboratory fragments of what seems to be the rim of the shield boss and a number of rivets (more than 2) are stored; a number of at least five rivets were counted (4-4-1). The grave was destroyed, but it is known that the other finds from this grave are a seax, knife, arrowhead, some indeterminate iron fragments, pottery fragments of a globular pot and an iron rod with loop and ring. The exact locations of the finds could not be established. The shield boss cannot be classified and dated on the basis of available fragments and information alone. Shield bosses, of different forms, are found in graves dating to nearly the entire Merovingian period; the indeterminate shield boss from grave 4 is a poor chronological indicator.

An iron shield boss (20-2-1.1) was found 40 cm from the western wall and 50 cm from the southern wall in grave 20. The six copper alloy rivets (20-2-1.3; missing), which attached the boss to the wooden shield, and the iron grip (20-2-1.2), were found detached but close to the shield boss. The shield boss is present as a restored specimen: remnants of four rivets can be observed on the rim and the remnants of five pins at the back of the rim (fig. 4.75). The shield boss has a straight to oblique wall and the transition from wall to cone is rather pronounced. The cone is relatively high and domed; the complete shield boss has a height of 8.1 cm and a diameter of 18.0 cm. The grip is also present, but in fragmented and severely corroded condition; it has a length of 15.5 cm and some additional fragments are also present. Wood remains are preserved at the back of the shield boss. The other finds from this grave are an axe, lance head, seax, belt fitting, biconical pot and a copper alloy bowl. The shield boss is classified as Siegmund's type Sbu6, which is described as shield bosses without knob and with relatively high and oblique walls and high pronounced cones. This type dates to Rhineland phases 9-10 (640-705).²⁹⁷ However, the wall of the Obbicht shield boss is more straight than 'obvious oblique' as described for Siegmund's type Sbu6. Moreover, the Franken AG observed that Siegmund included shield bosses with similar high domed cones in his type Sbu5 (which he defined as a type with squat cones and straight walls). The Franken AG therefore introduced additional type Sbu5B; shield bosses with rather straight walls and domed cones without knob. This type dates to their phase 5 (565-580/90)²⁹⁸, which seems to match better with

Fig. 4.75
Shield bosses, graves 20, 29,
30 and 53 (scale 1:2).



the other datable finds from grave 20. The shield boss from grave 20 is therefore identified as type Franken AG Sbu5B. A shield boss (29-3-1.1) was found in grave 29, with its cone downwards, along the southern wall and 150 cm from the eastern wall. The grip and rivets were found detached from it (29-3-1.1 and 1.2). This indicates that at the time of excavation enough was preserved of the shield boss for the excavators to identify it as such. At present an incomplete and corroded specimen is available (fig. 4.75). It has a height of 8.0 cm, a diameter of 15.0 cm and its rim has a width of 2.5 cm. Despite its corroded condition the shield boss can be identified as a boss with slightly oblique walls and a relatively high domed to conical cone. There is no clear indication for the former presence of a knob on the cone, but since the condition of the boss is corroded traces of a knob might be hidden. A number of four restored iron rivets with copper alloy plating (29-3-1.1), attached to iron fragments with some wood remains, resemble rivets that are generally known as shield boss rivets. The wood remains are identified as limewood. One of the iron fragments has a rounded outline and might be a fragment of the shield boss rim. Another five rivets and iron fragments are also present, but in corroded condition (29-3-1.2); these also seem to have been

part of the shield boss and iron grip. The four restored rivets have an average diameter of 2.3 cm; for the other five this is difficult to establish. Other finds from this grave are a lance head, horse bridle and belt fittings. On the basis of the corroded remnants the shield boss can be classified as either Siegmund type Sbu3 or Sbu4, since the cone is not squat but rather conical. Both types are characterised by a knob, but the actual absence of presence of a knob cannot be established on the shield boss from grave 29. Siegmund type Sbu3 dates to Rhineland phases 4-7 (530-610) and type Sbu4 dates to Rhineland phases 6-7 (570-610).²⁹⁹

The iron shield boss (30-3-1.1) from grave 30 is rigorously restored as is the iron grip, which was found detached from it (fig. 4.75). The wall of the boss is straight, the rim is slightly oblique. The transition from wall to cone is pronounced. The restored specimen has a horizontal rim on which only one large domed rivet is preserved, which seems to show traces of copper alloy plating. It cannot be reconstructed how many were originally present since the rivet holes, in which they were fixed, are not visible. The complete boss has an average diameter of 17.0 cm and a height of 7.4 cm (without the remnants of the knob on the cone). The wall is nearly straight and has a height of 3.1 cm. The cone has a height

(297) Siegmund 1998, 109. (298) Müssemeier *et al.* 2003, 53. (299) Siegmund 1998, 108-109.

of 4.1 cm and the rim a width of 2.6 cm. The cone is relatively high and shows remnants of a knob on top of it; the shape of the knob could not be reconstructed. The rivet on the restored shield boss has a diameter of 1.9 cm. A grip with a length of 19.2 cm is present and can be associated with the shield boss assigned to grave 30 (30-3-1.2). Some corroded remnants of presumably the shield boss are also present; they were not integrated in the restored and completed specimen (30-3-1.3). Two fragments with rounded edge (the rim of the shield boss) have remnants of rivets with copper alloy attached to them; this indicates that the rivets on the shield boss were originally iron rivets with copper alloy plating. Among the remnants some grip fragments are also present. Other finds from this grave are a sword, francisca and a plate buckle. The shield boss is classified as Siegmund type Sbu3 (on the basis of the knob remnants, the straight wall and domed to conical cone), which dates to Rhineland phases 4-7 (530-610).³⁰⁰

An iron shield boss with attached iron grip and wood remains preserved on it (53-1-1) was mentioned to have been found with the cone downwards, 50 cm from the eastern wall and 80 cm from the northern wall in grave 53. The shield boss is now available in corroded and incomplete condition (fig. 4.75). A number of rivets and fragments are present in restoration laboratory Restaura (53-1-2). The two available rivets have a diameter of 2.7 cm; the fragments are difficult to identify but might be of the shield boss. The corroded shield boss has a height of 7.5 cm and a diameter of 18.0 cm. It cannot be established whether a knob was formerly present. The condition of the shield boss hinders its classification, but it can carefully be classified as Siegmund type Sbu3, Sbu4 or Sbu5, which fall within the range of Rhineland phases 4-8 (530-640).³⁰¹

Shield bosses: missing

28 (28-2-1); 40 (40-8-1)

In the catalogue of Beckers and Beckers it was mentioned that a broken iron shield boss (28-2-1) with eight copper alloy rivets was found, with its cone downwards, 150 cm from the eastern wall and 20 cm from the southern wall of grave 28. The shield boss is no longer present.

An iron shield boss (40-8-1) was in the catalogue of Beckers and Beckers mentioned to have been found with its cone downwards near the southern wall and 170 cm from the western wall of grave 40. The shield boss is no longer present.

Seaxes

The seaxes from the cemetery are classified and dated as described in the section on the seaxes from the Sittard cemetery (table 4.4).

Seaxes: schmalsaxe/ leichter breitsaxe

5 (5-2-1; 5-2-2); 51 (51-3-1.2)

Iron seax 5-2-1 was found to the north of the sword from this grave, along the long northern wall of grave 5; it was thus depos-

ited to the left of the now completely decayed body with its tip pointing to the east. It was recorded that the seax had a knob and that its length was 50.0 cm, its blade width was 4.0 cm and that the hilt with knob had a length of 13.0 cm. Two seaxes have find numbers which can be associated with grave 5, one of them has an iron knob and one is without knob; the seax with knob is for now identified as the seax from grave 5 (5-2-1). The seax is present in corroded condition: its total length is c. 38.0 cm, its blade length c. 25.0 cm and width c. 3.8 cm. The seax could have lost some parts after its discovery and before its conservation, but its dimensions could also have been recorded incorrectly in the original catalogue. The other finds from this grave are a sword, belt fittings, a folded knife, a knife or small seax, a fire steel and various indeterminate iron fragments. On the basis of its current dimensions the seax is either a *Schmalsax* or *Leichter Breitsax* according to Siegmund's typology, or a *Schmalsax* according to the classification of the Franken AG.

The second seax from grave 5 (5-2-2) available in the collection is corroded and missing its hilt. The blade has a length of c. 32 cm. Many iron fragments which are not restored or cleansed yet are associated with this seax. The card mentions that the fragments belong to a sword, but that they can also be of seax. This seax is difficult to classify.

Siegmund dates *Schmalsaxe* (Sax1) to Rhineland phases 4-7 (530-610)³⁰² and *Leichter Breitsaxe* (Sax2.1) from Rhineland phase 7 to the middle of phase 9 (585-655).³⁰³ The Franken AG date *Schmalsaxe* (S-Sax1) from the end of their phase 3 to the end of phase 7 (510-640/50) although predominantly to phases 4-5 (510/25-580/90).³⁰⁴

Leichter Breitsaxe

33 (33-2-1; 33-4-1)

Various finds, among which four seaxes (33-1-1; 33-2-1; 33-3-1; 33-4-1), were found beneath the demolished mill and were ascribed to a single grave, number 33, but with the remark that it is not at all certain that the finds belonged to just one or two graves. In view of the number of seaxes it is likely that they belonged to four distinct graves. The catalogue recorded the dimensions of the seaxes of which only one is present as a restored specimen (33-4-1). This seax has a blade length of 30.1 cm and a hilt length of 8.7 cm, a blade width of 3.5 cm and a back width of 0.6 cm. The catalogue of Beckers and Beckers mentioned that one of the seaxes had a length of 41.0 cm, which corresponds with seax 33-4-1. It is identified as a *Leichter Breitsax*. The other seaxes from this 'context' are present in corroded and fragmented condition.

One of the seaxes was described as having a total length of 56.0 cm, a blade width of 6.0 cm and a hilt length of 22.0 cm, on the basis of which this seax (33-2-1) is identified as a *Leichter Breitsax*.

The Franken AG date *Leichter Breitsaxe* (Sax2.1) to their phases 6-7 (580/90-640/50).³⁰⁵ Siegmund dates this type (Sax 2.1) from Rhineland phase 7 to the middle of phase 9 (585-655).³⁰⁶

Schwerer Breitsaxe

51 (51-3-1.1)

One of the three seaxes (51-3-1.1c) from grave 51 is available in corroded condition. The seax was recorded as find from the lower burial of 'double' grave 51 and was mentioned to have been found 150 cm from the southern wall and 150 cm from the western wall, with the tip pointing to the east. It has a total recorded length of 54.0 cm, a blade width of 5.0 cm, and a hilt length of 11.0 cm. The corroded specimen has a length of 49.0 cm, a blade length of 40.0 cm and a blade width of 4.5 cm. It is thus slightly different form the one described by Beckers and Beckers, but matches better with the recorded dimensions than the other two seaxes with find numbers that can be associated with this grave.

The Franken AG classify *Schwerer Breitsaxe* as type Sax 2.2, which dates to their phases 6-9 (580-710), although predominantly to the end of phase 7 and phase 8 (640-670/80).³⁰⁷ Siegmund dates type Sax 2.2 to Rhineland phases 9-10 (640-705).³⁰⁸

Breitsaxen

4 (4-5-1); 20 (20-3-1); 40 (40-9-1); 33 (33-3-1); 46 (46-1-1)

A broken iron seax (4-5-1) was recorded as a find from grave 4. It was mentioned that the hilt had a length of 11.0 cm and that two copper alloy knobs were attached to it; other features were not mentioned in the catalogue. The two copper alloy rivets are present in a box in the restoration laboratory; they are rivets with domed heads and carved rims,³⁰⁹ but they belonged in all probability to the lance head that was also found in this grave but was not identified by Beckers and Beckers. Some iron fragments in this box are of the recorded seax; the fragments are corroded and falling apart but stored articulated which enables its restoration and reconstruction. The width of the blade could be established; it is c. 4.5 cm. The other finds from this grave are a shield boss, knife, arrowhead, some pottery fragments and an iron rod with ring. The location of the finds could not be recorded.

Iron seax 20-3-1 from grave 20 is severely corroded and a significant part of its blade is gone. The remaining blade length is 17.0 cm and its width is 4.4 cm. The seax has a rather prominent copper alloy knob attached to the extremity of the iron hilt core. The knob is oval and has a domed head. It has a width of 4.0 cm and a height of 2.7 cm. Together with the knob the hilt has a length of c. 12.6 cm. The catalogue of Beckers and Beckers mentions that the seax from grave 20 had a length of 45.0 cm at the time of excavation or shortly thereafter, which is rather different from the current total length of 29.7 cm; the seax deteriorated considerably after its excavation and before its restoration. The condition of the seax just before restoration was recorded on a photograph in the publication

of Beckers and Beckers.³¹⁰ It shows that the seax was not yet disintegrated; a significant part of the excavated specimen was lost after the publication, and probably before its restoration. The seax was found 50.0 cm from the northern wall and 80.0 cm from the western wall with its tip pointing to the short western wall. A knife was found underneath it. The other finds from this grave are an axe or francisca (this cannot be identified since it is not available anymore), a shield boss, a lance head, a vessel ensemble of two biconical pots, one glass vessel and one copper alloy vessel, and iron fragments among which one fragmented iron ring. Grave 20 was one of the most richly furnished graves of the cemetery. On the basis of the available parts of the seax it is identified as a *Breitsax*; it cannot be established whether it was a *Leichter* or *Schwerer Breitsax*.

Iron seax 40-9-1 from grave 40 is no longer present in the collection. In the catalogue of Beckers and Beckers a seax was recorded with a total length of 47.0 cm and a blade width of 5.0 cm. It was probably deposited in association with the shield boss close to the southern wall of the grave. It is part of the grave inventory of the lower burial of a 'double' grave. This grave inventory consist furthermore of two pottery vessels, a lance head, sword, shield boss, knife and a plate buckle. The plate buckle was found in association with a smaller seax of c. 20 cm, which is for now identified as the knife (40-6-1) present in the collection, since two seaxes are uncommon in Merovingian graves.

In view of the general length of hilts (c. 10-15 cm), seax 40-9-1 probably had a blade length of c. 32-37 cm. With its blade width of 5.0 cm it is a *Breitsax*, although it remains uncertain whether it was a *Leichter* or *Schwerer Breitsax*.

Various finds, among which four seaxes (33-1-1; 33-2-1; 33-3-1; 33-4-1), were found beneath the demolished mill and were ascribe to a single grave, number 33. It is likely that they belonged to four distinct graves. The dimensions of the seaxes were recorded in the original catalogue. Seax 33-3-1 had a blade length of 40.0 cm and blade width of 5.0 cm, the hilt is gone; it was thus a *Breitsax*.

An iron seax (46-1-1) with a length of 46.0 cm and a blade width of 5.0 cm was recorded as a find from grave 46. It was found 110.0 cm from the western wall and 80.0 cm from the southern wall with its tip pointing to the east. It is present in corroded condition, completely articulated, although falling apart, in a box in restoration labortory Restaura. Its original shape is difficult to discern and its length cannot be established independently from the dimensions given in the original catalogue; it is thus identified as a *Breitsax*.

The Franken AG date *Leichter Breitsaxe* (Sax 2.1) to their phases 5-8 (565-680), although predominantly to phases 6-7 (580/90-640/50).³¹¹ Siegmund dates this type (Sax 2.1) from Rhineland phase 7 to the middle of phase 9 (585-655).³¹² The Franken AG classify *Schwerer Breitsaxe* as type Sax 2.2, which dates to their phases

(300) Siegmund 1998, 108. (301) Siegmund 1998, 108-109. (302) Siegmund 1998, 92-93. (303) Siegmund 1998, 93-94. (304) Müssemeier *et al.* 2003, 45. (305) Müssemeier *et al.* 2003, 45. (306) Siegmund 1998, 93-94. (307) Müssemeier *et al.* 2003, 46. (308) Siegmund 1998, 94. (309) Dannheimer 1974, 131-140. (310) Beckers/Beckers 1940, 349, Afb. 126. (311) Müssemeier *et al.* 2003, 45. (312) Siegmund 1998, 93-94.

6-9 (580-710), although predominantly to the end of phase 7 and phase 8 (640-670/80).³¹³ Siegmund dates type Sax 2.2 to Rhineland phases 9-10 (640-705).³¹⁴

The discussed seaxes cannot be classified more precisely as Breitsaxe; they date to Rhineland phases 7-10 (585-705) and the Franken AG phases 5-9 (565-710).

Langsaxe
33 (33-1-1); 51 (51-1-1)

Seax 33-1-1, one of the four seaxes found below the mill, has a total length of 62.0 cm, a blade width of 6.0 cm and a hilt length of 17.0 cm and is on the basis of this information classified as a *Langsax*. The seax is present in corroded condition in the restoration atelier; it is falling apart but the fragments are stored articulated.

Iron seax 51-1-1 is one of the three seaxes assigned to ‘double’ grave 51 (on the basis of the find numbers; originally two are recorded in the catalogue of Beckers and Beckers; it is not possible to identify the seax which does not belong to this grave). It was found 100 cm from the western wall and 60 cm from the northern wall of the upper grave with its tip pointing to the east. Its recorded length is 61.0 cm and its recorded blade width is 4.5 cm. The hilt had a length of 11 cm. In the restoration laboratory a corroded specimen is stored with a length of 50.0 cm; this might be the seax from grave 51 since the other available seaxes ascribed to this grave are considerably shorter. On the basis of its dimensions it is identified as a *Langsax*.

Siegmund dates *Langsaxe* (Sax3) to Rhineland phase 10B-11 (c.685-740),³¹⁵ and the Franken AG to the end of their phase 8 to 10 (c.650-750).³¹⁶

Seax: knob
22 (22-1-1)

The iron hilt with knob (22-1-1) from grave 22 was most likely part of a seax; the rest of which was not discovered. The knob is boat shaped and has an additional loop attached to the upper side of one of the extremities. Its length is 5.5 cm, its height 0.9 cm. It is not clear for what purpose the loop was applied; similar loops on hilt knobs are not known to me. A fragment of 1.1 cm of the hilt core is still present. The catalogue of Beckers and Beckers mentions that the extremity of the seax hilt was found in this grave. Its position in the grave was not recorded.

Seaxes; indeterminate
29 (29-4-2); 31 (31-4-1)

Beckers and Beckers mention iron fragments found scattered throughout grave 29, which might be of a knife or small seax. The hilt (29-4-1) of what seems to be a seax is present in corded condition in the restoration laboratory. Numerous other fragments are present in the same box; these cannot be identified. The other ob-

jects from this grave found as more or less complete specimens are a lance head, shield boss, and a horse bridle, all found alongside the long southern wall of the grave.

The iron seax (31-4-1) which was recorded as a find from grave 31 was mentioned by Beckers and Beckers to have been found without its hilt; its remaining length was recorded to be 30.0 cm. Fragments of a seax, in corroded condition, starting to fall apart, are present in a box in the restoration laboratory. Fragments of what seems to be a hilt are also present, but these might be of the sword or second knife from this grave. Its length cannot be reconstructed.

Seaxes: missing and indeterminate
12 (12-1-1)

An iron seax (12-1-1) was recorded as find from grave 12. It was found close to the western and southern grave walls with its tip pointing to the east. Its dimensions were not given, but it was recorded as a ‘long seax’. This seax is not present in the available collection, but one of the seaxes ascribed wrongly to one of the above mentioned graves might be the seax originally found in grave 12.

Lance head: split socket, diamond shaped blade.
51 (51-2-1)

Iron lance head 51-2-1 was found with its tip touching the eastern wall, 30 cm from the northern wall. The available lance head has a diamond shaped blade, an open socket and a total length of 29.5 cm (Beckers and Beckers mention a length of 36.0 cm). The blade has a width of 3.9 cm (Beckers and Beckers: 4.0 cm). The socket shows a round hole, probably a rivet hole. The lance head is classified as Siegmund’s type Lan1.4 which dates to Rhineland phases 6-8A (570-625) although predominantly to phase 7 (585-610).³¹⁷

Lance head: closed socket
20 (20-5-1)

An iron lance (20-5-1) head with a length of 44 cm and a blade width of 3.5 cm was recorded as a find from grave 20. The catalogue describes that two copper alloy rivets with ribs were attached to the shank. The lance head was found near the southern wall, with its point in the direction of the eastern wall. A large part of the blade of the available lance head is gone; the remainder of the lance head has a length of 26.6 cm. The shape of the blade cannot be determined, and neither can the ratio blade length/socket length. The remainder of the wooden shaft is preserved in the closed socket and has an additional length of 2.6 cm. In the socket, the two copper alloy rivets with domed heads and carved rims are still present. The lance head cannot be classified but rivets similar to the ones attached to the shaft are classified as Legoux/Périn/Vallet type 44, which dates to their phases MA3-MR1 (560/70-

630/40) but can also occur sporadically in the phase before (MA2: 520/30-560/70).³¹⁸

Lance head: split or closed socket, small blade
40 (40-4-1)

Iron lance head 40-4-1 from grave 40 has a total length 20 cm. The wood fragment of the shaft in the socket opening has a length of 2.4 cm. It has a slightly flattened, pointed blade which is narrower than the socket. The blade has a length of c. 9.0 cm and a width of 1.9 cm. The base of the socket seems to be split, but this is not certain, and has a diameter of 2.4 cm. The lance head was associated with the lower burial of a double grave. It was found in the south-eastern corner of this grave. The other finds from this lower grave are a sword, a shield boss, a seax (maybe two), a knife, a plate buckle and a biconical pot.

Similar lance heads are classified as Siegmund’s type Lan1.5 (split socket) which dates to Rhineland phase 3 (485-530) or a Lan2.2 (closed socket) which dates to Rhineland phase 7 (585-610).³¹⁹

Lance heads: with mid ribs
23 (23-3-1); 31 (31-6-1); 46 (46-2-1)

Iron lance head 23-3-1 from grave 23 has a total length of 26.1 cm. The remainder of the wooden shaft still present in the closed shaft opening has a length of 3.3 cm. The blade is leaf shaped and has a prominent mid rib. The length of the blade is c. 16.6 cm and the width of the blade is 4.6 cm. The other finds from this grave are an arrow head and a biconical pot. The locations of the finds were not recorded.

An iron lance head (31-6-1) with a blade with a pronounced mid rib and with a total length of 28 cm was mentioned to have been found in grave 31. The blade had, according to the original catalogue, a length of 12.0 cm and a width of 3.5 cm. Only a plate with a rounded elevation is present in the collection; this might be part of the blade with traces of the pronounced mid rib. Fragments of the lance head might be present in a box in the restoration laboratory which holds remnants of grave 31.

An iron lance head (46-2-1) with a length of 42.0 cm and a blade width of 4 cm was recorded as a find from grave 46 by Beckers and Beckers. They noticed that the blade had a prominent mid rib and the socket two copper alloy rivets attached to it. It was found 50 cm from the southern wall and the tip was pointing east. In a box in the restoration atelier fragments of the lance head seem to be present, although in a very fragmented, corroded condition. One of the copper alloy rivets is also present in the box; it is a domed rivet with a carved rim. The other finds from this grave are a seax, belt fittings, a bowl and biconical pot, a fire steel and a knife.

(313) Müssemeier *et al.* 2003, 46. (314) Siegmund 1998, 94. (315) Siegmund 1998, 94. (316) Müssemeier *et al.* 2003, 46. (317) Siegmund 1998, 101. (318) Legoux/Périn/Vallet 2004, 14, 26, 52 (type 44). (319) Siegmund 1998, 101-102. (320) Siegmund 1998, 102. (321) Legoux/Périn/Vallet 2004, 14, 26, 52 (type 44). (322) Legoux/Périn/Vallet 2004, 14, 26, 52 (type 44). (323) Siegmund 1998, 99.

Lance heads (with leaf shaped heads) with mid ribs and closed sockets are classified as Siegmund type Lan2.1, which dates to Rhineland phases 7-8A (585-625).³²⁰ Rivets similar to the one associated with the lance head from grave 46 are classified as Legoux/Périn/Vallet type 44 which dates to their phases MA3-MR1 (560/70-630/40) but can also occur sporadically in the phase before (MA2: 520/30-560/70).³²¹

Lance heads: blade shape unknown
4 (4-8-1); 29 (29-1-1)

In a box holding remnants of finds from grave 4 a corroded and fragmented lance head is identified, with two detached copper alloy rivets with carved rims; these were probably attached to the socket of the lance head. The shape of the blade and the characteristics of the socket cannot be established on the basis of the remnants. The rivets, however, can be classified as Legoux/Périn/Vallet type 44, which dates to MA3-MR1 and sporadically to the phase before ((520/30-560/70) 560/70-630/40).³²²

Beckers and Beckers mention that in grave 29 an iron lance head with a ‘skewer’ shaped blade, which can be interpreted as a pointed blade with a somewhat broader base, was found. It was recorded that the blade had a length of 40.0 cm and a width of 3.0 cm, and that wood remains were present in the socket opening. It was found lying along the southern wall of the grave, with the tip of the lance head touching the short eastern wall, which indicates that the lance head was found in more or less complete condition. In the available collection only a small number of fragments, which might be the remnants of the lance head, are present. In restoration laboratory Restaura some remnants of what seem to be remnants of the shaft of a lance head are present.

The lance head cannot be reconstructed with these fragments. The other finds from this grave are a shield boss, horse gear, two buckles, and a knife. The lance head cannot be classified and dated on this basis of the available information since the in the catalogue given blade shape cannot be unambiguously be reconstructed.

Lance heads with open sockets and a length of 30-47.5 cm are classified as Siegmund type Lan1.1b and date to Rhineland phase 4 (530-555) and those shorter than 30 cm as type Lan1.1a which dates to Rhineland phases 6 (570-585).³²³

Lance head: open socket, spiral bands
37 (37-4-1)

Beckers and Beckers mention the find of an iron lance head (37-4-1) with a ‘skewer’ shaped blade with a width of 4 cm; the total recorded length of the lance head is 30 cm, the width of the open socket is 2.5 cm. It was found at a depth of 150 cm, along the southern wall

of grave 37B (it is a double grave; the masculine objects belong to the lower burial) with the tip pointing east. It is present in corroded condition together with two rings, originally fixed around the socket, and some wood remains of the shaft. The X-ray photograph shows that spiral bands were wrapped around the shaft. It cannot be determined of which material these spiral bands are; this will become clear after restoration. A parallel of a lance head with spiral bands dated to the seventh century is known from grave 6 of the cemetery of Niederstotzingen.³²⁴ In Obbicht it might date early in the seventh century since glass bell beaker fragments and biconical pot from this grave date to the end of the sixth and beginning of the seventh century.

Lance heads: missing

33 (33-5-1); 34 (34-1-1); 51 (51-8-1)

Iron lance head 33-5-1 was described as having a ‘skewer’ shaped blade and a total length of 30.0 cm, a blade length of 22.0 cm and a blade width of 6.0 cm. The grave associated with this lance head was destroyed by the mill, and it is highly unlikely that the lance head and the other finds (glass vessel, three pottery vessels and three seaxes), were finds from the same grave.

Iron lance head 34-1-1 with a blade length of 12 cm and a width of 3 cm was the only find from grave 34. It has a total length of 44 cm. The socket has two flat iron plates attached to it and were covered by an iron ring. It was found near the southern wall of the grave, with the tip pointing to the east.

Iron lance head 51-8-1 was found along the seax with the tip in the direction of the eastern wall, 1.50 cm from the southern wall and 1.50 cm from the western wall. It belonged to the lower burial of double grave 58. The lance head has a length of 45 cm and a blade width of 3.0 cm.

The lance heads cannot be classified or dated on the basis of the information available in the original catalogue alone.

Arrow heads: closed sockets

6 (6-1-1; 6-2-1); 11 (11-1-1)

Two iron arrow heads were found in grave 6. Beckers and Beckers refer to one arrow head with a leaf shaped blade and a length of 6.5 cm and to one with a ‘rectangular’ blade and a length of 11 cm. On the basis of the recorded lengths it became clear which arrow heads without find numbers were finds from grave 6. Arrow head 6-1-1 has an actual length of 6.7 cm and has a triangular blade with a length of 2.2 cm and a width of 1.6 cm. The arrow head has a relatively broad shaft with a diameter of 1.1 cm. It is heavily restored, and seems to have a closed shaft. Similar arrow heads are not classified by Siegmund, the Franken AG or Legoux/Périn/Vallet. The second arrow head (6-2-1) has an actual length of 11.7 cm and a shaft base of 1.3 cm and has a barbed blade. It is a heavily restored specimen, but seems to have a closed shaft. It can be questioned whether the restored specimen resembles its original shape, since

its features are rather different from other barbed arrow heads known from Merovingian graves. A somewhat resembling barbed arrow head was for example found in the cemetery of Posterholt, but this specimen has an open shaft.³²⁵ It is classified as L/P/V type 27, which dates to their phases MA1-MA3 (470/80-600/10).³²⁶ The arrow heads from grave 6 were found alongside the southern wall (it was not recorded where exactly) together with some indeterminate iron fragments. The only other find from this grave is a biconical pot.

Iron arrow head 11-1-1 from grave 11 has a length of 9.3 cm and a socket base diameter of 1.1 cm. The blade is leaf shaped and closed socket. It was not recorded where in the grave the arrow head was found. Other finds from this grave are a biconical pot with a beaker placed inside it.

This specimen is classified as L/P/V type 26 which dates to their phases MA1-MR1 (470/80-630/40).³²⁷

Arrow heads: split sockets

4 (4-7-1.1); 23 (23-2-1)

Iron arrow head 4-7-1.1 from grave 4 has a total length of 10.1 cm and the split socket base a diameter of 1.1 cm. The restored arrow head has a broad oval blade which is relatively wide (2.3 cm), compared with the socket diameter. There seem to be some wood remains preserved in the shaft opening. The other finds from this grave are a seax, shield boss, knife, biconical pot fragments and some utensils. The grave was destroyed; the original locations of the finds in this grave are not known.

Iron arrow head 23-2 from grave 23 has a length of 11.3 cm and a socket base diameter of 1.1 cm. It has a leaf shaped blade. Beckers and Beckers mention an open socket which is not visible anymore on the heavily restored specimen from grave 23. It was not recorded where in the grave the arrow head was found. The other finds from this grave are a lance head and a biconical pot.

Similar arrow heads are classified as L/P/V type 24, which dates to their phases PM-MA3 (440/50-600/10).³²⁸

Arrow heads?

31 (31-8-1); 37 (37-6-1)

Fragments of an arrow head are present in a box, which holds remnants of grave 31; it is not certain whether it actually belonged to grave 31. It was not recorded as a find from grave 31 in the initial catalogue.

Beckers and Beckers mention the find of the socket of an iron arrow head in grave 37, found lying next to the lance head. It is not certain whether the available object (37-6-1) matches with this find, since it is most probably not an arrow head socket: both extremities seem to expand a little; one of these expansions might be the onset of the blade, but the other expansion is not explained. The iron object has a length of 10.1 cm, what it also rather large for the socket of an arrow head. Another arrow head is not present.

Arrow heads: missing

56 (56-2-1; 56-3-1)

Iron arrow head 56-2-1 from grave 56 was recorded as a specimen with a length of 12.0 cm and a blade width of 2.0 cm and was found near the southern wall of the grave with its tip close to the short eastern wall. The second arrow head (56-3-1) from this grave has a recorded length of 10.0 cm and a blade width of 2.0 cm and was also found near the long southern wall of the grave with its tip close to the short eastern wall.

Swords

5 (5-1-1); 30 (30-1-1); 31 (31-1-1); 40 (40-5-1).

Ground workers found the hilt of sword 5-1-1 in the proximity of grave 5. The actual sword was found close to the northern wall of the grave, thus to the left of the now completely decayed body assuming that the deceased was buried with the head in the west. The hilt with knob has a length of 9.5 cm and the knob a width of 6.2 cm and a height of 1.2 cm. It is boat shaped with an oval base and has a narrow rectangular elevation in the middle of the base plate. The rest of the sword is broken, but its parts are restored and completed. The original length and width cannot be established precisely. Beckers and Beckers mention a (total) length of 82 cm, and a hilt length of 12.0 cm. The reconstructed blade length of the restored specimen is c. 38 cm, and the length of the hilt (see above) is 9.5 cm. The width of the blade parts present is c. 5.0 cm. Parts of the sword are absent; one of these parts is probably present in corroded condition (5-1-1.2); it has length of 31.0 cm.

A fraction of an iron sword (30-1-1) was mentioned to have been found in grave 30, which was destroyed by the construction of one of the subsequent mills. The fragment is present in corroded condition in the restoration laboratory. The corroded and fragmented condition hampers the classification of the sword. The other finds from this grave are a francisca, a shield boss and belt fittings. Their original location in the grave could not be recorded.

Beckers and Beckers mentioned a part of an iron sword (31-1-1) to have been found in grave 31. Fragments of what is presumably an iron sword are present in a corroded condition in restoration laboratory Restaura. It is difficult to reconstruct the original sword on the basis of these fragments, and its corroded and fragmented condition hampers the classification of the sword.

Two corroded iron blade parts of a seax or sword are available in corroded condition with leather or wood remains preserved on them. The remaining length of the two blade parts measure 26.7 and 33.9 cm, together thus 60.5 cm. This is rather long for a seax blade, and it should be questioned whether they do not belong to the sword (40-5-1) mentioned to have been found in this grave (in a very fragmented condition). A small fragment of the hilt, detached,

has a length of 4.1 cm. Together with the two corroded blade parts they form a specimen with a total length of 65 cm; the original sword will thus have been longer.

Sword: missing

28 (28-1-1)

Fragments of an iron sword, found in the middle of grave 28, were recorded in the original catalogue. They are no longer available in the current collection.

Axes

20 (20-1-1); 30 (30-4-1); 31 (31-5-1.1; 31-5-1.2)

The iron axe from grave 31 has a blade length of 18.4 cm and a cutting edge length of 7.4 cm. It is identified as an axe on the basis of the angle of the imaginary horizontal middle axes of the blade with the imaginary vertical axes which runs parallel with the back side (fig. 4-67). This angle is with its 86° larger than 75°, and therefore an axe and not a francisca according to the classification scheme of Dahmlos.³²⁹ Its rather straight upper blade edge is also a feature of axes (francisca’s have curved edges) and its lower blade edge is not as concave as those of francisca’s. Some wood remains are preserved in the oval shaft opening, which has a diameter of c. 2.7 cm. The other finds from this grave are a sword, seax and lance head. The locations of the finds in the grave could not be established since the grave was completely destroyed by one of the subsequent mills built on the cemetery terrain. Some small iron and wood remains (31-5-1.2), associated with the axe, are stored separately. The wood remains were never analysed, but are rather small; it remains questionable whether their analysis will provide additional information.

Iron axe 20-1-1 was found close to the western wall and 100 cm from the northern wall of grave 20. The axe has a blade length of 21.1 cm, the length of the facettted cutting edge is 9.1 cm and its back has a width of 4.6 cm (fig. 4-67). Wood remains are not preserved in the oval shaft opening.

Iron axe 30-4-1 is associated with grave 30, which was recorded as a grave destroyed by the construction of the mills; the locations of the finds were not recorded in the catalogue. The blade of this axe has a length of 18.5 cm and the facettted cutting edge a length of 7.4 cm (fig. 4-67). Beckers and Beckers mentioned that wood remains of the socket were present in the oval shaft opening; these are now lost. Axes with nearly straight upper edges are classified as Siegmund type FBA2.1, which dates to Rhineland phases 6-7 (570-610).³³⁰

(324) Paulsen 1967. (325) De Haas/Theuws 2013, 112. (326) Legoux/Périn/Vallet 2004, 14, 24, 52 (type 27). (327) Legoux/Périn/Vallet 2004, 14, 24, 52 (type 26). (328) Legoux/Périn/Vallet 2004, 14, 24, 52 (type 24).

Fig. 4-76
Axes, graves 20, 30 and 31 (scale 1:2).



Horse bridle
29 (29-2-1)

The iron horse bridle, recorded as a find from 29, is available in corroded condition in the restoration laboratory. It consists of various iron parts, which exact features are however difficult to discern due to the corrosion layer. Nonetheless, it is clearly a horse bridle. In the description of horse grave 25 it was mentioned that horse teeth were also found in grave 29. Both probably refer symbolically to a horse, since the graves could not have contained a complete horse. The bridle was found 70 cm from the eastern wall, in the section of the grave associated with the lower body. Two buckles were found in association with the bridle. The other finds from this grave are a shield boss, lance head and seax.

Siegmund mentions that bridles are predominantly deposited in the richer graves of the Merovingian period.³³¹ Bridles are not specifically dated by Siegmund, nor are they by the Franken AG. Legoux, Périn and Vallet classify bridles as type 101 which they date to their phases MA1-MA3 (470/80-600/10).³³²

Pottery

The collection of pottery vessels from the Obbicht graves is quite extended; there are fine ware vessels such as bottles, bowls and biconical pots, and coarse ware vessels such as egg shaped pots and globular pots. Numerous vessels were found in fragmented condition but the majority is now restored and completed.³³³

Fine pottery: bottle, red-brown
57 (57-3-1)

The red globular wheel thrown bottle from grave 57 has a height 20.0 cm, is of a fine burnished ware and is without decoration (fig. 4-77). It has a globular body, a relatively narrow neck and a horizontal outward folded rim. One red bottle was also found in the cemetery of Sittard-Kemperkoul, but this specimen is rather different from the Obbicht specimen, which bears more resemblance with the bottle from Bergeijk-Fazantlaan grave 53.³³⁴ The Obbicht bottle, however, is more elongated and less globular than the Bergeijk bottle and has a shorter neck. Moreover, the Bergeijk bottle is decorated with undulating and straight grooves on its shoulder. The Bergeijk bottle is part of an ensemble, consisting furthermore of a ceramic beaker, a coarse ware pot, a biconical pot and a palm cup (glass). The bottle from Obbicht is a single vessel deposition, as is the bottle from Sittard-Kemperkoul, which was found in the grave of a child. The burial pit in which the Obbicht bottle was found has a length of 2.80 m, which indicates that it was probably the burial of an adult (although pits with similar dimensions are known to have held small coffins matching the length of children). It was found in the middle of the grave, 80 cm from the long northern wall. A knife and beads were also found in this grave; it was thus the burial of a woman.

Fig. 4-77
Red-brown bottle, grave 57
(scale 1:4).



Fig. 4-78
Orange-red bowls type Siegmund Sha2.21, graves 24, 49 and 21 (scale 1:4).



Koch provided an overview of ceramic bottle forms and mentions that they are difficult to date precisely; they appear in the course of the sixth century but are mainly finds of the later Merovingian period.³³⁵ The Obbicht bottle can best be compared with Koch's forms E and G since it is a rather elongated specimen with a short cylindrical neck. Koch mentions that the difference between form E and the more frequent form G is rather gradual; type E dates to SD 8 (600-620) and G to SD 9 (620-650). Siegmund proposed a classification of bottles on the basis of the neck/bottom index and the shape of the body. This index is 0.39 for the Obbicht specimen, what makes it a bottle with a relatively narrow neck. It is classified as Siegmund's type Fla1.1 because of its straight bottom, globular body, short neck and horizontal outward folded rim without clear groove (which is typical for type Fla1.1). This type dates to phase 8 (610-640) but can also appear earlier.³³⁶ The Franken AG maintained Siegmund's type, but with the remark that the variation within this typological group is rather large. They date S-Fla1.1 to their phases 5-7 (565-640/50), thus to a date range which starts before Siegmund's date range.³³⁷ The Obbicht bottle is dated to the first half of the seventh century.

Fine pottery: bowls, orange-red, of Siegmund's type Sha2.21
24 (24-1-1); 49 (49-4-1)

The two orange-red bowls from Obbicht are of a different quality. The bowl from grave 24 has a height of 7.0 cm and is of a fine burnished ware (fig. 4-78). It is neatly made in the sense that it has a symmetric outline, which is in contrast with the bowl from grave

49. The wall of bowl 24-1-1 is divided by a carination; the lower wall is slightly convex, the upper wall slightly concave and it has a simple rim. The upper wall is decorated with two zones of multiple lines of rectangular/square roulette stamp impressions. The foot can be classified as a foot stand. It was found with a globular pot in a completely disturbed grave; the exact former location of the bowl in the grave is not known. This pot is classified as Siegmund's type Sha2.21, on the basis of its foot stand and simple rim, and is dated to Rhineland phases 5-8 (555-640).³³⁸

The red bowl from grave 49 has a height of 7.8 cm and was, as already mentioned, badly executed (fig. 4-78). It is asymmetric (the height is irregular) and the foot stand is badly finished. The upper and lower walls are divided by a faint carination. The lower wall is slightly convex and the upper wall is straight. It was found in the middle of the grave, close to a biconical pot, near the short eastern wall in the proximity of the feet. Numerous beads and a belt fitting were also found in this grave. Although its appearance is rather different from the bowl from grave 24, it is also classified as type Siegmund Sha2.21 on the basis of its carination and foot stand. It dates accordingly to Rhineland phases 5-8 (555-640).³³⁹

Fine pottery: bowls, orange/red
21 (21-1-1)

An orange/red bowl was found in fragmented condition in grave 21. It is now restored and completed; approximately 50% of the original bowl is present (fig. 4-78). The bowl has a reconstructed height of 7.4 cm and a mouth diameter of 19.6 cm, a globular belly,

(329) Dahmlos 1977. (330) Siegmund 1998, 107. (331) Siegmund 1998, 11. (332) Legoux/Perin/Vallet 2004, 29 (type 101). (333) The condition of the vessels at the time of their excavation was not consequently recorded. Their original condition was also established on the basis of the restoration reports of restoration laboratory Restaura in which the state of the vessels before the first restoration round was recorded. It is assumed that this condition was similar to the condition in which they were found. (334) Theuws/Van Haperen 2012, 102-103, Fig. 6.35. (335) Koch 2001, 343-346. (336) Siegmund 1998, 45. (337) Müssemeier *et al.* 2003, 64. (338) Siegmund 1998, 154-156. (339) Siegmund 1998, 154-156.

and a straight, not thickened rim. The foot is identified as a stand ring. The fragments of the bowl were found scattered throughout the grave. Other finds were indeterminate iron fragments, found also scattered throughout the grave. The bowl is classified as Siegmund type Shaz.31 which dates to Rhineland phase 4 (530-555).⁽³⁴⁰⁾ The Franken AG maintained this type but date it to their phases 3-5 (460/80-580/90).⁽³⁴¹⁾

Fine pottery: fine burnished beaker
65 (65-1-1)⁽³⁴²⁾

A globular beaker of a fine burnished ware was in the original catalogue recorded as a find from grave 65; it is no longer present in the collection. It is described as a beaker with a height of 9.5 cm, a foot diameter of 4.0 cm, and a mouth diameter of 6.0 cm. It had a foot stand, a straight neck and a thickened rim. The transition from the globular belly to neck was described as clearly indicated. The description of this beaker might match with the small egg-shaped Roman beakers, comparable to the one known from Sittard grave 11. This fits with the glass jar (late Roman/early Merovingian) also known from this grave. Grave 65, which is located at some distance from the actual cemetery, might be the only remnant of an early phase of the cemetery.

Fine pottery: biconical pots (general remarks)
The biconical pots from the Obbicht graves (table 4.5 and 4.10) are classified as either Siegmund's type group 2 (biconical pots with a pronounced carination, a straight upper wall without ridge and with or without decoration, although never with roulette stamp decoration) or type group 3 (pots with straight upper walls, pronounced carination, roulette stamp decoration and or ridges on the upper wall). Their specifics are in the following discussed per Siegmund type.

Fine pottery: biconical pot of Siegmund's type Kwt2.12
17 (17-2-1)

The larger of the two biconical pots from grave 17 has a height of 18.2 cm. The pot was found in fragmented condition, but is now restored and completed; approximately 90% of the original pot is present (fig. 4.79). It has a grey-brown surface and its upper wall is decorated with a zone of five grooves underneath the neck and a zone of three grooves above the carination in between which oblique single stamp impressions of rectangular grids with rounded corners filled with three columns and six rows alternating with single stamp impressions of circular outlines filled with radial lines are applied. The pot was found with a smaller biconical pot (17-3-1) inside it, 20 cm from the long southern wall and 40 cm from the short eastern wall of the grave near the presumed location of the feet. The only other find from this grave is a small indeterminate iron fragment. It is not known whether it was the grave of a woman or a man.

Table 4.10
The biconical pots from Obbicht. H=Height, B=Belly diameter, M=Mouth diameter, BF=Basic Form, G=Group (Siegmund 1998).

Vessel	H	B	M	BF	G	Type
17-2-1	18.2	21.1	16.0	4	2	Kwt2.12
17-3-1	8.0	9.5	8.1	3	2	Kwt2.31/2.32
7-1-1	10.8	9.2	6.4	5	2	Kwt2.33
46-7-1	6.5	9.0	7.6	2	2	Kwt2.41
51-10-1	9.7	10.6	7.5	4	2	Kwt2.42
40-3-1	8.5	9.3	6.3	4	2	Kwt2.42
40-1-1	12.3-13.5	13.1	9.8	4 / 5	2	Kwt2.42/ 2.43
64-1-1	9.9	10.5	6.6	5	2	Kwt2.43
20-6-1	16.9-17.5	23.6	19.6	2	3	Kwt 3.11
40-2-1	15.8-16.5	20.3	15.6	2/4	3	Kwt 3.11/3.12
37-9-1	20.1	25.5	20.4	2/4	3	Kwt 3.11/3.12
11-2-1	10.6	14.2	9.6	2	3	Kwt 3.11/3.12
8-6-1	15.9	19.7	15.7	4	3	Kwt 3.12
6-4-1	11.4	13.2	8.7	4	3	Kwt 3.12/3.22
23-4-1	11.9	15.2	11.8	2	3	Kwt 3.21
10-1-1	15.0	19.2	16.0	2	3	Kwt 3.21
35-1-1*	18.0	21.0	13.5	4	3	Kwt 3.21/3.11
36-10-1	14.5	18.4	14.0	2/4	3	Kwt 3.21/3.22
12-4-1	12.3	14.4	9.9	4	3	Kwt 3.22
43-1-1	13.5	15.9	12.1	4	3	Kwt 3.22
49-5-1	12.6	14.4	9.9	4	3	Kwt 3.22
1-1-1	14.1	16.0	11.6	4	4	Kwt 4.11
61-1-1	8.8	12.3	8.2	2	4	Kwt 4.2

Fig. 4.79
Biconical pot type Siegmund Kwt2.12, grave 17 (scale 1:4).



Fig. 4.80
Biconical pot type Siegmund Kwt2.31/2.32, grave 17 (scale 1:4).



The large biconical pot is classified as Siegmund's type Kwt2.12, the eldest form of biconical pots with straight upper walls, which dates to Rhineland phase 4 (530-555).⁽³⁴³⁾ It is the oldest biconical pot known from the Obbicht cemetery. The Franken AG classify similar pots as type Kwt2A which dates to their phases 4-5 (510/25-580/90).⁽³⁴⁴⁾

Fine pottery: biconical pot of Siegmund's type Kwt2.31/2.32
17 (17-3-1)

The small biconical pot (17-3-1) from grave 17 was found inside the larger one (17-2-1), close to the presumed original location of the feet. The pot is nearly complete; it is rather asymmetric and of a poor quality (fig. 4.80). It has a grey surface, a height of 8.0 cm, and two prominent grooves applied on the upper wall. The faint grooves just above these two grooves seem to be production traces. Its basic form, according to Siegmund's classification scheme, is either 3 or 4 since the mouth/belly index is circa 0.85 which fits with basic form 3 (≥ 0.85). Considering its asymmetry basic form 4 is also an option. Basic form 3 results in a classification of the pot as Siegmund's type Kwt2.31, which dates to Rhineland phase 5 (555-570), and basic form 4 results in a classification of the pot as type Siegmund Kwt2.32, which dates to Rhineland phases 4-5 (530-570).⁽³⁴⁵⁾ In view of the date range assigned to biconical pot 17-2-1 (530-555: the date range of the pot in which it was found), a classification as Kwt2.32 seems appropriate, though the other option is of course also possible since objects can be in circulation for some time before deposition.

(340) Siegmund 1998, 156. (341) Müsseseimer *et al.* 2003, 67-86. (342) No longer available. (343) Siegmund 1998, 129. (344) Müsseseimer *et al.* 2003, 58. (345) Siegmund 1998, 129-130. (346) Müsseseimer *et al.* 2003, 59. (347) Siegmund 1998, 130. (348) Müsseseimer *et al.* 2003, 59.

Fig. 4.81
Biconical pot type Siegmund Kwt2.33, grave 7 (scale 1:4).



The Franken AG classify pots with grooves as type Kwt3A, which dates to their phases 4-5 (510/25-580/90) but can also appear, although sporadically, in phase 6 (580/90-610/20).⁽³⁴⁶⁾

Fine pottery: biconical pot of Siegmund's type Kwt2.33
7 (7-1-1)

The biconical pot from grave 7 was found in fragmented condition but is now restored and completed; approximately 90% of the original pot is present (fig. 4.81). It has a slightly pronounced carination and a relatively high rim. It seems to have been baked under conditions with abundant smoke resulting in the thin dark layer, which is now considerably weathered and shows the brown-grey paste underneath. The pot has a height of 10.8 cm and its upper wall is decorated with four relatively broad and deep grooves. Other finds are not known from grave 7. It was observed that the grave was completely disturbed; the original find location of the pot in the grave could as a consequence not be established. The pot is classified as Siegmund's type Kwt2.33, which dates to Rhineland phases 6-8 (570-640).⁽³⁴⁷⁾ The Franken AG classify pots with grooves as type Kwt3A, which dates to their phases 4-5 (510/25-580/90) and less frequently to phase 6 (580/90-610/20).⁽³⁴⁸⁾

Fine pottery: biconical pot of Siegmund's type Kwt2.41
46 (46-7-1)

The small biconical pot from grave 46 has a dark surface and is not decorated (fig. 4.82). It was found inside the large red bowl from this grave. The height of the pot is 6.5 cm. The carination is po-

Fig. 4.82
Biconical pot type Siegmund Kwt2.41, grave 46 (scale 1:4).



sitioned at the lower part of the pot, which results in a rather peculiar form. This feature is not discussed in Siegmund's and the Franken AG's typological overviews of biconical pots and neither is its slightly sagging base. It can be questioned whether it should not be considered as a separate class, but parallels are not known to me. On the basis of metric criteria it can be classified as Siegmund's type Kwt2.41, which dates to phase 4 (530-555).³⁴⁹ The belt fittings from this grave date to 625-640 and the other biconical pot to 625-670, which might indicate that the small biconical pots need to be classified and dated differently.

Fine pottery: biconical pots of Siegmund's type Kwt2.42

40 (40-3-1); 51 (51-10-1)

The biconical pot from grave 40 was found in fragmented condition but is now restored and only for a small part completed (fig. 4.83). It has a height of 8.5 cm, which makes it one of the smaller pots of the cemetery. The pot is without decoration. It seems to have been baked under conditions with abundant smoke resulting in thin dark outer layer. This layer is now considerably weathered and shows the brown past underneath. The pot was found in a 'double grave' of two superimposed bodies, inside a larger biconical pot (40-2-1), placed in the middle of the grave approximately 200 cm from the short western wall of the lower burial, and thus near the presumed former location of the feet. Such find circumstances suggest that these small biconical pots should rather be considered to be beakers. The other finds associated with this lower burial are a sword, lance head, shield boss and plate buckle.

The biconical pot from grave 51 has a height of 9.7 cm and is without decoration (fig. 4.83). It seems to have been baked under conditions with abundant smoke resulting in the thin dark outer layer, which is now considerably weathered showing the brown paste underneath. The pot was found in a 'double grave' and be-

Fig. 4.83
Biconical pots type Siegmund Kwt2.42, graves 40 and 51 (scale 1:4).



longed to the lower burial of the two superimposed bodies, together with a seax, lance head, belt fittings, tweezers and spouted pot. The biconical pot was found close to the spouted pot in the middle of the grave, near the short eastern wall and thus near the presumed former location of the feet.

The pots from grave 51 and 40 are both classified as Siegmunds Kwt2.42, which dates to Rhineland phase 7 (585-610).³⁵⁰ The Franken AG classify undecorated pots with 'normal' dimensions as type Kwt4A, which dates to their phases 4-7 (510/25-640/50).³⁵¹

Fine pottery: biconical pots of Siegmund's type Kwt2.42/2.43

40 (40-1-1); 64 (64-1-1)

The biconical pot from grave 40A was found in fragmented condition but is now restored and for approximately 5% completed (fig. 4.84); it has a height of 12.8 cm. The considerably weathered surface seems to be a thin dark top layer which is a result of baking conditions with abundant smoke; it covers the yellow to red paste underneath. The pot is without decoration. It was found in a 'double' grave, and was associated with the upper burial of the two superimposed burials. The pot was found in the middle of the grave, close to the eastern wall, thus close to the presumed former location of the feet. Other finds are not associated with this burial. Since the pot is rather asymmetric it might be either ground form 4 or 5 according to Siegmund's classification scheme, and as a consequence either Siegmund type Kwt2.42 or Kwt2.43. Type Kwt2.42 dates to Rhineland phase 7 (585-610) and Kwt2.43 to Rhineland phases 8-9 (610-670).³⁵²

The small biconical pot from grave 64 has a height of 9.9 cm, has a grey-black surface and is without decoration (fig. 4.84). The top layer seems to be a thin dark layer resulting from baking conditions with abundant smoke; it is now somewhat weathered showing the lighter past underneath. It has a relatively high rim. It was

Fig. 4.84
Biconical pots type Siegmund Kwt2.42/2.43, graves 40 and 64 (scale 1:4).



Fig. 4.85
Biconical pot type Siegmund Kwt 3.11, grave 20 (scale 1:4).



found in fragmented condition but is now restored and completed; the added parts are however difficult to tell apart from the original parts. It was assigned to a completely destroyed grave and associated with a bottom fragment of a pot and an arrow head. The locations of the finds were not recorded. The pot is classified as Siegmund's type Kwt2.43 which dates to Rhineland phases 8-9 (610-670), although it might also be a type 2.42 (585-610), depending on its basic form which is identified as 5, but might also be 4.³⁵³ The Franken AG classify undecorated pots with 'normal' dimensions as type Kwt4A, which dates to their phases 4-7 (510/25-640/50).³⁵⁴

Fine pottery: biconical pot of Siegmund's type Kwt 3.11

20 (20-6-1)

The large red biconical pot (20-6-1) from grave 20 was found in fragmented condition but is now restored and completed; the restored and original parts are in some places difficult to tell apart, but the restoration report mentions that approximately 25% of the original pot was present and that the bottom was completely gone (fig. 4.85). The upper wall of the pot is decorated with a single line of rectangular to triangular roulette stamp impressions, applied as a spiral line covering nearly the complete upper wall. The pot was found in the middle of the grave near the short eastern wall and thus near the presumed location of the feet. It is clas-

sified as Siegmund type Kwt3.11, which dates from Rhineland phase 6 to the beginning of phase 7 (570-c.600).³⁵⁵ The Franken AG classify pots with single lines of roulette stamp impressions as type Kwt5A which dates to their phases 5-6 (565-610/20).³⁵⁶

Fine pottery: biconical pots of Siegmund's type Kwt 3.11/3.12

11 (11-2-1); 37 (37-9-1); 40 (40-2-1)

The pot from grave 11 was found in a fragmented condition but is now restored and completed; approximately 90% of the original pot is present (fig. 4.86). The surface is considerably weathered, but a thin dark smoked surface seems to have been present. It is now weathered and shows the light grey-brown paste originally underneath it. The pot has a height of 10.6 cm. The upper wall is decorated with a single groove and single lines of complex roulette stamp impressions applied two times above the groove, and one time beneath it. The stamp impressions consists of lines, crosses, stars, tridents and squares; since the pattern is uninterrupted it is identified as an example of the early group of roulette stamps as defined by Siegmund. It was found close to the eastern wall of the grave, thus near the presumed location of the feet. A small conical glass beaker was placed upside down in the pot. The single other find from the grave was an arrow head. The pot is classified as either Siegmund type Kwt3.11 (6-7A: 570-c.600) or Kwt3.12 (6-7: 570-610) since its ground form cannot be established unambiguously.³⁵⁷ The Franken AG classify pots with complex uninterrupted roulette stamp impressions as type Kwt5G, which dates to their phases 5-6 (565-610/20).³⁵⁸

The biconical pot from grave 37 has a smoked top layer which is considerably weathered showing the red paste underneath. It was found in fragmented condition, but is now restored and completed; approximately 10% of the rim and 5% of the wall were added (fig. 4.86). The restored pot has a height of 20.1 cm and its upper wall is decorated with single lines of complex roulette stamp impressions of vertical and oblique stripes and crosses. The decoration was applied as a spiral line covering nearly the complete upper wall surface. The pot was found close to the eastern wall, in the middle of the grave, thus near the presumed location of the feet. The roulette stamp impressions are uninterrupted and the decoration is therefore identified as an example of the early group of roulette stamps of Siegmund. Since the ground form of the pot could not be established unambiguously as form 2 or 4, the pot is classified as either type Siegmund Kwt3.11 (570-c.600) or type Kwt3.12 (570-610).³⁵⁹ The Franken AG classify pots with complex uninterrupted roulette stamp impressions as type Kwt5G, which dates to their phases 5-6 (565-610/20).³⁶⁰

Black biconical pot 40-2-1 from grave 40 was found in fragmented condition but is now restored and completed; approximately

(349) Siegmund 1998, 130. (350) Siegmund 1998, 130. (351) Müsseseimer *et al.* 2003, 60. (352) Siegmund 1998, 130. (353) Siegmund 1998, 130. (354) Müsseseimer *et al.* 2003, 60. (355) Siegmund 1998, 130. (356) Müsseseimer *et al.* 2003, 60-61. (357) Siegmund 1998, 130. (358) Müsseseimer *et al.* 2003, 62. (359) Siegmund 1998, 130. (360) Müsseseimer *et al.* 2003, 62.

Fig. 4.86
Biconical pots type Siegmund Kwt 3.11/3.12,
graves 11, 37 and 40 (scale 1:4).



90% of the original pot is present (fig. 4.86). The pot has a shiny dark top layer, probably a smoked surface, and its upper wall is decorated with a ridge, a little above the middle of the upper wall, above which two single lines of rectangular roulette stamp impression are applied and beneath which three single lines of the similar roulette stamp was applied. A smaller biconical pot (40-3-1) was placed inside this pot. It was found in the middle of the grave approximately 200 cm from the western wall and thus near the presumed location of the feet of the lower burial of the two superimposed burials. According to Siegmund, ridges occur on biconical pots with roulette stamp impressions of the late group. The single lines of roulette stamp impression on pot 40-2-1, however, belong to the early group. For now it is classified on the basis of the roulette stamp and thus as either type Kwt3.11 or Kwt3.12 since its ground form cannot be established unambiguously.³⁶¹ Kwt3.11 dates from Rhineland phase 6 to the beginning of phase 7 (570-c.600) and type Kwt3.12 dates to Rhineland phases 6-7 (570-610). The presence of a ridge on the upper wall is according to Siegmund a later feature of biconical pots; the pot from grave 40 might date somewhat later in the assigned date range. The Franken AG classify pots with single lines of roulette stamp impressions as type Kwt5A which dates to their phases 5-6 (565-610/20).³⁶²

Fine pottery: biconical pot of Siegmund's type Kwt3.12
8 (8-6-1)

The biconical pot from grave 8 is with a height of 15.9 cm a relatively large pot within the collection of biconical pots from Obbicht (fig. 4.87). The pot was found in fragmented condition but is now

restored and completed; approximately 60% of the original pot is present. It had a smoked surface; a thin dark top layer which is now considerably weathered showing the light paste underneath. The upper wall is decorated with a ridge and multiple lines of roulette stamp impressions of which the exact shape is rather difficult to discern but seem to form crosses. The stamp pattern is identified as an example of the early group as defined by Siegmund, since it is rather regular and uninterrupted. The pot belonged to the grave of a woman (identified on the basis of beads), which was probably reopened since iron fragments and the fragments of the pot were found scattered throughout the grave. It is a rare example of a pot with a ridge on the upper wall in the southern Netherlands. It is classified as Siegmund type Kwt3.12 (early group of roulette stamps, which, however does not occur in combination with ridges according to Siegmund), which dates to Rhineland phases 6-7 (570-610).³⁶³ The Franken AG classify pots with complex uninterrupted roulette stamp impressions as type Kwt5G, which dates to their phases 5-6 (565-610/20).³⁶⁴ Since ridges are considered to be later features, the pot may also date somewhat later.

Fine pottery: biconical pot of Siegmund's type Kwt3.12/3.22
6 (6-4-1)

The thin dark top layer of the smoked biconical pot from grave 6 is now considerably weathered showing the lighter paste underneath (fig. 4.88). The pot was found in fragmented condition; the parts were glued together and approximately 5% of the pot appeared to be missing and was completed. The pot was found 90 cm from the short eastern wall in the middle of the grave; thus near

Fig. 4.87
Biconical pot type Siegmund Kwt3.12,
grave 8 (scale 1:4).



the presumed location of the lower legs. It has a height of 11.4 cm and its upper wall is decorated with six to seven single lines of triangular and rectangular roulette stamp impressions. On the basis of its ground form and early roulette stamp it is classified as Siegmund type Kwt3.12 (6-7A: 570-c.600).³⁶⁵ Two to three of the roulette stamp lines, however, seem to consist of rectangles in relatively ordered positions; it might thus also be an example of Siegmund's late group of roulette stamps and thus Siegmund type Kwt3.22 (7B-8A (c.600-c.620)).³⁶⁶ The Franken AG classify pots with single lines of roulette stamp impressions as type Kwt5A which dates to their phases 5-6 (565-610/20), and pots with multiple lines of roulette stamp impressions as type Kwt5B, which dates to their phases 5-7 (565-640/50).³⁶⁷

Fine pottery: biconical pots of Siegmund's type Kwt3.21
10 (10-1-1); 23 (23-4-1)

The biconical pot from grave 10 was found in fragmented condition, but is now restored and completed; approximately 95% of the original pot is present (fig. 4.89). The original thin dark smoked top layer is considerably weathered showing the lighter paste underneath. The restored pot has a height of 15.0 cm and its upper wall is decorated with three zones of multiple lines of rectangular roulette stamp impressions covering the entire upper wall. The pot was found 30 cm from the eastern wall in the middle of the grave, thus approximately near the presumed former lo-

(361) Siegmund 1998, 130. (362) Müssemeier *et al.* 2003, 60-61. (363) Siegmund 1998, 130. (364) Müssemeier *et al.* 2003, 62. (365) Siegmund 1998, 130. (366) Siegmund 1998, 131. (367) Müssemeier *et al.* 2003, 61.

Fig. 4.88
Biconical pot type Siegmund Kwt3.12/3.22,
grave 6 (scale 1:4).



Fig. 4.89
Biconical pots type Siegmund's Kwt3.21, graves 10 and 23 (scale 1:4).



cation of the lower legs. Cremation remains are now stored in the pot; it is not clear whether they were found inside this pot or in grave 10 since a find number was not recorded on the bag holding the remnants.

The biconical pot from grave 23 was found in a fragmented condition, but is now restored and completed; approximately 95% of the original pot is present (fig. 4.89). The pot has a brown-grey surface, and might have been covered with a smoked (?) dark thin top layer. It has a height of 11.9 cm and its upper wall is decorated with four grooves above and underneath which four lines of rectangular roulette stamp impressions are applied; it is thus an example of Siegmund's late group of roulette stamps. The two fine grooves on the lower wall are production traces. On the basis of the identified features the two pots are classified as Siegmund's type Kwt3.21, which dates to Rhineland phases 7-8 (585-640)³⁶⁸, and Franken AG type Kwt5B, which dates to their phases 5-7 (565-640/50).³⁶⁹

Fine pottery: biconical pot of Siegmund's type Kwt 3.21/3.22 or 3.11/3.12
36 (36-10-1)

The biconical pot from grave 36 was found in fragmented condition, but is now restored and completed; approximately 95% of the original pot is present (fig. 4.90). It has a height of 14.5 cm. The original top layer is considerably weathered and shows the lighter paste underneath it; it was a thin dark smoked top layer of which

now only dark vague stains are visible. A red-orange substance covers a part of the outer upper wall and some parts of the lower wall; it is unclear what this mineralised substance is but it might be corrosion left by the iron bucket bands next to which the biconical pot was found in the grave. The entire surface of the upper wall is decorated with lines of rectangular roulette stamp impressions. The stamp seems to be an example of Siegmund's late stamp group consisting of three lines of relatively neatly ordered rectangular impressions, but it can also be single line roulette stamp impressions (Siegmund's early group). Since its ground form could not be established unambiguously as either form 2 or 4, the pot is classified as Siegmund's type Kwt3.21, which dates to Rhineland phases 7-8 (585-640) and Kwt3.22, which dates to the end of Rhineland phase 7 and the beginning of phase 8B (c.600-c.630).³⁷⁰ The pot might also be classified as Siegmund's type Kwt3.11 or 3.12 (single line roulette stamp in combination with ground form 2 and 4); Kwt3.11 dates from Rhineland phase 6 to the beginning of phase 7 (570-c.600) and type Kwt3.12 dates to Rhineland phases 6-7 (570-610).³⁷¹ The Franken AG classify pots with single line roulette stamps as type Kwt5A which dates to their phases 5-6 (565-610/20) and pots with multiple line roulette stamps as type Kwt5B, which dates to their phases 5-7 (565-640/50).³⁷²

Fine pottery: biconical pots of Siegmund's type Kwt3.22
12 (12-4-1); 43 (43-1-1); 49 (49-5-1)

The surface of the complete biconical pot (12-4-1) from grave 12 is considerably weathered; the surface is black but the light grey-

ish layer underneath is shining through; it is in all probability a smoked but now weathered top layer (fig. 4.91). The pot has a height of 12.3 cm. The entire upper wall is covered with four lines of complex roulette stamp impressions: an isolated part of the stamp consist of rectangular grids filled with 3 columns and 4 rows of square impressions, one rectangular grid of 4 columns and 4 rows of square impressions, one rectangular grid with two crosses, and a rectangular grid with two reversed V-shapes. Since there is some space between the single elements it is identified as interrupted complex roulette stamp impressions. The pot was found in the middle of the grave of a man. Other finds from this grave are a seax and two knives.

The Franken AG classify pots with interrupted complex roulette stamp impressions as type Kwt5F, which dates to their phases 5-7 (565-640/50).³⁷³

Biconical pot 43-1-1 from grave 43 originally had a grey surface but it now considerably weathered showing the red paste underneath it (fig. 4.91). The pot was found in fragmented condition but is now restored and for approximately 20% completed. The upper wall is decorated with a single line of complex roulette stamp impressions; an isolated fragment of the line shows that the stamp consisted of one rectangular grid filled with four columns and four rows of rectangular impressions, four mirrored S-shapes, one cross, one S-shape and two crosses again. The single line roulette stamp is applied twice just beneath the neck, and twice above the carination. The pot was found 50 cm from the eastern wall and 30 cm from the southern wall inside the coffin. The stamp was also used on the spouted pot from Sittard grave 86 and a biconical pot

Fig. 4.90
Biconical pot type Siegmund Kwt 3.21/3.22 or 3.11/3.12, grave 36 (scale 1:4).



Fig. 4.91
Biconical pot type Siegmund Kwt3.22, graves 12, 43 and 49 (scale 1:4).



Fig. 4.92
Biconical pot type Siegmund Kwt4.11, grave 1 (scale 1:4).



Fig. 4.93
Biconical pot type Siegmund Kwt4.2, grave 61 (scale 1:4).



impressions applied five times on the upper wall (fig. 4.92). The pot is part of a grave goods assemblage that consists furthermore of a plate buckle and ceramic spindle whorl. The pot was found 40 cm from the short eastern wall and 30 cm from the long southern wall, and was thus deposited close to the presumed location of the feet. The pot is classified as Siegmund's type Kwt4.11 on the basis of its rounded carination. This type dates to the end of Rhineland phase 7 and the first half of phase 8 (c.600-c.625).³⁷⁸ The Franken AG classify similar pots as type Kwt5B, which dates to their phases 5-7 (565-640/50).³⁷⁹

Fine pottery: biconical pot of Siegmund's type Kwt4.2
61 (61-1-1)

The red biconical pot from grave 61 has a rounded carination but has an appearance different from the one with rounded carination from grave 1. The pot is undecorated, is smaller with its height of 8.8 cm, is squatter than pot 1-1-1, and has as a consequence a sagging appearance (fig. 4.93). It is the only find from this grave and it was found 80 cm from the short eastern wall and 50 cm from the long northern wall, thus near the presumed former location of the feet. The pot is classified as Siegmund's type Kwt4.2 on the basis of its sagging belly shape. This type dates to Rhineland phase 7 (585-610).³⁸⁰ The Franken AG classify similar pot as type Kwt4A, which dates to their phases 4-7 (510/25-640/50).³⁸¹

Fine pottery: biconical bowl Siegmund's type Kwt4.3
46 (46-6-1)

The large red biconical pot from grave 46 has a wide mouth, a foot stand, a pronounced carination and a ridge on the nearly vertical upper wall (fig. 4.94). The pot was found in fragmented condition, but is now restored and completed; approximately 95% of the original pot is present. The pot has a height of 19.7-20.0 cm and a mouth diameter of 21.2-22.8 cm. The foot has a diameter of 11.0 cm and a belly diameter of 25.0 cm. Some small black spots are visible on the outer surface of the pot and it is tempered with fine sand and pebbles. The upper wall shows a ridge above which two undulating grooves are applied and beneath which two zones of three straight grooves are applied. The bowl was found near the tip of the lance head, 40 cm from the southern wall and 40 cm from the eastern wall and was thus deposited near the presumed location of the feet. A small black biconical pot was found inside the bowl. The other finds, apart from the lance head and small bowl, are a seax, belt fittings, a knife and fire steel; it was thus the grave of a man. The pot is classified as Siegmund's special biconical pot type Kwt4.3, which dates to Rhineland phases 8B and 9 (625-670).³⁸² The Franken AG maintained Siegmund's type (Franken

from grave 159 of the cemetery of Rhenen (see also chapter 7 for a discussion of this reused stamp).³⁷⁴ The reappearing roulette stamp is discussed in more detail in chapter 7. The roulette stamp is identified as an example of Siegmund's late roulette stamp group (interrupted pattern). The Franken AG classify pots with interrupted complex roulette stamp impressions as type Kwt5F, which dates to their phases 5-7 (565-640/50).³⁷⁵

The biconical pot from grave 49 has a considerably weathered smoked surface showing the lighter past underneath (fig. 4.91). The pot was found in fragmented condition; the parts are now glued together and approximately 10% of the rim and 10% of the wall appeared to be missing and was completed. The height of the reconstructed pot is 12.6 cm and the upper wall is decorated with four grooves just beneath the neck. Underneath the grooves multiple lines of rectangular roulette stamp impressions are applied. The pot was found next to the red bowl in the middle of the grave, close to the short eastern wall and thus near the presumed former location of the feet. The Franken AG classify similar pots as type Kwt5B, which dates to their phases 5-7 (565-640/50).³⁷⁶

The three pots are all classified as Siegmund's type Kwt3.22 (roulette stamp of the late group), which dates to the end of Rhineland phase 7 and beginning of phase 8B (c.600-c.630).³⁷⁷

Fine pottery: biconical pot of Siegmund's type Kwt4.11
1 (1-1-1)

The red biconical pot from grave 1 has a rounded carination, a height of 14.1 cm and a double line of rectangular roulette stamp

(368) Siegmund 1998, 130-131. (369) Müssemeier *et al.* 2003, 61. (370) Siegmund 1998, 130-131. (371) Siegmund 1998, 130. (372) Müssemeier *et al.* 2003, 61. (373) Müssemeier *et al.* 2003, 62. (374) Wagner/Ypey 2011, 146. (375) Müssemeier *et al.* 2003, 62. (376) Müssemeier *et al.* 2003, 61. (377) Siegmund 1998, 131. (378) Siegmund 1998, 131-132. (379) Müssemeier *et al.* 2003, 61. (380) Siegmund 1998, 132. (381) Müssemeier *et al.* 2003, 60. (382) Siegmund 1998, 132.

Fig. 4.94
Biconical bowl type Siegmund
Kwt4.3, grave 46 (scale 1:4).



AG S-Kwt4.3) and date it to their phases 7-8 (610/20-670/80), although predominantly to phase 7 (610/20-640/50).³⁸³ This type of pot is relatively rare but by now several specimens are known from the southern Netherlands.³⁸⁴ Other examples were found in the Rhineland.

Biconical pots: missing

35 (35-1-1)

Biconical pot 35-1-1 from grave 35 was in the catalogue of Beckers and Beckers described as a ‘blue-black’ pot with a roulette stamp decoration of six lines of impressed rectangles in between two zones of grooves; four grooves above the stamp impressions and four grooves beneath them. The pot was found 60 cm from the southern wall and 80 cm from the eastern wall. Since the dimensions of the pot were recorded in the catalogue (height: 18 cm, mouth diameter: 13.5 cm and belly diameter: 21.0 cm) it

is identified as a pot of form group 3 and either as Siegmund’s type Kwt3.21 (roulette stamp of multiple lines), which dates to Rhineland phases 7-8 (585-640) or type Kwt3.11 (roulette stamp of single lines), which dates to Rhineland phases 6-7 (570-610).³⁸⁵

Biconical pot fragments: without decoration

38 (38-1-1)

The fragments of a grey biconical pot (38-1-1) were found scattered throughout grave 38; they are available but the pot is not restored yet.

The Franken AG classify undecorated pots with ‘normal’ dimensions as type Kwt4A, which dates to their phases 4-7 (510/25-640/50), and the elongated ones as FAG S-Kwt2.43, which dates to their phases 6-9 (580/90-710).³⁸⁶ Siegmund classifies pot without decoration as types Kwt2.41/2.42/2.43, which date to Rhineland phases 4-9 (530-670).³⁸⁷

Biconical pot fragments: with single stamps and grooves

28 (28-5-1)

Fragments of a biconical pot are known from grave 28. The decoration on the wall fragments consists of single stamp impressions of vertical undulating stripes in combination with grooves (see the catalogue). The fragments are classified as Siegmund Kwt2.11/2.12, which dates to Rhineland phases 4-5 (530-570)³⁸⁸, and Franken AG type Kwt2A, which dates to their phases 4-5 (510/25-580/90).³⁸⁹

Biconical pot fragments: with grooves

20 (20-7-1)

Beckers and Beckers mention that a small (biconical) pot (20-7-1) with a red outer surface was found in fragmented condition to the north of the large biconical pot in grave 20. In the restoration laboratory several fragments with straight grooves of a red pot are present. The pot is not restored yet. The Franken AG classify pots with grooves as type Kwt3A, which dates to their phases 4-5 (510/25-580/90) and less frequently to phase 6 (580/90-610/20).³⁹⁰ Siegmund classifies pot with grooves as types Kwt2.31/2.32/2.33, which date to Rhineland phases 4-8 (530-640).³⁹¹

Biconical pots fragments: roulette stamp impressions, early group

3 (3-2-1); 4 (4-9-1); 14 (14-1-1); 15 (15-1-1); 19 (19-3-1; 19-4-1); 52 (52-1-1); 59 (59-2-1); 63 (63-1-1)

Beckers and Beckers mention the find of a wall fragment of a (biconical) pot with a dark outer surface and decoration in grave 3; the decoration was not further specified. A wall fragment with rim is present in the restoration atelier; it is dark grey and has a single line roulette stamp decoration of triangles/vertical stripes. It remains uncertain whether a complete pot was originally deposit-

ed in this grave. Only one other pottery fragment of a terra sigillata bowl, was assigned to this grave.

Fragments of the wall and rim of a grey biconical pot (4-9-1) are present in the restoration laboratory. The wall fragments show a single line of vertical stripes/rectangular roulette stamp impressions. Although the grave was destroyed it is known that the other finds from this grave are a shield boss, seax, knife, arrow head and toilet utensils. The location of the finds could not be recorded.

From grave 14 fragments of a small biconical pot are present. They show single lines of rectangular roulette stamp impressions. They are classified as Franken AG type Kwt5A (5-6: 565-610/20).³⁹²

Fragments of a large biconical pot with thick walls are known from grave 15. They have a grey outer surface and show seven rows of single lines of roulettes stamp impressions of stripes on the upper wall.

In grave 19 the fragments of a biconical pot (19-3-1) with a black outer surface were found as one heap in the middle of the grave near the eastern wall, thus near the presumed former location of the feet. The original shape and dimensions of the pot cannot be reconstructed. The decoration can be classified; it is a complex uninterrupted roulette stamp decoration of single lines of crosses and vertical lines. The catalogue mentions that seven lines were applied on the upper wall, which seems to be in accordance with the number of lines on the shards available. A second small wall fragment (19-4-1), clearly of another biconical pot, is also known from this grave. The fragment is decorated with single lines of uninterrupted reversed and straight V-shaped roulette stamp impressions. The fragments of the two different pots are classified as Franken AG types Kwt5G/H, which date to their phases 5-7 (565-640/50).³⁹³

Fragments of a brown-grey biconical pot were found in grave 52. The decoration on the upper wall with presumably a ridge is considerably weathered and difficult to identify. It seems to be a complex roulette stamp decoration of single uninterrupted lines of rectangular grids filled with small rectangular impressions of two columns and three rows, alternating with rectangular grids filled with radial lines. It is classified as the early roulette stamp group of Siegmund, and as Franken AG type Kwt5G/5H (5-6: 565-640/50).

The fragments of a grey biconical pot from grave 59 show a decoration of eight single lines of rectangular roulette stamp impressions. The Franken AG classify pots with single lines of rectangular roulette stamp impressions as type Kwt5A which dates to their phases 5-6 (565-610/20).³⁹⁴

The biconical pot fragments from grave 63 are decorated with single uninterrupted lines of complex roulette stamp impressions consisting of rectangular grids of two columns and two rows of

small rectangles. The stamp impressions are present on a carination fragment and a rim fragment, which seems to indicate that the entire upper wall was decorated. The fragments were found 20 cm from the southern wall and 60 cm from the eastern wall. They are classified as Franken AG type Kwt5G (5-6: 565-610/20).³⁹⁵

All the fragments mentioned above are on the basis of the singular lines of uninterrupted complex roulette stamp impressions classified as Siegmund types Kwt3.11/3.12/3.13, which date to Rhineland phases 6-7 (570-610).³⁹⁶

Biconical pots fragments: roulette stamp impressions, late group

28 (28-4-1); 47 (47-1-1)

Fragments of a grey biconical pot with in all probability multiple lines of rectangular roulette stamp impressions (they may also be single lines, this is difficult to see) were found in grave 28. They are classified Franken AG Kwt5B or 5C (5-8: 565-670/80)³⁹⁷ and Siegmund’s types Kwt3.21/3.22/3.23 (7-8: 585-640).³⁹⁸

Fragments of a biconical pot with a black surface and decoration on the upper wall were recorded as finds from grave 47; they were found scattered throughout the grave and one wall fragment was found rather high in the grave. The fragments show single lines of complex interrupted roulette stamp impressions of grids filled with small rectangles. The Franken AG classify pots with similar stamp impressions as type Kwt5F (complex, interrupted), which dates to their phases 5-7 (565-640/50).³⁹⁹ Siegmund classifies similar roulettes stamps as those of the late group (complex, interrupted) and thus as Kwt3.21/3.22/3.23, which date to phases 7-8 (585-640).⁴⁰⁰

Biconical pot fragments: indeterminate

49 (49-1-1)

The bottom fragment of a biconical pot with a black-blue surface was recorded as find from grave 49; it was found a little to the north of the skull, but at the same depth. No specifics are given.

In grave 52 a black biconical pot was found in fragmented condition. It was not complete and was found close to the western wall, in the middle of the grave. Further descriptions were not provided.

Fine pottery: spouted pots

The number of six spouted pots in the Obbicht cemetery is comparable to the number found in the two nearby cemeteries of Sittard-Kemperkoul and Stein. Spouted pots are in fact biconical pots with a spout and handle, and thus considered to be a special form within the groups of biconical pots. One of the spouted pots from Obbicht is red/brown, the others are dark, from grey to

(383) Müssemeier *et al.* 2003, 60. (384) Theuws/Van Haperen 2012, 101-102, fig. 6.36. (385) Siegmund 1998, 130-131. (386) Müssemeier *et al.* 2003, 59. (387) Siegmund 1998, 130. (388) Siegmund 1998, 129. (389) Müssemeier *et al.* 2003, 58. (390) Müssemeier *et al.* 2003, 59. (391) Siegmund 1998, 129-130. (392) Müssemeier *et al.* 2003, 60-61. (393) Müssemeier *et al.* 2003, 62-63. (394) Müssemeier *et al.* 2003, 60-61. (395) Müssemeier *et al.* 2003, 62. (396) Siegmund 1998, 130. (397) Müssemeier *et al.* 2003, 60-61. (398) Siegmund 1998, 130-131. (399) Müssemeier *et al.* 2003, 62. (400) Siegmund 1998, 130-131.

black. The red/brown spouted pot is the single undecorated pot, the others show various roulette stamp impressions. The rims of spouted pots can be simple or can have added inward turned collars with conspicuous decoration.⁴⁰¹ The pots from Obbicht are all rather common with only slightly outward folded simple rims. They are classified and dated on the basis of the biconical pot classifications schemes of Siegmund and the Franken AG (table 4.11).

Fine pottery: spouted pot of Siegmund’s type Ktw2.43

51 (51-9-1)

Beckers and Beckers recorded a red spouted pot as find from grave 51. It was described as a pot with a handle with two grooves and a thick ridge beneath the rim, found in the middle of the grave, near the eastern wall. A red spouted pot, without decoration but with a ridge at the transition from wall to rim is available in the collection although without find number (fig. 4.95): for now it is assigned to Obbicht grave 51 since a red spouted pot was not recorded as a find from the other Obbicht graves and not as a find from the cemetery of Stein (the two collections are stored together). On the basis of its dimensions⁴⁰² and the absence of decoration it is classified as Siegmund’s Kwt2.43, which dates to Rhineland phases 8-9 (610-670).⁴⁰³ The Franken AG classify pots of similar dimensions without decoration as type Kwt4A, which dates to their phases 4-7 (510/25-640/50).⁴⁰⁴

Fine pottery: spouted pot of Siegmund’s type Kwt2.33

32 (32-2-1)

The spouted pot from grave 32 has a dark smoked surface which is considerably weathered showing the lighter past underneath (fig. 4.95). It is a rather elongated pot with a height of 19.4 cm and relatively high lower wall; its body shape shows more resemblance with globular pots than it does with biconical pots. The decoration applied is also different from those observed on the other spouted pots from Obbicht, Stein and Sittard. Some shallow grooves are applied on the simple horizontal outward folded rim and the decoration on the upper wall consists of three undulating grooves and zones of three straight grooves above and underneath them. The handle has a width of 4 cm and has two grooves. It starts on the rim and ends just above the carination on the upper wall. The pot is on the original cemetery plan depicted as being found close to the eastern wall of the grave; this cannot be accurate since it was mentioned that the grave was completely destroyed by the construction of the mill which was built on the cemetery terrain. The find location of the pot is therefore not depicted on the latest reconstruction of the cemetery plan and individual grave.

Table 4.11
The spouted pots from Sittard. H=Height, B=Belly diameter, M=Mouth diameter, BF=Basic Form, G=Group (Siegmund 1998).

Pot	H	B	M	BF	G	Type
51-9	17.0	11.0	7.5	5	2	Kwt2.43
32-2	19.4	20.5	15.7	5	2	Kwt2.33
18-1	17.0	19.6	13.7	4	3	Kwt3.12
28-3	18.7-20.1	23.6	15.7	4	3	Kwt3.12
62-1	17.9	19.0	13.6	4	3	Kwt3.22
59-1 (fragments)	-	-	-	-	3	Kwt3.22/3.23

The shape of the pot and its decoration of straight and undulating grooves resemble the large globular pot from Bergeijk grave 30, of which the classification possibilities are extensively discussed.⁴⁰⁵ The large globular pot is, however, of a coarse ware, whereas the Obbicht specimen is definitely of a fine burnished ware with smoked surface. The discussion shows that the combined decoration of straight and undulating grooves can be found on different pot forms. Undulating lines are an older decoration element⁴⁰⁶ and it can in Obbicht be found only on a large red biconical pot with wide mouth. The Obbicht specimen falls within the same group as the large globular pot from Bergeijk. The Bergeijk pot is dated as Siegmund type 2.33, although it is mentioned that it may very well date to the first half of the seventh century. On the basis of its indexes and characteristics this pot is also classified as Siegmund’s type Kwt2.33, which dates to phases 6-8 (570-640).⁴⁰⁷ The Franken AG classify pots with straight and undulating grooves as type Kwt3B, which dates to their phases 4-5 (510/25-580/90).⁴⁰⁸ The classification and dating of the wide variety of globular pot forms with straight and undulating grooves require some rethinking.

Fine pottery: spouted pots of Siegmund’s type Kwt3.12

18 (18-1-1); 28 (28-3-1)

Fragments of a black spouted pot with smoked surface were found scattered throughout grave 18. The pot is restored and completed which revealed that it has a height of 17.0 cm and one handle and a spout opening to the opposite of the handle; approximately 45% of the original pot is present, the spout is missing, and the smoked surface is considerably weathered showing the lighter paste underneath (fig. 4.95). The pot has a thickened and outward folded rim on which two grooves are applied and onto which the handle is attached. The handle has a deep groove in the middle and ends on the upper wall of the pot just above the carination. The upper wall is decorated with four to five zones of two to four single lines

Fig. 4.95
Spouted pots, graves 51, 32, 18, 28 and 62 (scale 1:4).



(401) See for example the overview of spouted pots from Bergeijk (Theuvs/Van Haperen 2012, 104-106, Fig. 6.38). (402) The actual dimensions of the pot are not exactly in line with the dimensions given in the original catalogue. However, some errors with regard to the recorded dimensions where observed in this catalogue and the dimensions given for the red spouted pot might be one of them. (403) Siegmund 1998, 130. (404) Müssemeier *et al.* 2003, 60. (405) Theuvs/Van Haperen 2012, 113-114, fig. 6.50. (406) Theuvs/Van Haperen 2012, 113-114. (407) Siegmund 1998, 130. (408) Müssemeier *et al.* 2003, 59.

of irregular ‘rectangular’ roulette stamp impressions. On the basis of its indexes the pot is classified as type Siegmund Kwt3.12.⁴⁰⁹ The Franken AG classify pots with single lines of rectangular roulette stamp impressions as Kwt5A, which dates to their phases 5-6 (565-610/20).⁴¹⁰

A dark grey smoked spouted pot was found in fragmented condition in grave 28. The parts are glued together and it appeared that approximately 5% of the pot was missing; these parts are now added to the pot (fig. 4.95). The pot is rather asymmetric and has a height from 18.7 to 20.1 cm. Its entire upper wall is decorated with six single lines of roulette stamp impressions of vertical and oblique lines and crosses. One line of the same roulette stamp is applied on the horizontal outward folded rim. The handle has a width of 3.2 cm and has a deep groove in the middle. It is attached to the rim and upper wall, ending just above the carination. The spout is applied approximately on the middle of the upper wall and its upper end is connected with the rim. It was found 70 cm from the short eastern wall and 40 cm from the long southern wall of the grave, thus near the presumed former location of the lower legs or feet. The Franken AG classify pots with uninterrupted complex roulette stamp impressions as type Kwt5G, which dates to their phases 5-6 (565-610/20).⁴¹¹ Siegmund classified pots with dimensions similar to the two spouted pots and with single lines of roulette stamp impressions as Kwt3.12 which dates to Rhineland phases 6-7 (570-610).⁴¹²

Fine pottery: spouted pot of Siegmund’s type Kwt3.12/3.22
62 (62-1-1)

Grey spouted pot 62-1-1 was found in fragmented condition but is now restored and completed; approximately 80% of the original pot is present (fig. 4.95). The reconstructed height of the pot is 17.9 cm. The pot has an outward folded rim, which is not thickened. The handle with a width of 2.7 cm and two grooves is attached to the rim, opposite to the spout, and ends on the middle of the upper wall. The spout, opposite to the handle, is attached to the upper part of the upper wall and its extremity is connected with the rim. The upper wall is decorated with seven single lines of roulette stamp impressions of rectangular grids filled with two columns and five rows of small rectangles (sometimes the impressions are shallow and left only four rows). The roulette stamp decoration covers the entire surface of the upper wall and seems to be an interrupted stamp. Siegmund classifies complex interrupted roulette stamp impressions as those of the late group; the pot is classified as type Kwt3.22, which dates from the end of Rhineland phase 7 to the beginning of 8B (c. 600-630).⁴¹³ It might, however, also be an uninterrupted complex roulette stamp, and thus a type Kwt3.12 (6-7: 570-610).⁴¹⁴ The Franken AG classify complex interrupted roulette stamps as type Kwt5F, which dates to their phases 5-7 (565-640/50)⁴¹⁵, or complex uninterrupted roulette stamps as type Kwt5G which dates to their phases 5-6 (565-610/20).⁴¹⁶

Fine pottery: fragments of spouted pots of Siegmund’s type Kwt3.22/3.23
59 (59-1-1)

Fragments of a grey spouted pot with rounded carination and a horizontal outward folded rim were found in grave 59; the pot is not restored yet. The fragments show nonetheless that the upper wall was decorated with multiple lines of rectangular roulette stamp impressions which can be identified as a roulette stamp of the late group. A biconical pot was found in association with the spouted pot in this completely destroyed grave. The spouted pot is classified as either Siegmund type Kwt3.22 or Kwt3.23, since spouted pots are generally of basic form group 4 or 5. Type kwt3.22 dates from the end of Rhineland phase 7 to the beginning of 8B (c. 600-630) and type Kwt3.23 dates to Rhineland phase 8 (610-640).⁴¹⁷ The Franken AG classify pots with multiple lines of rectangular roulette stamp impressions as type Kwt5B or Kwt5C, depending on the basic form group, which date to phases 5-8 (565-670/80).⁴¹⁸

Coarse pottery: globular pot, grey
24 (24-2-1).

The pot from grave 24 is of a coarse ware, grey, baked hard, and has a height of 15.4 cm (fig. 4.96). It has a clear globular belly, which egg-shaped pots do not have; it is thus not placed in the re-

lated group of egg-shaped pots but might however fall within the same broad category of coarse ware pottery with spherical bodies. The rim of the pot is folded outwards and has a concave groove in which a lid fits. The volcanic inclusions seem to indicate that it was produced in a production centre in the Eifel region (Germany). Similar types of pots are rare finds from Merovingian graves, but more common finds from settlement contexts and are for example known to have been produced in the pottery production centre of Maastricht-Wyck.⁴¹⁹ In grave contexts similar pots are discovered in Bergeijk (one grey pot from grave 53 and one orange pot from grave 110)⁴²⁰ and in Maastricht-Vrijthof (one black pot from grave 36)⁴²¹. The two pots from the Bergeijk cemetery are not dated to an exact phase, but a dating to the early seventh century is suggested on the basis of the associated grave inventory of one of the specimens. The authors observed black smoke spots or some other black residue on the outer surface of the pots; these were also observed on the Vrijthof pot. This might indicate that the pots were used as cooking pots, as was also concluded for the pots from the Maastricht-Wijck furnaces.⁴²² Similar stains are, however, not observed on the Obbicht pot.

Siegmund identified similar pots as his type Kwt4.12; pots of coarse ware with rounded carinations and concave rims, and mentioned that they are difficult to date precisely within the Merovingian period.⁴²³ He refers to an undisturbed grave inventory dated to Rhineland phase 10 (670-705) in which a pot of this type was found. Siegmund recorded four specimens in his research area and three in Krefeld-Gellep. Dating the Obbicht pot to the seventh century seems a plausible option.

Semi-coarse pottery: large globular pot
39 (39-1-1)

The large globular pot from cremation grave 39 with a height of 27.5 cm, a flat bottom, and a nearly horizontal outward folded rim with indentation is considerably weathered (fig. 4.96). It had a grey-black smoked surface, which now shows the lighter brown layer underneath it. The pot was used as a cremation container in which unburned finds, apart from the cremation remains, were deposited. These were a number of iron belt fittings with silver and copper alloy inlays (dating to 640-670), a copper alloy rivets and an oil lamp. Similar pots are rather rare finds from Merovingian grave contexts. One is for example known from the cemetery of Bergijk (height: 27.3 cm); it is of a coarser ware than the Obbicht pot and was not used as a cremation container. Moreover, the Bergeijk pot was decorated with straight and undulating grooves. The vague grooves on the Obbicht specimen are rather production traces. A straightforward classification and date range were not provided for the Bergeijk pot; numerous options were given of which a dating to the late sixth and early seventh century was considered a probable one.⁴²⁴

ed for the Bergeijk pot; numerous options were given of which a dating to the late sixth and early seventh century was considered a probable one.⁴²⁴

Pottery: handmade
64 (64-2-1)

Beckers and Beckers mention a lower part of a small red pot (64-2-1) in grave 64. The diameter of the bottom is 4 cm. This bottom fragment is present. It seems to be of a handmade pot. It was not recorded where in the grave the fragment was found or what the condition of the grave was.

Pottery: terra sigillata
3 (3-1-1)

A bottom fragment of a terra sigillata plate was recorded as a find from grave 3; in a box in the restoration laboratory, where also iron fragments from grave 31 are stored, a terra sigillata shard is present.

Pottery: fragments
4 (410-1); 50 (50-1-1); 47 (47-3-1)

Fragments of a grey coarse ware among which one rim fragment with an outward folded rim, of presumably of a globular coarse ware pot are known from grave 4. Approximately 15% of the original pot is present. Globular pots are difficult to date precisely; the fragments might date to seventh century.

According Beckers and Beckers a fragment of a black pot (50-1-1) was found at a relative high level in grave 50. In the restoration laboratory a soft baked, polished, rather weathered black shard is available.

Bottom and wall fragments of a grey black pot with thick walls were found scattered throughout grave 47; they are difficult to classify and date. The fragments of a biconical pot, also known from this grave are dated to 565-640/50, and the grave is dated accordingly.

Pottery vessels: missing
13 (13-1-1); 33 (33-6-1; 33-7-1; 33-8-1)

Fragments of a large hard baked pot with thick walls and a grey outer surface were found in grave 13; these are now missing. Pottery vessels were recorded as find from possible grave 33; they are no longer available. It can be assumed that the three vessels originally belonged to more than one grave.

Fig. 4.96
Globular pots, graves 24 and 39 (scale 1:4).



(409) Siegmund 1998, 130. (410) Müssemeier *et al.* 2003, 60-61. (411) Müssemeier *et al.* 2003, 62. (412) Siegmund 1998, 130. (413) Siegmund 1998, 131. (414) Siegmund 1998, 130. (415) Müssemeier *et al.* 2003, 62. (416) Müssemeier *et al.* 2003, 62. (417) Siegmund 1998, 131. (418) Müssemeier *et al.* 2003, 61. (419) Van Wersch 2011, 164-166 (pot ovoïde à lèvres simple) (420) Theuws/Van Haperen 2012, 112-114, fig. 6.49, 35-41, 110.a. (421) Kars 2011, 194-195. (422) Vanwersch 2011. (423) Siegmund 1998, 132. (424) Theuws/Van Haperen 2012, 113-115, Fig 6.50.

Glass vessels

A collection of glass vessels is known from the cemetery; it consists of an exceptional glass jug (although found in a grave discovered at some distance from the cemetery), a claw beaker, a cone beaker, two bell beakers and a palm cup.

Glass vessel: jug

65 (65-2-1)

An exceptional light green glass jug, complete, was found in Obbicht grave 65 (fig. 4.97). The jug has a squeezed rim, which forms a trefoil spout. The outer diameter of the mouth is 5.4-5.7 cm and the spout takes up approximately 1/3 of the mouth diameter. The handle has one deep groove and is connected to the wall just underneath the outward folded rim and ends on the lower wall of the jug. The extremity of the handle, connected just beneath the rim, is folded back, and the handle end connected to the body expands considerably from its middle section on. The jug has a sagging belly with the widest diameter towards the lower part of the wall, and its foot is formed as a stand ring. The jug is decorated with three zones of horizontal spiral trails of similar coloured glass. The upper zone consists of a horizontal spiral trail wound thirteen times around the neck starting just beneath the rim and ending on the narrow neck. The middle zone consists of spiral trails applied seven times on the middle of the belly, and the lower zone consists of spiral trails applied c. seven times just above the foot. The height of the jug is 13.1 cm, the belly has a widest diameter of 8.6 cm and the bottom has a diameter of 4.3 cm.

Glass jugs from Merovingian graves are rather rare. Feyeux

identified two types of jugs in his research area (north-western France): T.30⁴²⁵ without foot and decoration and T.32⁴²⁶ with foot and with email spiral trails; both types have a spout and one handle. T.30 dates to 485-530/40 and T.32 to the end of the fifth and beginning of the sixth century. The Obbicht specimen with its spiral trails of similar coloured glass resembles T.32 but this type is characterised by squeezed foots and email trails, which are different from the stand ring and glass trails of the Obbicht specimen. Feyeux mentions that jugs with glass spiral threads are directly connected to the Roman tradition of glass production and should be dated before or to the beginning of the fifth century.⁴²⁷

The overview of glass forms from the Champagne shows that jugs date to the middle of the fifth century.⁴²⁸ The example from this area is however different since it has a differently shaped foot and a more elongated body than the Obbicht specimen. Nonetheless, it is made in the same tradition as the Obbicht jug, and dating this jug from grave 65 to the fifth century and maybe the beginning of the sixth century seems a plausible option.

The other finds from grave 65 are a globular beaker, unfortunately not present anymore. The glass jug might indicate that it was an early Merovingian grave. The grave was excavated in another parcel, at some distance from the other graves and might represent an early phase of the cemetery of which, unfortunately, no other graves were discovered.

Glass vessel: claw beaker

20 (20-8-1)

A very light green claw beaker with four claws, applied at the same height, was found in fragmented condition in grave 20 (fig. 4.97).

It is now restored and completed; the outline of the beaker could be reconstructed and three of the original four claws are present (one is reconstructed). The claw beaker has a height of 17.5-18.4 cm, a mouth diameter of 8.0 cm and a bottom diameter of 2.9 cm. The rim is rounded and only slightly thickened, and the lower wall is straight as is the upper wall; the transition from lower wall to upper wall is slightly incurved at the zone where the upper claws are applied. The bottom is pinched to form a foot and the base of the foot itself was pushed in with a ring-shaped tool, with a rather asymmetric foot as result. A fine similar-colour glass thread was dropped on the beaker just beneath the rim and turned downwards c. 26 times (the upper trails are rather vague, due to the restoration of the beaker). A second thread was dropped on the beaker lower down the beaker and turned downwards c. 13 times (no all the threads are clearly visible), ending just above the foot. The four claws are applied as one row, at the same height, just beneath the middle of the beaker, on the upper trails of the spirally applied threads. The extremities of the claws are fixed on the upper side of the foot. The glass and claws are impure; air bubbles can be observed. The beaker was found to the south of the large biconical pot, which was found close to the middle of the short eastern wall; the beaker was thus placed close to the presumed location of the right foot. The other finds from this grave are an axe, seax, shield boss, lance head and copper alloy bowl; the claw beaker belonged to a grave of a man with an extended set of weaponry and a varied vessel ensemble.

The Obbicht claw beaker was already published by Ypey in 1957/58; he restored and completed the beaker and published an extended description of the production of this glass vessel and its specific features. He also discussed the chronological development and distribution pattern of claw beakers on the basis of the work of Fremersdorf, Thorpe and Rademacker, and used Harden's work for the distribution patterns of Anglo-Saxon specimens.⁴²⁹ A development from squat beaker shapes to elongated forms, from two rows of claws to one row of claws, from the gradual appearance of spiral glass threads applied on the upper parts of the beakers to the disappearance of glass trails on the claws, was by then generally accepted. Since the Obbicht claw beaker has one row of claws, spiral glass trails on its upper part and less manifest claws compared to early specimens, it was dated to the seventh century at the time of Ypey's publication.

Claw beakers are also known from Anglo-Saxon contexts.⁴³⁰ Again the development from Roman specimens to Merovingian specimens is described (from type 1 to type 4); the main differences with the Roman specimens are the foots formed in one piece with the body, the smoothed rims, and the horizontal trails (the Roman specimens have zigzag trails). The post Roman beakers became taller and were more elongated (cone shaped), and the claws were applied on the lower two-thirds of the body, following the curve

of the wall, but still with two rows of claws, terminating well above the foot. The beakers of the last period have features which are comparable to the Obbicht beaker: trails are not present on the claws anymore and a plain area is present in between the trails below the rim and those on the belly. The latest types (4a-c) date to the 6th-7th centuries, but examples of claw beakers with only one row of claws were not included in the chronological overview. It seems as if the Obbicht beaker is a late example in the general development of claw beakers, which was never introduced in Anglo-Saxon England.

Koch presented an overview of claw beakers on the basis of the finds from the *Runde Berg bei Urach*.⁴³¹ A specimen similar to the one from Obbicht (one row of claws) is not present, but it is mentioned that especially the claw beakers without nicked glass bands, as the one from Obbicht, date later than those with nicked glass bands (they date to the second half of the fifth century); they became frequent around the middle of the sixth century.

Since claw beakers are rather rare in the Rhineland, Siegmund did not create a classification for this form of beakers but refers to the typological work of Pirling and Hinz for further specifications. The most recent study with regard to glass vessels, including claw beakers, is, apart from Pirling and Hinz, the study of Feyeux. He classifies claw beakers as type T.42.2i: claw beakers with spiral glass trails. Feyeux also refers to the development from late Roman to early medieval specimens.⁴³² He dates claw beakers in the north-west of France from the second half of the fifth to the first half of the sixth century, and more sporadically to the second half of the sixth century and beginning of the seventh century. He claims that the later examples, those dating to the end of the sixth century and to the seventh century, are more elongated than their predecessors. The claws of these later specimens are observed to cover the spiral trails applied on the middle sections of the beakers. The examples in Feyeux's overview all have two rows of claws, which is clearly an earlier feature than the single row of claws of the Obbicht beaker, which is also elongated and on which the claws are applied on top of the spiral trails. A specimen with one row of four claws, although not as elongated as the Obbicht specimen, is known from Anderlecht Champ Saint-Anne.⁴³³ Unfortunately, this beaker is not dated. Another claw beaker with a single row of claws is known from grave 413 of the cemetery of Rhenen.⁴³⁴ This is also a rich grave of a woman; the silver bracelet with thickened extremities dates to Rhineland phase 3 (485-530) and the two silver gilded bow brooches date to Rhineland phase 6-8 (570-640); the claw beaker might date as late as 640.

The Obbicht beaker clearly has features which are characteristic for the later examples of claw beakers, and maybe the single row of claws is also a late feature; dating the Obbicht beaker to the late sixth and beginning of the seventh century seems a plausible option, also in view of the other finds from grave 20 on the basis of which it is dated to phase O-OM IIa (565-610/20).

Fig. 4.97
Glass vessels, graves 65, 20, 11, 22 and 32 (scale 1:2).



(425) Feyeux 2003, 33, fig.9. (426) Feyeux 2003, 33, fig.9. (427) Feyeux 2003, 71. (428) Cabart *et al.* 1995, 172. (429) Ypey 1958, 92-95. (430) Evison 1982; Evison 2008, 13-15. (431) Koch 1987, 165-178. (432) Feyeux 2003, 77-78. (433) Alenus-Lecerf 1993, 106, object 14. (434) Wagner/Ypey 2011, 34, abb. 39, 292-300.

Beckers and Beckers refer to a beaker with a conical wall and a dark brown outer surface from grave 11. It was found upside down in a biconical pot, near the presumed former location of the feet. When it was found the rim was missing and the foot was described as rather asymmetrical. This description might refer to the bottom fragment of a glass beaker present in Archaeological Museum Stein. It is the bottom of a conical glass beaker, dark brown, decorated with approximately eight vertical loops of similar coloured glass covering the (lower) wall (fig. 4.97). Of this beaker, 6.5 cm is left as a bottom fragment. The bottom has a diameter of 2.7 cm, and is indeed rather asymmetric and has a shallow indentation. The widest diameter of the bottom remnant of the glass beaker is 4.4 cm.

This beaker was originally a conical beaker, or *Spitzbecher*. Siegmund offers parameters that distinguish Roman from Frankish cone beakers. These cannot be used since the majority of the Obbicht beaker is gone. However, it is mentioned that the walls, and thus also the bottom parts, of Frankish beaker are often decorated with grooves and glass trails, whereas the walls of the Roman beakers often have smooth surfaces. On the basis of these remarks the bottom fragment of Obbicht is identified as a specimen of the Merovingian period. Koch refers to cone beakers with glass trail loops and broad zones of horizontal trails underneath the rim as conical beakers of the type Kempston, after Evison.⁴³⁵ The Obbicht bottom fragment seems to fit the descriptions of Kempston beakers, which, according to Koch, can date from the first half of the fifth century to the beginning of the seventh century. Siegmund classifies these beakers on the basis of Koch's criteria; the Obbicht remnant can be classified as Siegmund's type Gla7.3 (Type Kempston), which cannot be dated more precisely as to Rhineland phases 4-7 (530-610).⁴³⁶ The Franken AG maintained Siegmund's type and date it to their phases 4-6 (510/25-610/20).⁴³⁷ According to the typology of Feyeux, the cone beaker is either a type T.51.2fh or 2hi.⁴³⁸ Both the Feyeux types have glass trail loops covering the lower part of the wall; type 51.2fh has additional horizontal glass trails applied below the rim and type 51.2hi has spiral trails below the rim. This latter type is referred to a type 'Kempston'. The single known find context of an example of type 51.2fh is dated to the end of the fifth and beginning of the sixth century. The single dated context of an example of type 51.2hi is dated to end of the fifth century.⁴³⁹ Cone beakers with vertical loops are also known from Anglo-Saxon England and here referred to as Kempston beakers.⁴⁴⁰ They date from the first half of the fifth century well into the sixth century. The majority of the examples from Anglo-Saxon England are executed in various shades of light green, but the ear-

liest examples are said to be shorter and broader and brown, olive green or nearly colourless.⁴⁴¹ The Obbicht specimen is brown, which might indicate that it is an early specimen. According to the catalogue of the exposition of glass finds from Wallonia, similar beakers date to the fifth and beginning of the sixth century in this area.⁴⁴² The bottom of the glass cone beaker from Obbicht grave 11 is dated to 450-610/20 on the basis of all the discussed typo-chronologies. The other finds from this grave are an arrow head and a biconical pot, which dates it to O-OM Ila (565-610/20).

Glass vessels: bell beakers

22 (22-3-1); 37 (37-10-1).

From grave 22 a bottom fragment and some wall and a rim fragment of a small yellow-brown glass vessel, probably an incurved bell beaker, are known (fig. 4.97). The bottom is complete; it is a sagging bottom, rounded, without bulge or point. The transition from bottom to wall is pronounced; the bottom has a height of 1.0 cm. The diameter of the bottom is 5.5 cm. The wall above the pronounced transition seems to be vertical, but this cannot be concluded with certainty since the majority of the beaker is gone. The rim fragment shows that it was probably a beaker without decoration and that it had a simple vertical thickened rim. Air bubbles are also visible, which indicates that it was not of the best quality. On the basis of the observed features the vessel can be classified as a bell beaker with rounded bottom without decoration. The general shape of bell beakers shows a general chronological development from short, squat specimens with s-shaped bodies to carinated walls and finally cylindrical bodies.⁴⁴³ The wall shape of the Obbicht specimen cannot be reconstructed. However, three different bottom shapes have been identified for such beakers, each with a distribution pattern of its own.⁴⁴⁴ Koch provided and overview of bell beakers with rounded or sagging bottoms. It clearly shows that the predominant occurrence of this bottom type is in the cemeteries along the river Rhine or adjacent areas.⁴⁴⁵ Koch dates these bell beakers to SD7 (580-600). Feyeux identifies bell beakers with rounded bottoms as T.53. He dates the specimens without decoration to 530-600.⁴⁴⁶ Maul distinguishes between bell beakers with rounded bottoms (1) and pointed bottoms (2).⁴⁴⁷

Siegmund identified four types of bell beakers on the basis of relative belly diameters, which has to avoid the subjectivity of wall shape descriptions.⁴⁴⁸ Siegmund did not consider the shape of the bottom and the decoration as chronological relevant criteria. The Franken AG changed this classification by introducing a less complicated arithmetic method to identify the different forms, what resulted in five bell beaker types.⁴⁴⁹ Since the majority of the Obbicht beaker is gone, it cannot be classified precisely accord-

ing to Siegmund and the Franken AG. Siegmund dates the general group of bell beakers to Rhineland phases 4-8A (530-625).⁴⁵⁰ The Franken AG date the general group of bell beakers to their phases 4-6 (510/25-610/20).⁴⁵¹

Legoux, Périn and Vallet identified three types of bell beakers (*gobelets campaniforme*) on the basis of wall and bottom shapes (they do not define the peak or drop at the bottom more precisely than as bouton). The Obbicht beaker with rounded bottom can be classified as type 450 which dates from the second half of their phase MA2 to MR1 (520/30-630/40).⁴⁵² The Obbicht beaker can thus be dated to the second half of the sixth and beginning of the seventh century.

Beckers and Beckers mention that a small yellow-brown bell beaker (37-10-1), with a rounded bottom and thickened rim, was found in grave 37 next to the biconical pot (close to the eastern wall, in the middle of the grave), with a height of 6.0 cm. It is present in fragmented condition. It is in fact an olive green bell beaker with faint diagonal ribs. The other finds from this grave are buckles and knives, a bead and a biconical pot.

The rounded bottom (although no longer present) dates according to the descriptions above to the second half of the sixth and the beginning of the seventh century. The diagonal ribs are classified by Feyeux as type T.53.3l. Four specimens with this type of decoration are present in his research area, of which one is dated on the basis of its grave inventory to the second half of the sixth century. This is the specimen from grave 23 in Contrexéville in the Vosges.⁴⁵³ The bell beaker from Obbicht is dated to second half of the sixth century, and beginning of the seventh.

Palm cup: low and broad with rounded inward rolled hollow rim

32 (32-1-1)

The olive green palm cup (32-1-1) from grave 32 with clearly visible air bubbles has a rounded bottom and thick rim (fig. 4.97). The rim is with its height of 0.5 cm rather modest. It is an inward rolled rim, which shows a tubular cavity inside it. The transition from wall to rim is distinct, both at the outside and inside of the cup. The height of the beaker is 6.8 cm and the diameter of the mouth is 10.9 to 11.1 cm. The glass was broken, but is now restored.

The typology of Maul indicates that it is a palm cup of her type B (squat cup with wide mouth) with rim type 1 (rounded or rolled). The cup is without decoration; the wall is smooth, which is in Maul's typology decoration type a; the cup is thus a Maul type B1a.⁴⁵⁴ The distribution map of type B1a shows that it a rather frequent form with a large distribution area of which the majority is found along the river Rhine, but some also along the river Meuse.⁴⁵⁵ Maul's type dates to the second half of the sixth century,

but predominantly to the end of the sixth and the first half of the seventh century, but can still occur in the second half of the seventh century and beginning of the eighth.⁴⁵⁶ Feyeux classifies similar palm cups as T55.o, which he dates to the second half of the sixth and beginning of the seventh century.⁴⁵⁷ Altogether, a dating to 550-620 seems plausible. The other find from grave is a spouted pot, and the grave itself is dated to O-OM I+IIc (510/20-640/50).

Glass vessels: missing

33 (33-9-1); 52 (52-2-1)

A glass vessel was recorded as find from possible grave 33; specifics were not given. Glass fragments were found in the proximity of the biconical pot from grave 52; they are no longer present in the current collection.

Copper alloy bowl

20 (20-9-1)⁴⁵⁸

A fragmented copper alloy vessel was found in grave 20 (fig. 4.98). It is now restored and completed. It is a simple bowl with a flat base, a slightly conical body and an outward folded horizontal rim without decoration. Two U-shaped handles with curved extremities are fixed to shield form plates applied on the outside of the bowl, just underneath the rim. The plates are attached to the bowl with three small copper alloy rivets with flat heads. The plates each have two copper alloy loops in which the handle extremities are fixed. A peculiar feature is the ancient repair of the bowl: a copper alloy plate covers a damaged part of the upper wall and rim and is attached to the bowl with five small copper alloy rivets with flat heads. The bowl has an average height of c. 7.7 cm; it is asymmetric, which is in all probability a result of the bad condition in which it was found. The mouth diameter of the bowl is c. 25 cm. Beckers and Beckers mention that the bowl was found in the east-western corner of the grave, which is clearly an incorrect notation. The south-eastern or north-eastern corner (near the feet) seem the most probable options since vessels are generally found in the section associated with the feet or lower body. On the grave drawing the location of the bowl is indicated in the south-eastern corner of the grave. It was mentioned that the two handles were found detached from the bowl. The excavators noticed that the copper alloy sheet metal was very thin and that it seemed to have been covered with wood. These wood fragments can be remnants of a wooden bowl placed inside the copper alloy bowl. The other finds from this grave are an extended set of weapons, namely a sword, shield boss, lance head, and axe and an extended set of ves-

(type 450). (453) Feyeux 2003, 128-129. (454) Maul 2002, 253, Abb.2. (455) Maul 2002, 298, Abb.91. (456) Maul 2002, 154-155. (457) Feyeux 2003. (458) The bowl was in the Archaeological Museum Stein stored as a find from Obbicht grave 36. The catalogue of Beckers and Beckers does not refer to such a find from grave 36, but refers to a copper alloy bowl as find from grave 20. Since a second copper alloy bowl is not present in the collection and there are no indications that it ever was, the bowl is now assigned to grave 20.

(435) Koch 1987, 116-145. (436) Siegmund 1998, 170. (437) Mussemeier *et al.*, 2003, 71. (438) Feyeux 2003, 20, 35, Fig.11, 87. (439) Feyeux 2003, 87. (440) Evison 1972, 48-66.; Evison 2008, 9. (441) Evison, 12, Fig. 5-36-37, Fig 638-41. (442) Alenus-Lecerf 1993, 149-150. (443) Böhner 1958, 228-231. (444) Maul 2002, 46; Koch 1998, 160; Cabart/Feyeux 1995, 58. (445) Koch 2001, 264-265, abb. 111, 569, Liste 27. (446) Feyeux 2003, 36, Fig. 12, 119-123, 241. (447) Maul 2002. (448) Siegmund 1998, 170-172. (449) Müssemeier *et al.* 2003, 71-72. (450) Siegmund 1998, 170-172. (451) Müssemeier *et al.* 2003, 71-72. (452) Legoux/Périn/Vallet 2004, 21, 50, 55

Fig. 4-98
Copper alloy bowl, grave 20 (scale 1:2).



sels, namely two pottery vessels, one glass vessel and thus perhaps one wooden vessel. The bowl is thus part of a relatively rich grave goods inventory deposited in the grave of a man.

Copper alloy bowls are relatively rare finds from Merovingian grave contexts, but over the years constantly new specimens were discovered. Some were found in the surroundings of Obbicht. A simple copper alloy bowl with two handles was found in the cemetery of Borgharen,⁴⁵⁹ and one, without handles, was found in the cemetery of Sittard-Kemperkoul. It is peculiar that these bowls from the southern Netherlands were all found in cemeteries in the ‘countryside’, and not in the ‘urban’ cemeteries of Maastricht (cemeteries in the proximity of the Church of Saint Servatius). The mentioned bowls are however all relatively simple specimens. The more exclusive bowls have foot stands, elaborate handles and are decorated.

The Franken AG’s classification of copper alloy bowls is based on Christlein’s classification.⁴⁶⁰ Simple bowls of copper alloy sheet metal without decorated rim and without a foot stand are classified as type BrgE, which dates to Franken AG phases 5-6 (565-610/20).

Bucket

36 (36-9-1)

Beckers and Beckers refer to a bucket from grave 36. Grave 36 is the richest grave of a woman in the cemetery in view of the diversity of objects and the presence of objects made of precious metals. The bucket was found as a heap of numerous iron fragments, sheet copper alloy and wood remains close to the northern wall, more to the east than the find location of the gold ring, thus near the presumed location of the right lower leg or foot. The heap of bucket remnants had a diameter of 20-22 cm. It was not possible to reconstruct the bucket just after its discovery. Nonetheless, it was observed that this bucket was richly decorated with copper alloy mounts and iron bands and that it had a rod shaped handle. In the restoration laboratory numerous corroded fragments of this bucket are present in a box; its reconstruction may be possible and will reveal its original appearance. The bucket is now classified as type L/P/V 456, which dates to their phases PM-MA1 (440/50-

520/30), but can also date to the phases thereafter.⁴⁶¹ Buckets are mentioned as finds from the Rhineland, but they are not classified and dated.⁴⁶² The Franken AG classify buckets as type EimA, which dates to their phases 3-5 (460/80-580/90).⁴⁶³

Belt appendages/utensils

Folded knife: missing

5 (5-5-1)

A folded iron knife was mentioned to have been found in association with a plate buckle and back plate, close to the long northern wall, in grave 5. Unfortunately, the knife is no longer present and its dimensions were not recorded in the catalogue of Beckers and Beckers. The other finds from this grave were a sword, seax, fire steel, knife, and the already mentioned belt fittings.

Siegmund classifies foldable knives as type Ger1.3, which dates to Rhineland phases 9-11 (640-740).⁴⁶⁴ The Franken AG maintained this type and date it to their phases 8-10 (640-750).⁴⁶⁵ This date range, however, is not in accordance with the date ranges accorded to the other datable finds from this grave; the belt fittings are dated to 585-670 and the seax to 510-640/50, and the tweezers to 520/30-600/10. The foldable knife might date early in the proposed date range and the grave might thus date to the middle of the seventh century, or the object was by mistake identified as a folded knife.

Knives: angled backs

12 (12-2-1); 44 (44-1-1)

Iron knife 12-2-1 from grave 12 has a blade length of 10.5 cm and a blade width of 2.2 cm. The length of the remaining iron core of the hilt is 0.9 cm. Some wood or leather remnants were preserved on the blade. The back of the knife shows an obvious angle, close to the tip. It was found in association with another iron knife, placed cross-wise, close to the long northern wall and 20 cm from the short western wall of the grave, thus near the presumed former location of the head, which is a rather unusual location. The other

finds from this grave are a seax and a biconical pot (dated to 565-640/50). The pot was found in the middle of the grave, which is also an unusual location for pottery vessels.

The iron knife from grave 44 has an obvious angled back and leather remains preserved around the middle of the blade. The blade has a length of 10.4 cm and a width of 2.4 cm. The iron hilt core has a length of 5.2 cm. The knife was the only find from this grave and was found 30.0 cm from the short western wall and 50.0 cm from the long northern wall of the grave, thus near the presumed former location of the head. Its tip was pointing to the west.

Knives with angled backs are classified as Siegmund type Ger1.2 and date to Rhineland phases 10-11 (670-740).⁴⁶⁶ The Franken AG maintained this type, yet proposed a stricter definition. Only knives with angle just before the tips of the knives are classified as this type and can be dated, more precisely than other knives with angled backs, from the end of Franken AG phase 7 to phase 10 (640/50-710).⁴⁶⁷

Knives: iron

4 (4-6-1.1; 4-6-1.2; 4-6-1.3); 5 (5-6-1); 20 (20-4-1); 31 (31-2-1; 31-3-1); 35 (35-6-1); 37 (37-1-1; 37-5-1); 40 (40-6-1); 45 (45-2-1); 46 (46-4-1); 50 (50-2-1); 51 (51-11-1); 56 (56-1-1); 62 (62-2-1)

Two knives were in the catalogue of Beckers and Beckers mentioned to have been found in grave 4. Three knives are now assigned to this grave on the basis of the available find numbers; one of them is probably wrongly assigned to this grave but it cannot be established which one this is.

Iron knife 4-6-1.1 from grave 4 has a curved back and curved cutting edge, and has wood remains preserved around its iron hilt core. The blade has a length of 12.6 cm and a width of 2.6 cm. Iron knife 4-6-1.2 has wood remains preserved around the iron hilt core and mineralised remains (of a scabbard?) preserved at one of the blade sides. It has a curved back and straight cutting edge. The knife has a blade length of 8.6 cm and a width of 1.7 cm. Iron knife 4-6-1.3 has a curved to angled back and slightly curved cutting edge. It has a blade length of 12.1 cm and a width of 2.6 cm. Wood remains are preserved around the iron hilt core. The knives were found in a grave in which also a seax, arrow head, shield boss, toilet utensil and a simple ring were found. The grave was destroyed and the exact find locations of the grave goods inside the grave.

Iron knife 5-6-1 has curved back and a straight cutting edge. The blade has a length of 10.1 cm, a width of 2.5 cm and its back a width of 0.6 cm. It was at first identified as the second seax from grave 5 (length 18.0 cm), but this is revisited. It was not recorded where exactly in the grave the knife was found. The other finds from this grave are a sword, seax, belt fittings, fire steel, tweezers and a folded knife (missing).

(459) Lauwerier *et al.* 2011, 94-95, Afb. 80. (460) Müsseseimer *et al.* 2003, 92, note 251 (Christlein 1968: Qualitätsgruppen unter der Grabausstattungen des 6. und 7. Jahrhunderts aus Süd- und West-Deutschland, Diss. Freiburg 1968, 176-185). (461) Legoux/Périn/Vallet 2004, 21, 50, 55. (462) Siegmund 1998, 175. (463) Müsseseimer *et al.* 2003, 73. (464) Siegmund 1998, 112-113. (465) Müsseseimer *et al.* 2003, 54. (466) Siegmund 1998, 112. (467) Müsseseimer *et al.* 2003, 53.

Beckers and Beckers mention that an iron knife (20-4-1) was found underneath the seax in grave 20. In the restoration atelier a hilt and a fragment of the blade of a knife are present; it might be the knife referred to in the catalogue. However, a knife in corroded condition is also present in the collection stored in Archaeological Museum Stein. The exact dimensions and morphological characteristics cannot be established. It cannot be established which knife originally belonged to grave 5; maybe they both did. The other finds from this grave are a claw beaker, a copper alloy bowl, a biconical pot and an extended weapon set.

Iron knife 31-2-1 from grave 31 has a blade length of 10.8 cm and a blade width of 2.4 cm. The blade is covered with mineralised remnants, probably of the leather scabbard in which it was carried. Around the iron hilt core wood remains are preserved; the hilt with wood has a length of 2.3 cm.

Beckers and Beckers mention a second knife (31-3-1) from grave 31 with broken hilt. Fragments of this knife might be present in a box in the restoration laboratory, which holds remnants of iron objects from this grave. The original knife will be difficult to reconstruct. The other finds from this grave are a seax, sword, a lance head, and a second knife.

A corroded and broken knife with mineralised textile (35-6-1) is present in the restoration laboratory. The original find number matches with grave 35, but it was not recorded as find from grave 35 in the initial catalogue.

Fragments of an iron knife (37-1-1) were mentioned to have been found close to the southern and eastern walls of grave 37; fragments of this knife may be present in the restoration laboratory. The tip of iron knife 37-5-1 from grave 37 is gone; the remaining length of the blade is 10.8 cm, the width of the blade is 2.7 cm, and the remaining length of the iron hilt core with wood remains is 6.3 cm; it was thus a relatively large knife. It was found in association with a lance head, close to the long southern wall of the grave.

Beckers and Beckers mention the find of an iron knife or seax (40-6-1), found underneath the sword, along the long northern wall of grave 40. Since a seax is already known from this grave, the available knife with original find number VIB 129 is identified as the recorded knife/seax with a length of 20 cm. The available knife, however, has a total remaining length of 11.1 cm, which is not even close to the length of 20 cm. The blade has a length of 9.9 cm and a width of 2.0 cm. It is for now considered to be a mistake in the catalogue and the knife is for now assigned to grave 40 since other knives matching with this grave are not present.

Iron knife 45-2-1 has a blade length of 11.1 cm and a width of 2.7 cm. Organic remains (probably leather) are preserved around the blade and wood remains around the iron hilt core, which has a length of 7.1 cm. Its exact morphological characteristics can as a consequence not be established.

Beckers and Beckers mention an iron knife (46-4-1) in grave 46. It was described as a knife with a length of 12 cm and was found in association with a seax (found 110.0 cm from the western wall and 80.0 cm from the southern wall), plate buckle and back plate. Remnants of this object might be present in a box in the restoration laboratory holding remnants of this grave.

Iron knife 50-2-1 was found close to the northern wall and 70.0 cm from the western wall of grave 50. It was recorded as a knife with a length of 16.0 cm and a blade width of 3.0 cm. Corroded fragments of a knife with an original find number matching the find numbers ascribed to grave 50 are available in the restoration laboratory

A fragment of a knife is known from grave 51B; it was not recorded as find but the fragment is assigned to this grave on the basis of its original find number, and to 51B since the iron fragments recorded as finds associated with upper burial 51A are present.

An iron seax/knife was recorded as find from grave 56. It was broken, found at the fatty black spot (shadow of the body) in the middle of grave, together with an indeterminate flat copper alloy plate (length 6 cm, width 4 cm). In the restoration laboratory some fragments of what seems to be a knife are present and some indeterminate fragments among which fragments which resemble a copper alloy nail. The original length of the knife cannot be established.

The fragments of an iron knife (62-2-1) were found scattered throughout grave 62. In the restoration atelier some fragments with corresponding find numbers are stored. These might be of the knife recorded in the catalogue.

It is generally acknowledged that knives were used over an extended period and are difficult to date. The only exceptions are knives with clear angled backs, Hackmesser (cleaver/kitchen knives) and *Klappmesser* (folded knives).⁴⁶⁸ Legoux, Périn and Vallet consider knives with curved backs and straight cutting edges as characteristic for the seventh century.⁴⁶⁹ Their type 73 dates to their phases MR2-MR3 (630/40-700/10).⁴⁷⁰ These characteristics could only be established for Obbicht knives 4-6-1.2 and 5-6-1.

Knives: missing

12 (12-3-1); 29 (29-4-1); 57 (57-1-1)

An iron knife, found in association with another knife, was found close to the northern wall and 20 cm from the western wall of grave 12. One of them is no longer present.

Fragments of an iron knife (or small seax) were found scattered throughout grave 29. These are now missing, except for a hilt which seems to be of a seax.

An iron knife with a length of 17.0 cm and a blade width of 2.5 cm was found close to western wall of grave 57 with the tip pointing south. It is not present in the collection.

Tweezers

51 (51-7-1); 5 (5-7-1)

The pair of tweezers 5-7 from grave 5 is formed by bending an iron band. It has a simple head and slightly expanding arms with inward curved pincers and has total length of 7.6 cm. Remnants of a suspension ring are attached to the head of the tweezers. It was not recorded where in the grave they were found. The other finds from this grave are a sword, seax, belt fittings, knife and fire steel.

The pair of tweezers (51-7-1) from grave 51 consists of a simple folded iron band with a simple head, slightly expanding arms and inward curved pincers. The pair has a total length of 9.9 cm. It belongs to the grave inventory of the lower burial of a ‘double’ grave, in association with belt fittings and the hilt of a seax, which was found 150.0 cm from the southern wall and 150.0 cm from the western wall; it can be assumed that the tweezers and belt fittings were found in the middle of the lower grave but close to the long southern wall. The other finds from the lower burial are, next to the seax and belt fittings, a lance head, spouted pot and biconical pot.

Similar ‘tweezers’ are generally known from the graves of men and are referred to as beard pincers; the two pairs of tweezers from Obbicht were indeed found in the graves of men. Up to now it appeared difficult to date pairs of tweezers to a restricted chronological period. Legoux, Périn and Vallet classify iron tweezers similar to the Obbicht specimens as type 322 which dates to their phases MA2-MA3 (520/30-600/10).⁴⁷¹

Fire steel

46 (46-5-1)

Iron fire steel 46-5-1 has a length of 9.9 cm and a width of 2.7 cm. It is a triangular fire steel with curved extremities of which only small fragments of the two extremities are gone. Some mineralised wood remains are preserved on one side of the fire steels. It was found in the middle of the grave and was thus presumably deposited in a purse attached to the waist belt. Other finds from this grave are a seax, belt fittings, a knife and a large pottery bowl and biconical pot.

Fire steels are difficult to date precisely; they were used as grave goods throughout the Merovingian period.

Fire steel: missing

5 (5-8-1)

An iron fire steel with a length of 10.0 cm and a width of 4.0 cm was recorded as find from grave 5; its exact find location was not indicated and neither was its shape. The fire steel is no longer present in the collection.

Decorative plates: copper alloy

36 (36-5-1; 36-7-1); 37 (37A-3-1)

The kidney shaped copper alloy plate (36-5-1) from grave 36 has a length of 3.0 cm and a width of 1.8 cm (fig. 4-73). The middle of the broad base of the plate shows a rectangular cut out space, and three small holes indicate the former presence of small rivets. The plate might be the back plate of a small composite kidney shaped plate buckle, of which examples are known from the fifth and early sixth centuries. It was found in association with a thin copper alloy rod, a simple ring, a belt fitting and another decorative mount, close to the long northern wall and approximately 100 cm from the short western wall. It was thus found to the left of the presumed former location of the waist. They were probably attributes or contents of a purse, fixed to the waist belt. The plate may have been an antique (found by accident or kept for some generations) and cherished as a ‘special’ object in the purse.

Copper alloy plate 36-7-1 from grave 36 has a length of 3.0 cm and a width of 2.7 cm. Parts of the plate are gone, but it is clear that it had a base with rounded outline which expands into three ‘arms’ (fig. 4-73). At the base of the plate and the middle ‘arm’ holes are present. The might have held rivets, which are now gone, attaching the plate to the garment, purse or belts or straps. Another option is that chain links of a chatelaine went through them. Nearly the entire surface of the plate is covered with stamped in dots and semi-circles with silver (niello). The plate was found in association with plate 36-5-1 and the other objects mentioned. This object can be identified as a decorative plate of a chatelaine. Siegmund identified chatelaines as a type, but did not discuss the decorative elements of these girdle hangers separately. He dates chatelaines (Ghg6) to Rhineland phase 8 (610-640).⁴⁷² The Franken AG maintained this type and neither discuss the variety of decorative elements. They date these girdle hangers to their phases 6-8 (580/90-670/80).⁴⁷³ Legoux, Périn and Vallet identified four types of decorative elements of chatelaines. None of these, however, resemble the Obbicht specimen. The four types of Legoux, Périn and Vallet all date predominantly to their phase MR1 (600/10-630/40), yet can occur sporadically in the phases before (560/70-600/10) and thereafter (630/40-660/70).⁴⁷⁴ It seems plausible to date the Obbicht specimen to the first half of the seventh century

Copper alloy plate 37-3-1 from grave 37 is a folded plate; it has a length of 3.0 cm and a width of 2.4 cm. The folded base of the plate is thick and hollow. This thick base is decorated with engraved horizontal stripes. At the other broad end of the plate four copper alloy rivets are present. The plate was found close to the long southern wall and short eastern wall of the grave, thus near the presumed former location of the feet. The grave was disturbed, and the plate may have moved from its original location. The other finds from this grave are a knife and a single bead.

Simple ring / ring rod: iron

4 (4-3-2; 4-3-1); 8 (8-4-1.1; 8-4-1.2); 35 (35-3-1)

Simple iron ring 4-3-2 from grave 4 has an outer diameter of 3.9-4.2 and an inner diameter of 3.2 cm. Beckers and Beckers mention that an iron rod with suspension ring was found in grave 4. An iron rod with suspension hole is known as find 4-3-1, but is without suspension ring. The rod has a length of 7.4 cm. The ring probably became separated from the rod some time after excavation. The other finds from this grave are a shield boss, seax, knife and arrow head, and some fragment of what seems to be a globular pot. The grave was disturbed, and the exact find locations of the finds were not recorded.

Simple iron ring 8-4-1.1 from grave 8 is not complete; half of it is missing. Its outer diameter can nonetheless be reconstructed at 3.7 and the inner diameter at 2.2 cm. Another half of an iron ring (8-4-1.2) with a looped rod attached to it was also found in this grave. This ring is with a diameter of 3.1 cm smaller and was thus not part of the other half. The rod has a remaining length of 3.2 cm. They were assigned the same find number and were thus probably found in association. It was not recorded where in the grave the two rings and rod were found. Other finds from this grave are a string of beads, a coin pendant and fragments of a biconical pot.

Simple iron ring 35-3-1 from grave 35 has an outer diameter of 2.2 cm and an inner cm of 1.5 cm. Mineralised textile remains are preserved on the ring. The small simple ring was found in the middle of the grave close to the short western wall and was thus probably used as a purse fastener or belt appendage. Siegmund dates large simple iron rings, which he identifies as bracelets, to Rhineland phase 8 (610-640).⁴⁷⁵ He identifies the small iron rings, similar to the ones from Obbicht, as girdle hangers but does not date them to a specific phase, and neither do the Franken AG, Legoux, Périn, and Vallet classify simple iron rings as girdle hangers (type 357) and date them to their phases MA2-MR1 (520/30-630/40).⁴⁷⁶

Simple ring: copper alloy

36 (36-6-1)

Simple ring 36-6 from grave 36 is a thick copper alloy ring width an outer diameter of 4.0 cm and an inner diameter of 2.2 cm. (fig. 73). It was found in association with the thin copper alloy rod and the crescent shaped plate, close to the northern wall and approximately 100 cm from the western wall, which is approximately in the middle of the northern section of the grave. It was probably used in association with a purse or with a strap attached to the waist belt. It was part of the richest grave inventory of a woman in the Obbicht cemetery. Simple copper alloy rings are not classified or dated in the available typo-chronology schemes.

(468) Siegmund 1998, 112-113. (469) Legoux/Périn/Vallet 2004, type 73, 15, 28, 52. (470) Legoux/Périn/Vallet 2004, 15, 28, 52 (type 73). (471) Legoux/Périn/Vallet 2004, 19, 39, 54 (type 322). (472) Siegmund 1998, 83. (473) Müssemeier *et al.* 2003, 40-41. (474) Legoux/Périn/Vallet 2004, type 363-366, 19, 41, 54. (475) Siegmund 1998, 81. (476) Legoux/Périn/Vallet 2004, type 357, 19, 41, 54.

Simple ring: missing

20 (20-11-1)

Fragments of a ring found at an unspecified location in relatively rich grave 20. The other finds from this grave are a copper alloy bowl, a biconical pot, a glass vessel and a shield boss, seax and lance head. The diameter of the ring was not given and neither its material component.

Rod: copper alloy

36 (36-4-1)

A thin copper alloy rod, 36-4-1, was found close to the northern wall, approximately 100 cm from the western wall in relatively rich grave of a woman. The rod has a length of 2.9 cm. Its function remains unclear. It was found close to the long northern wall, approximately 100 cm from the short western wall, in association with the simple copper alloy ring, the decorative plates and although a bit further, the gold finger ring. It was thus found to the left of the middle part of the now completely decayed body (assuming it was a w-e orientated burial), and the mentioned objects (apart from the ring) might be related to a purse.

Spindle whorl: ceramic

1 (1-2-1); 45 (45-4-1)

Ceramic spindle whorl 1-2-1 from grave 1 is yellowish, asymmetric biconical, with grooves applied only on the higher wall. The spindle whorl has a diameter of 3.0 cm and a height of 1.8 cm. The spindle whorl was found close to the biconical pot, which was found 40 cm from the eastern wall and 30 cm from the southern wall, thus close to the presumed former location of the feet of the now completely decayed body.

A ceramic spindle whorl is assigned to grave 45 on the basis of its original find number which matches best with this grave. A spindle whorl was however not recorded as find from this grave in the catalogue of Beckers and Beckers; it remains uncertain whether it actually belonged to this grave.

Spindle whorls are typical finds from graves of women, and were often carried in purses (attached to the belt), or attached to the belt with additional straps. This is not in accordance with the find location of the spindle whorl from grave 1. However, the grave was partly disturbed, and the spindle whorl might have moved from its original location. Legoux, Périn and Vallet classify spindle whorls of baked clay as type 347 and date them to their phases MA1-MR1 (470/80-630/40).⁴⁷⁷ Both Siegmund and the Franken AG did not classify spindle whorls of baked clay.

Cylinder

19-5-1

A conical hollow tube with a length of 5.9 cm, closed at the narrow

side and open at the wide side, was found in grave 19. It was found in the wooden container grave of a woman (identified on the basis of the beads). It was not recorded where in the grave this object was found, and it is not clear what its function was.

Rivets

22 (22-2-1); 38 (38-2-1); 39 (39-4-1)

An iron fragment with a flat copper plate on its rounded extremity is known from grave 22. The flat copper alloy plate is decorated with an engraved line along its edges, and a domed copper alloy rivet is placed on top of it. The rivet has a diameter of 1.0 cm. Its former function is unclear.

Three iron rivets/nails, probably of shield boss, with head diameters of circa 2.5 cm, are known from grave 38. Other traces of the former presence of a shield boss were not discovered.

Copper alloy rivet 39-4-1 from grave 39 has a domed but flat hollow head with a carved rim. The head has a diameter of 2.1 cm. Similar rivets are classified as Siegmund Sax 4.4 and date in Rhineland phase 9 (640-670),⁴⁷⁸ or as type Fanken AG Sax4.4, which dates from the end of their phase 7 to phase 8 (640/50-670/80).⁴⁷⁹

Nails

8 (8-2-1); 20 (20-10-1); 23 (23-1-1)

A number of iron nails were found dispersed throughout grave 8. One nail is present in the collection, without find number; it is not certain whether it belonged to grave 8.

Fragments of nails were found scattered throughout the grave. They are no longer available.

A fragment of an iron nail was found in grave 23. An iron nail without find number is present in the collection; it is not certain whether it originally belonged to this grave.

Fragments, iron or copper alloy

4 (4-1-1); 5 (5-9-1); 6 (6-3-1); 8 (8-1-1); 17 (17-1-1); 20 (20-12-1.1; 20-12-1.2; 20-12-1.3); 21 (21-2-1); 27 (27-1-1); 35 (35-4-1); 37B (37-12-1); 44 (44-2-1); 45 (45-3-1); 48 (48-1-1); 51A (51-3-1); 58 (58-4-1); 62 (62-3-1)

Numerous indeterminate iron fragments (4-1-1) were found scattered throughout grave 4. Various fragments, in corroded condition, are present, among which one corner mount.

Numerous iron fragments, indeterminate, are known from grave 5. A number of few iron fragments, found in association with the arrow heads close to the southern wall of the grave, were recorded as finds in the initial catalogue. They are missing or might be present among the fragments of the cemetery which are not restored yet.

Various iron indeterminate fragments were found dispersed throughout grave 8. They are no longer present in the collection.

An indeterminate small iron fragment was found in grave 17. It is no longer available in the collection.

Indeterminate iron fragments were found scattered throughout grave 20; one corroded fragment seems to be a knife, and one fragment is a folded rim in corroded condition; it might be a fragment of a bucket (comparable to the bucket from grave 36).

Beckers and Beckers mention the find of indeterminate fragments of iron (21-2-1) found scattered in grave 21. Various iron fragments, corroded and indeterminate, are present.

Numerous iron fragments (27-1-1) were found scattered throughout grave 27; they are available in corroded condition.

Two indeterminate iron fragments (35-4-1) were recorded as finds from grave 35; they were found in the middle of the grave close to the western wall, thus close to the presumed location of the head. Various iron fragments, corroded and indeterminate, are present. Their original find numbers (VIB 91) match with grave 35; it cannot be established what they actually were.

Fragments which might be of a shield grip are assigned to grave 37B.

An indeterminate iron fragment with mineralised remains (wood and textile?) is known from grave 44.

An indeterminate iron object with some mineralised remains (textile?) is known from grave 45.

An indeterminate iron fragment is known from grave 48.

Indeterminate iron fragments were found in grave 51A.

A round iron fragment was found in the middle of the grave 58 close to the eastern wall; it is no longer present in the collection.

Some indeterminate copper alloy fragments were found dispersed throughout grave 62.

Wood remains

58 (58-1-1; 58-2-1)

A large wood fragment was found in the middle of grave 58, and other smaller wood fragments (58-2-1) were found dispersed throughout the grave. A large wood fragment is stored in the restoration laboratory, smaller fragments will probably also be present in the box. Their former function is not clear.

Oil lamp

39 (39-5-1)

An oil lamp was found in cremation grave 39. Only fragments are now available; it is not certain whether they belonged to an oil

lamp and whether the object it was correctly identified as an oil lamp by Beckers and Beckers.

Human remains⁴⁸⁰

4 (4-11-1)?; 36 (36-2-1)⁴⁸¹; 39 (39-0-0); 49 (49-6-1); 63 (63-2-1)

Two molars and fragments of two teeth have find numbers matching with grave 4; these are however not recorded as finds from this grave in the catalogue of Beckers and Beckers.

Four or five teeth of a young child (36-2-1) were recorded as finds from grave 36. They were found in the western section of the grave, in association with the beads. They are no longer present in the collection, but the molars and teeth which are present might be wrongly assigned to grave 4.

Human cremation remains (23 grams) and some finds were deposited together in a large vessel identified as grave context 39. The remains are human and represent at least one individual. They were burnt at a temperature higher than 800°. The fragments are relatively small; fifteen grams of the available fragments are smaller than 1 cm. Various parts of the skeleton are present: 4 grams of the skull, 1 gram of the ribs, 2 grams of the fibula, and 1 gram of the epiphysis of the distal humerus. The cremated remains are of an individual of c. 14 years, which is established on the basis of the epiphyseal closure of the distal humerus. The biological sex of the individual could not be determined on the basis of the available remains and pathological bone changes were absent. Animal remains were not present among the cremation remains.

The severely deteriorated inhumated remains from grave 49 are on closer inspection some skull fragments and a part of the mandible. The biological sex indicators are ambiguous: the mastoid process is low, but broad and robust, the corpus of the mandible is low, the chin is more feminine than masculine, but the jaw is relatively thick and robust. The incompleteness of the remains hinders an unambiguous biological sex identification (fifteen parameters are normally used for this determination on the basis of a complete skull). In view of its overall robust appearance it might be a man. The estimated age at death is based on the attrition of one molar (nr. 4.7). This attrition is slight and points to an age at death of 17 to 25 years according to the classification of Brothwell. The element next to this molar, nr. 4.6, was lost during life due to tooth decay. This was identified on the basis of a cavity caused by a peri-apical abscess. The identified degree of attrition of nr. 4.7 might therefore not be indicative for the age at death since chewing with this side of the jaw was probably painful and avoided as much as possible; the other jaw side might thus have been used more and might have showed more attrition. The conclusion with regard to the age at death between 17 to 25 years is therefore only an indication. As

(477) Legoux/Périn/Vallet 2004, 19, 40, 54. (type 347). (478) Siegmund 1998, 95. (479) Müssemeier *et al.* 2003, 47. (480) Analysis and contribution by Dr. Liesbeth Smits of the University of Amsterdam. (481) No longer present in the collection.

overall conclusion it is suggested that the remains were of an adult, probably a man.

Fragments of the skull and upper jawbone, and a nearly complete lower jawbone and teeth of a young (non-adult) individual were recorded as finds from grave 63 in the catalogue of Beckers and Beckers. The available fragments are weathered fragments of the skull: the os occipitale (occipital bone), the maxilla (upper jaw with remnants of five molars and the dental enamel of one premolar) and four cervical vertebrae. The robustness of the bone fragments (especially the cervical vertebrae and the molars) indicates a woman. The occipital bone is also feminine since the protuberantia occipitalis externa (external occipital protuberance) is not present. An age at death of more than 18 years is established on the basis of the closure of the basilaris (spheno-occipitale synchondrosis). The attrition of the molars is slight; only the enamel is somewhat worn, which indicates that it was a young individual with an age of roughly between circa 25-30 years. One of the molars shows caries at the labial side. As overall conclusion it is suggested that it was a woman of 18 to 30 years of age.

Animal remains⁴⁸²

25 (25-1-1); 29 (29-7-1)

Grave 25 is a horse burial. A nearly complete horse skeleton was discovered inside the undisturbed outline left by the decayed wooden container walls. The catalogue refers to the surviving remnants as ‘thick bones, limbs, skull, molars and teeth’ and mentions that the smaller bones were gone but left shadows. Other finds or human remains were not found in this grave.

Only eleven horse molars are present in the collection; all the other skeleton parts went missing. The analysis of the molars shows that they were at least of two individuals (table 4.12). The molars concerned are: P2, P3, P4/M1 en M1/M2 of the right upper jaw and a P4 and M3 of the left upper jaw of one individual (horse 1), and a M1, M2 and M3 of the right upper jaw of the second individual (horse 2).⁴⁸³ Two additional molars (P3, P4, M1 or M2) of a left lower jaw are also present. These are in all probability of one individual, and in view of their characteristics they seem to belong to horse 1.

It is not clear which elements belonged to grave 25, but it can be concluded that one set of molars belonged to another grave. The description of grave 25 in the catalogue of Beckers and Beckers refers to the discovery of horse tooth in grave 29. However, in the description of grave 29, the wooden container grave of a man, no such reference is made. It is for now assumed that the horse molars of the two individuals belonged to graves 25 and 29; it cannot be established which molars belonged to which grave exactly.

Table 4.12
Crown heights of the Obbicht horse molars and the estimation of the associated age groups.

Individual	Molars	Crown height (mm)	Age group (years)*
Horse 1	P2	46	8-9
	P3	65	6-7
	P4/M1	69	6-7/5-6
	M1/M2	73	5-6/6-7
Horse 2	M1	56	7-8
	M2	62	7-8
	M3	60	7-8

* Levine 1982, appendix IIIa

The molars were in a relatively good condition compared to preservation state of the scarce skeletal remains present in the cemetery. Molars are better preserved in loess soils than other skeletal remains, but the horse molars are in an even better condition than can be expected. Some of the molars were not complete, but they were certainly not falling apart.

The age of a horse can be estimated if the outer side (cheek side) of the molar is present from chewing surface till at least the upper part of the root; if present the crown height can be measured.⁴⁸⁴ The age of the two horses could be estimated on the basis of the molars from the right upper jaws. Horse 1 was 5 to 9 years old when it died, and horse 2 7 to 8 years; they had approximately the same age at death.

Horse graves or the presence of horse remains in graves are not exceptional in Merovingian cemeteries,⁴⁸⁵ and can be seen as part of the Merovingian death cult in view of this repetitive character. In the province of Limburg other horse graves are discovered in Gennep Touwslagersgroes,⁴⁸⁶ Venzelderheide,⁴⁸⁷ Swalmen,⁴⁸⁸ and Borgharen.⁴⁸⁹ The horses from Obbicht were of approximately the same age as the horse from Gennep Venzelderheide and some years older than the two horses from Borgharen. Other features as the wither height of the Obbicht horses and their location in the grave are not available and cannot be compared with the other horse graves from Limburg. Obbicht is the only cemetery in the province of Limburg where rests of a horse (the tooth in grave 29) are deposited in an inhumation grave of a human; in this grave there is thus a clear relation between the man (with weapons, a warrior?) and the horse parts; the relation between warriors (identified a such on the basis of the presence weapons in graves) and horses is the most frequent one established in Merovingian cemeteries, but other relations can also be observed. The two horses from Borgharen for example, which were young and inexperienced riding-horses, do not underline the clear cut relation between a warrior and his riding-horse.⁴⁹⁰

Finds from the cemetery of Stein-Groote Bongerd

Belt fittings

The belt fittings from grave 8

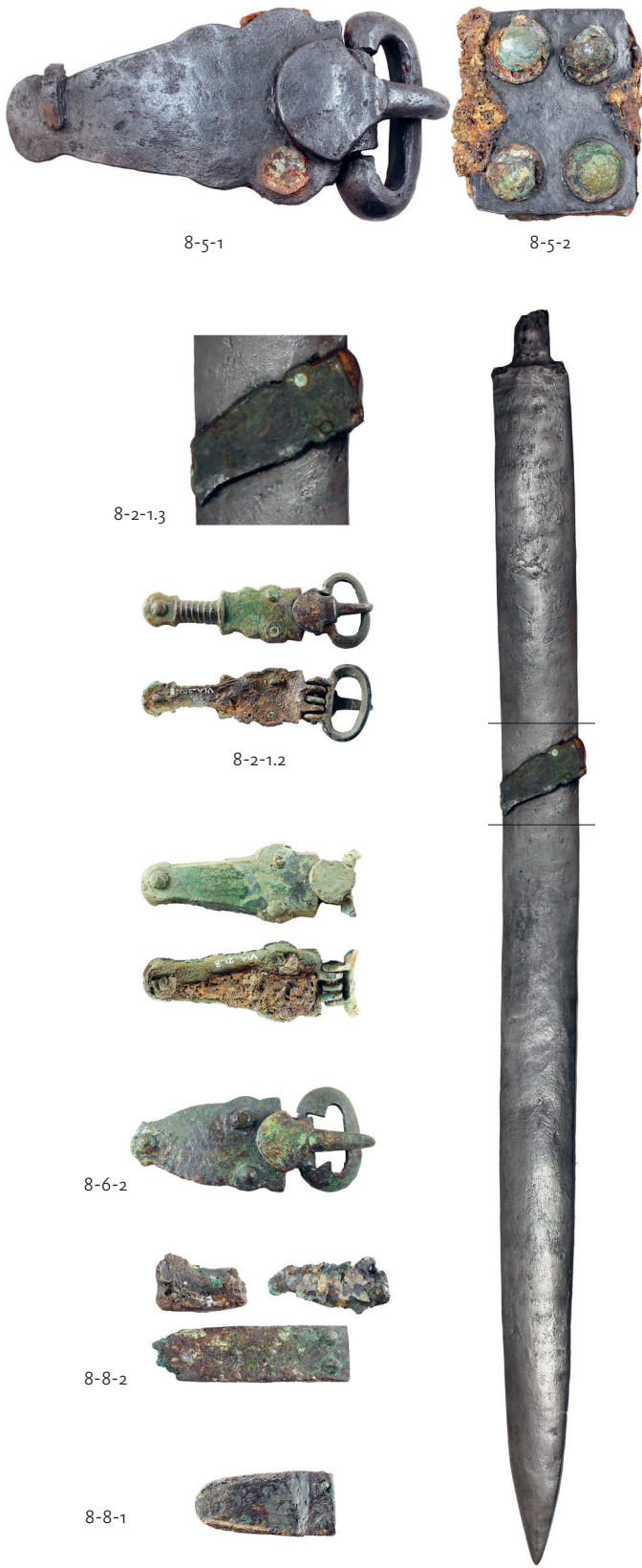
8 (8-5-1; 8-5-2-; 8-5-3; 8-5-4; 8-6-1; 8-6-2; 8-8-1; 8-8-2; 8-2-1.2; 8-2-1.3)

Grave 8 is a richly furnished grave of a man with, among other finds, a sword and seax and a set of associated belt and strap fittings (fig. 4.99).

A large iron plate buckle and matching back plate form the waist belt fittings from this grave. The iron plate buckle (8-5-1) has a triangular plate with an undulating outline and is attached to the buckle loop with a wrapped and slotted construction. The remnant of one copper alloy rivet, of originally three is present at the base of the plate. A second rivet will have been present at the other end of the plate base, and a third one in all probability at the protruding extremity of the plate; a small iron fragment is present at this extremity but it is not clear what it is. The two bulges at the basis of the plate represent the location of two rivets. The plate has a length of 9.8 cm and the maximum width of the plate is 5.8 cm. The buckle loop is D-shaped and the inner length of the loop is 4.3 cm. The belt to which the fitting was attached had a width of c. 5.8 cm and was narrower towards its extremity if it went through the loop. Leather remains of the belt were found at the back of the plate. The plate buckle was found in association with a back plate, close to the hilt of the seax and the sword, along the eastern wall of the grave. The rectangular back plate (8-5-2) has three large domed copper alloy rivets and remnants of a fourth; one of the rivet pins is visible at the back of the plate which is completely covered with leather remnants of the belt. The rivets seem to have rims with silver inlays, although this is quite difficult to establish with certainty since they are rather damaged. The rivets on the plate buckle probably had similar rims. The plate has a length of 5.7 cm and a width of 4.6 cm; the length of the plate is in accordance with a belt width matching the plate buckle, they belonged to the same belt.⁴⁹¹ Some iron fragments (8-5-3; 8-5-4) with traces of copper alloy inlays are recorded as finds from this grave in the catalogue of Beckers and Beckers; these might be traces of rivet rims. These fragments are not available anymore. Large iron plate buckles are classified as type Siegmund Gür4.5, which dates to Rhineland phase 8 (610-640).⁴⁹²

Four additional and smaller copper alloy strap fittings are also known from grave 8. They are part of the larger set of the waist belt with straps which attached the sword (scabbard) and seax (scabbard) to the waist belt; each of these four fittings is thus either associated with the seax or sword straps.

Fig. 4.99
The belt fittings from grave 8 (scale 1:2).



(482) Analysis and contribution by Inge van der Jagt MA, of the State Service of Cultural Heritage. (483) P= Premolar, M= Molar. (484) Levine 1982. (485) Müller-Wille 1971; Prummel 1993; Van der Jagt *et al.* 2014. (486) Zijlstra 1997. (487) Stoepker/Tak/Wagner 1990; Laarman/Lauwerier 1991; Stoepker *et al.* 1997. (488) Proos 1988. (489) Van der Jagt *et al.* 2014. (490) Van der Jagt *et al.* 2014. (491) The back plate was stored in association with an iron plate buckle with round plate (which was also (probably by mistake) assigned to grave 8), but shows a best match with the triangular plate buckle in view of the reconstructed dimensions of the associated leather belt. The triangular plate buckle is also a better match with the description of the finds from grave 8 in the catalogue of Beckers and Beckers than the plate buckle with round plate. (492) Siegmund 1998, 31-32.

Copper alloy plate buckle 8-2-1.2 and copper alloy plate 8-2-1.3 were found associated with the sword. Only the shield tongue of the plate buckle was found attached to the sword; the loop of the buckle was partly gone and the plate became detached from the shield tongue and sword. The other copper alloy plate is still attached to the sword and the shield tongue of the plate buckle was also attached to blade; at the same height as the plate but at the other side of the sword blade. The plate buckle was restored and connected again to the shield tongue, which was for restoration purposes separated from the sword. The plate is complete; it has a length of 4.6 cm and a base width of 1.5 cm. It is a triangular shaped plate with an undulating outline with a rod shaped extension with ribs, ending in a protruding shield shaped extremity. One small copper alloy and slightly domed rivet is present at this extremity. The other two similar rivets are present at the triangular plate. The plate is hollow, and the pins of the three rivets can be observed at the back of the plate. The plate was attached to the loop with a hinged construction. A major part of the buckle loop was gone, but now completed. The reconstructed buckle loop has an outer length of 2.2 cm and an inner length of 1.6 cm, and is oval with a D-shaped section.

The associated copper alloy plate attached to the other side of the sword blade was restored but not taken from the sword blade. The plate has a length of 5.2 cm and a base width of 2.0 cm. The plate has a rectangular base with two copper alloy domes rivets. The rest of the plate is curved and ends in a straight extremity. Decoration cannot be observed on the plate, but it might have disappeared due to corrosion. Some leather remains can be observed underneath the rectangular base of the plate; these are leather remains of the strap to which it was attached or these are the remains of the sword scabbard.

The plate buckle and plate seem to have been part of the same belt/strap with a width of approximately 1.5-2.0 cm. It was probably wrapped around the scabbard of the sword when deposited in the grave. It was recorded that the sword was found lying alongside the southern wall, in association with a lance head, a seax and some belt fittings other than the ones attached to the sword. These belt fittings seem to have been the fittings of the main waist belt (described above). The ensemble was deposited to the right of the now completely decomposed body, assuming that the body had a w-e orientation. Siegmund suggests that hinged constructions (types Gür3.3 and 3.4) are chronological significant characteristics. The plate buckle and associated plate might be identified as variants of these Siegmund types and can be dated accordingly to Rhineland phase 8 (610-640).⁴⁹³

Two additional copper alloy plate buckles (8-6-1 and 8-6-2) are also identified as parts of the ensemble of seax, sword and waist-/sword belt fittings. The two plate buckles are not identical. Plate buckle 8-6-1 has a triangular plate with an undulating outline and

three domed copper alloy rivets; two at the base of the plate and one at the protruding extremity. The pins of the rivets are visible at the back of the plate. The plate has a length of 4.3 cm and the base a width of 2.7 cm. It is attached to the loop with a wrapped and slotted construction. The hollow loop has a shield tongue attached to it and an outer length of 3.0 cm and inner length of 1.9 cm. It has a trapezium cut out space towards the base of the loop which forms the rod to which the plate is attached. Beckers and Beckers suggest that this plate buckle and plate buckle 8-6-2 may have been attached to a strap which connected the sword and seax to the waist belt⁴⁹⁴; it can thus be concluded that the two plate buckles were found in the proximity of the sword and seax.

Copper alloy plate buckle 8-6-2 has a triangular plate with an undulating outline and three small copper alloy rivets. The appearance of the plate buckle is however different from associated plate 8-6-1 (see the section above). The plate is hollow and has a length of 4.9 cm and a base width of 1.9 cm; is thus more elongated and narrower than pate buckle 8-6-1. The plate is attached to the remnants of a buckle loop with shield tongue with a hinged construction; the dimensions of the buckle loop could not be established. Mineralised textile/leather was preserved on its back and remnants of copper alloy sheet metal around pins of rivets can be observed at the back of the plate. The plate buckle can thus also be classified as a variant of Siegmund types Gür3.3 and 3.4 and dated accordingly to Rhineland phase 8 (610-640).⁴⁹⁵

One of the two iron strap ends from grave 8 is tongue shaped (8-8-1) with a split base and two small copper alloy rivets going through the split. It has a length of 3.9 cm and a width of 1.8 cm. The second is a tongue shaped copper alloy strap end (8-8-2) with two small copper alloy rivets going through the base, which is not split. The extremity of the strap end is gone; it was not much longer than the remaining part. Two additional copper alloy fragments are associated with this strap end. The remaining length of the strap end is 5.4 cm. Legoux, Périn and Vallet classify strap ends as type 199, which dates to their phases MA1-MR1 (470/80-630/40).⁴⁹⁶ On a whole, the set of belt fittings associated with the seax and sword can be dated to 610-640. The other finds from this grave, a palm cup and a shield boss match with this date range, and the grave is thus dated accordingly.

Plate buckles: iron, broad triangular plate, five rivets, without decoration

7 (7-2-1)

An iron counter plate or plate of plate buckle of which the base is partly gone is known from grave 7 (fig. 4.100). Four (of originally five) small domed iron rivets are present; they seem to be iron, but can also be copper alloy. The plate is rather thin and has a length of 7.0 cm and a width of 3.4 cm. The pin of one rivet is visible at the

Fig. 4.100
Iron plate buckle, grave 7 (scale 1:2).



Fig. 4.101
Copper alloy slotted plates, grave 64 (scale 1:2).



Fig. 4.102
Iron plate buckle, grave 66 (scale 1:2).



back of the plate. It is classified as Siegmund's type Gür4.5, which dates to Rhineland phase 8 (610-640).⁴⁹⁷

Plate buckles: iron

14 (14-2-1; 14-3-1)

Beckers and Beckers mention that and iron buckle (14-2-1) was found close to the western wall of grave 14, and that underneath, attached to the buckle, the remnants of two copper alloy rivets (14-3-1) were found.⁴⁹⁸ A large corroded iron ring or buckle loop is present, together with two small plates with nails. They might be the finds referred to in their catalogue. They are stored in a box in association with other finds known from this grave, but their find numbers are not available anymore. The catalogue mentions that the buckle has a length of 7.0 cm and a width of 4.0 cm; it might thus also be a plate buckle since in general the catalogue refers to the length including the buckle loop. On the basis of the available fragments these objects cannot be classified or dated. The other find from this grave is a globular pot which dates to the seventh century.

Plate buckles: iron, 'heart' shaped plates?

64 (64-1-1.1; 64-1-1.2; 64-1-1.3; 64-1-1.4)

Beckers and Beckers mention the find of an iron plate buckle, counter plate, back plate and slotted plates; they form an extended set of waist belt fittings from grave 64.⁴⁹⁹ Of all these fittings only the plate buckle seems to be present, although in corroded condition, in restoration laboratory Restaura. The slotted plates are restored. A number of small iron fragments present in the laboratory might have been parts of the other fittings, but are difficult to identify as such. The plate buckle (64-1-1.1) is described as an iron plate buckle with a heart shaped plate with three copper alloy rivets. The extremity of the (iron) tongue was mentioned to be curved and bent over the loop. The length of the plate buckle is 13 cm and the width of the base of the plate is 6 cm. This cannot be verified on the basis of the corroded fitting; a lot of it is gone. The other fittings from this grave are described in the catalogue as a heart shaped counter plate (64-1-1.2) with five copper alloy

rivets and a length of 11.0 cm and a base width of 6 cm, found in the proximity of the plate buckle. The back plate is described as a rectangular back plate with five rivets (64-1-1.3), four in each corner and one in the middle of the plate, with a length of 6.0 cm and a width 5.0 cm; it was also found in the proximity of the plate buckle and thus the counter plate. Five restored slotted plates (64-1-1.4) are present; they have rectangular openings and rivets at each corner (fig. 4.101). Two engraved thin lines are applied along the edges of the five plates. One has a length of 2.9 cm and a width of 2.7 cm. Three other plates are incomplete but seem to have been of similar dimensions. One is considerably smaller with a length and width of 2.4 cm. Iron plate buckles, with or without inlays, with a minimum of two additional fittings can be classified as Siegmund's types Gur4.2/4.3/4.5/4.6/4.7/4.8 and date from the end of Rhineland phase 7 to phase 9 (c. 600-670).⁵⁰⁰

Similar thin copper alloy plates, but with engraved geometric decoration, are for example known from the Pandhof cemetery in Maastricht⁵⁰¹; they are here associated with an extended belt set consisting of hollow copper alloy fittings classified as Siegmund's type Gür3.3, which dates to Rhineland phase 8 (610-640).⁵⁰² This is in accordance with the date range proposed for the iron belt fittings from grave 64.

Belt fittings: iron plates

18 (18-2-1; 18-6-1)

The square iron plate 18-2-1 from grave 18 is severely corroded; it was not cleansed or restored. It might have been a back plate of a waist belt, but this is now difficult to determine. An iron back plate was recorded as a find from this grave; it was found close to the western wall, in the middle of the grave, which is in accordance with the former location of a waist belt.⁵⁰³ An iron buckle (18-6-1) is also known from this grave; it might be a fitting of the waist belt. The buckle was found close to the square plate. The belt fittings are classified and dated on the basis of the back plate since this is the most obvious element of the identified belt fittings; it is classified as type Siegmund Gür4.10 (square back plates), which dates to Rhineland phases 8B-9 (625-670). Siegmund mentions that square

(493) Siegmund 1998, 27-28. (494) Beckers/Beckers 1940, 300. In view of the bad conservation of organic materials it can be questioned whether they could distinguish between a waist belt and a sword belt when all these objects were found lumped together. (495) Siegmund 1998, 27-28. (496) Legoux/Périn/Vallet 2004, 17, 34, 53.

(497) Siegmund 1998, 31-32. (498) Beckers/Beckers 1940, 301. (499) Beckers/Beckers 1940, 317-318. (500) Siegmund 1998, 31-33. (501) Kars 2011, 248-249. (502) Siegmund 1998, 27-28. (503) Beckers/Beckers 1940, 302.

back plates are generally part of ensembles of belt fittings decorated with inlays forming animal style patterns and sporadically geometric patterns.⁵⁰⁴ The X-ray photograph of the back plate shows that it was without decoration.

Plate buckle: iron, triangular plate, three rivets, without decoration
66 (66-1-1)

Iron plate buckle 66-1-1 from grave 66 was restored, but is severely weathered; its current condition is presumably smaller and different from its original state (fig. 4.102). The remaining length of the triangular plate is 5.3 cm and the width of the base of the plate is c. 2.5 cm. Remnants of three possibly copper alloy rivets can be observed on the plate. The plate is probably attached to the buckle loop with a wrapped and slotted construction. The buckle consists of an oval loop with shield tongue. The outer length of the buckle is c. 3.3 cm and the inner length c. 1.8 cm. The plate buckle was attached to a belt with a width of c. 2.5 cm, and was narrower towards its extremity which went through buckle loop. The plate buckle was found along the long northern wall, in the middle of the grave, and was thus deposited to the left of the waist: it might have been the fitting of the waist belt. The other finds from this grave are a biconical pot and an iron nail. Large iron plate buckles are classified as type Siegmund Gür4.5, which dates to Rhineland phase 8 (610-640).⁵⁰⁵

Plate buckle: iron, round plate, three rivets, without decoration

A plate buckle with a round plate and three copper alloy rivets with craved rims, and mineralised textile and/or leather remains preserved on its back has a find number on the basis of which it should be assigned to grave 8; it is not certain whether it originally belonged to this grave since it is not recorded as find from this grave and another large plate buckle is already ascribed to it. It is classified as Siegmund's type Gür4.1/4.2 which dates to Rhineland phase 7 (585-610; this date range is not a perfect match with the other finds from grave 8.

Belt fittings: iron, plate buckle with round plate and back plate
0 (0-0-5)

An iron plate buckle with round plate and a matching rectangular back plate are known as finds from Stein. The original find number is difficult to match with a grave unambiguously since the possible matching graves were without such finds. The set is classified

as Siegmund's type Gür4.1/4.2, which dates to Rhineland phase 7 (585-610).

Plate buckle: iron, triangular plate
0 (8-0-4)

An iron plate buckle, severely damaged, with a triangular plate with protruding extremity and a vertical band shaped elevation on what is either the front or back side of the plate has a find number matching with grave 8. Since numerous belt fittings are already assigned to this grave, and a belt fitting similar to the one discussed is not recorded as find from this grave it remains uncertain whether it originally belonged to it. The remnants of the tongue base can be observed, but the buckle loop is gone; it is difficult to classify and date this plate buckle.

Belt fittings: Bülach style, iron with geometric silver inlays
49 (49-2-1.1; 49-2-1.2)

Numerous small iron fragments were stored in a box; they are not restored yet, but the X-ray photo shows that they are detached belt fitting fragments with silver inlays (fig. 4.103). The decoration patters enables the fragments to be identified as a plate buckle and counter plate of the Bülach style.

A considerable fragment of the middle field of the plate buckle or counter plate is present; the decoration on the middle field consists of braided bands filled with silver dots. The middle field is framed by two zones of vertical silver stripes separated by a zone with a horizontal undulating stripe. The braided bands do not seem to end in animal heads, which can be a feature on Bülach belt fittings.⁵⁰⁶ Since a large fragment on which the two zones of vertical stripes separated by the zone with horizontal undulating stripe is present, and is too large to fit with the preserved middle field, it could thus be established that a plate buckle and counter plate were present. Whether the fragment with the preserved middle field with braided bands belonged to the plate buckle or counter plate cannot be established. The other fragments with decoration show swallow's tail extremities which is a characteristic of the plate buckles of the so called 'Bülach' type.⁵⁰⁷ In Bülach most of the belts (eight out of twelve) show a monochrome (silver) incrustation.⁵⁰⁸ The identical shading on the X-ray photograph indicates that the decoration on the Stein plates is also monochrome, but this will become clear after their restoration. From the Vrijthof cemetery a Bülach plate buckle with silver and copper alloy inlays is known.⁵⁰⁹ The decoration pattern on the Stein fittings is similar to that on the plate buckle and counter plate found on a field in

Macharen in the province of North-Brabant, which is also monochrome.⁵¹⁰

The name 'Bülach', ascribed to this kind of plate buckles, refers to the find concentration of such plate buckles in the Swiss cemetery of Bülach. Werner suggests that because the plate buckles of this type have that many similarities it can be assumed that they were made in the same workshop.⁵¹¹ However, Werner states that the definition of these plate buckles as type 'Bülach' does not mean that Bülach should be considered to be the place of production of these plate buckles but merely that it refers to the high concentration of finds in this cemetery.⁵¹² The specimen from the Vrijthof cemetery again shows that this type appears in graves far away from the Swiss region. A plate buckle of the 'Bülach' type with bichrome inlay is for example known from grave 1975/79 of the cemetery of Lent.⁵¹³ Van Es and Hulst offer a list of ten cemeteries in the Frankish area where belt fittings of this type with monochrome inlays were found.⁵¹⁴ A new inventory of such belt fittings will probably show a large number of them distributed over a large part of northern Gaul.⁵¹⁵

The belt fittings from Stein grave 49 were not identified as such during excavation, but it was recorded that a triangular shaped iron object with a length of 13.0 cm, a maximum width of 4.5 cm and a minimum width of 1.5 cm was found in the middle of the grave, not far from the southern walls, and a iron pear shaped object (no dimensions given), also found in the middle of the grave, but a little bit more to the north than the triangular fragment; these might have been the plate buckle and counter plate. A seax was also found in this grave, which is not an uncommon combination with Bülach belt fittings. Bülach belts can be classified as a variant of Siegmund's type Gür4.6, which dates to Rhineland phase 8 (610-640).⁵¹⁶ The Franken AG maintained this type and date it in their phase 7 (610/20-640/50).⁵¹⁷ Knaut dates the plate buckles of the Bülach type with bands and dots in the second quarter or second third of the seventh century.⁵¹⁸ Walter dates tripartite monochrome swallow tailed belt fittings with braided decoration to phases 5 and 6 of the Mengen cemetery (610-640/640-670).⁵¹⁹ Plumier-Torfs, who studied silver and copper alloy inlaid belt and shoe fittings from Belgium, dates the belt fittings with this decoration to the first half of the seventh century.⁵²⁰

Counter plate: iron, silver (and copper alloy) inlays
23 (23-4-1)

An iron fragment was discovered in grave 23 of a woman (identified on the basis of beads). The X-ray photograph revealed a decorated iron belt fitting (fig. 4.104).⁵²¹ It is in all probability a counter

Fig. 4.103
Iron Bülach style belt fittings, grave 49 (scale 1:1).

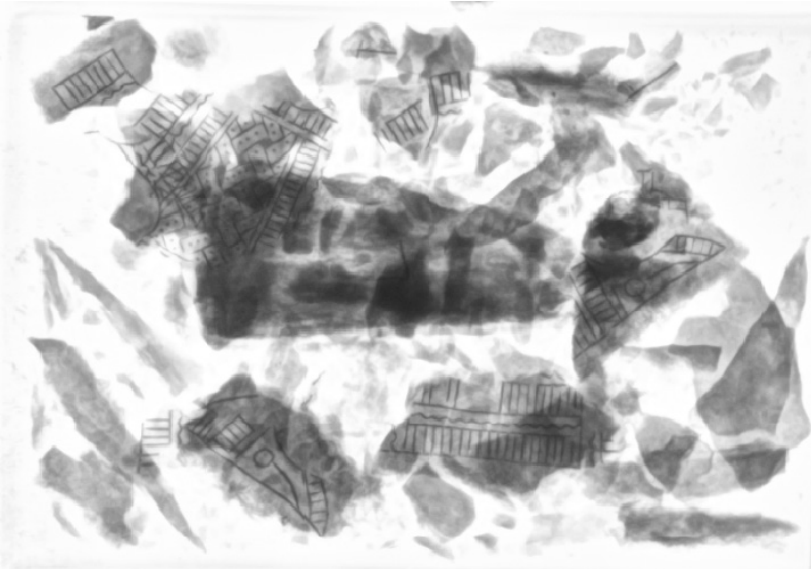


Fig. 4.104
Iron counter plate with silver (and copper alloy) inlays, the black undulating line is a recent clamp of the wooden box, grave 23 (scale 1:1).

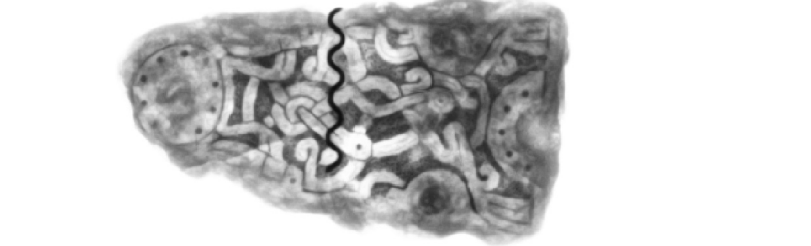


plate but it might also be the plate of a plate buckle. The decoration consists of a regular animal style ornament which intersects the silver plating which covers nearly the entire plate. The ornament consists of intertwining bands ending in bird heads with relatively long beaks. The eyes of the bird heads are indicated with a silver dot. Additional silver and/or copper alloy threads might have been integrated in this ornament; this cannot be established on the basis of the X-ray photo. Belt fittings with similar decorative ornaments are classified as Siegmund's type Gür4.7, which dates to Rhineland phase 9 (640-670).⁵²² The Franken AG maintained Siegmund's type and date it to their phase 8 (640/50-670/80).⁵²³

Plate buckle: iron, silver (and copper alloy) inlays
64 (64-7-1)

An iron plate buckle with a triangular shaped plate with undulating outline and three (remnants of) rivets and half of the loop is present in corroded condition.⁵²⁴ The X-ray photograph shows

(504) Siegmund 1998, 33. (505) Siegmund 1998, 31-32. (506) Schrickel 1979, 24-25. (507) Werner 1953, 31-34; Schrickel 1979, 15-28; Van Es/Hulst 1991, 123-124. (508) Werner 1953, 31. (509) Kars 201, 250-251. (510) Van Ginkel/Theunissen 2009, 233. (511) Werner 1953, 31. (512) Werner 1953, 30. (513) Van Es/Hulst 1991, 123-124, 281, Abb. 83. This 'Bülach' type has a decoration of bichrome inlay and the authors suspect a place of production in the Meuse Valley. (514) Van Es/Hulst 1991, 147, note 218. (515) They are for instance also found in Paris (Périn 1985, 383 (Saint-Germain-des-Prés)). A decoration identical to the Stein specimen with stripes and an undulating line are also found at Saint-Germains-des-Prés (Périn 1985, 381-382) (516) Siegmund 1998, 32. See also the discussion on silver and copper alloy inlaid belts

by Ament 1976. (517) Müssemeier *et al.* 2003, 20-21. (518) Knaut 1993, 132. (519) Walter 2008, 166-167. (520) Plumier-Torfs 1986. (521) The dark undulating line on the photograph is a recent iron staple of the wooden box in which it is stored. The object was X-rayed in the box. (522) Siegmund 1998, 32. (523) Müssemeier *et al.* 2003, 21. (524) Since a plate buckle is not recorded as a find from grave 64 in the catalogue of Beckers and Beckers it might be wrongly assigned of this grave. It might be, in view of the matching dimensions, the missing plate buckle recorded as find from grave 72. For now it is maintained, although with reservations, as a find from grave 64.

Fig. 4.105
Iron plate buckle with silver (and copper alloy) inlays, grave 64 (scale 1:1).

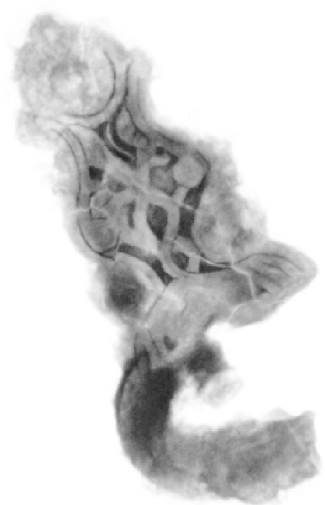


Fig. 4.106
Iron plate buckle with silver (and copper alloy) inlays, grave 56 (scale 1:1).



that the plate is decorated with a (silver) plated middle field, which is intersected by a degenerated animal style pattern probably with additional silver and/or copper alloy threads (fig. 4.105). It cannot be observed whether the buckle loop was decorated. The plate has a length of 4.8 cm and a base width of 2.5 cm. The plate buckle is classified as Siegmund's type Gür4.8, which dates to Rhineland phase 9 (640-670).⁵²⁵ The Franken AG created type Gür4.8A, which is characterised by silver plating and degenerated animal style decoration and different from their type Gür4.8B, on which silver plating is absent. Type Gür4.8A dates to their phase 8 (640/50-670/80).⁵²⁶

Plate buckle: iron, silver (and copper alloy) inlays
56 (56-5-1; 56-6-1.1; 56-6-1.2)

A large iron triangular plate with three rivets of a plate buckle (or maybe a counter plate) is present in corroded condition (56-6-1.1).

Fig. 4.107
Iron strap end with silver (and copper alloy) inlays, grave 37 (scale 1:1).



Fig. 4.108
Iron strap fittings with silver inlays, find context not known (scale 1:1).



The X-ray photograph shows that the middle field is silver plated and that this silver plating is bordered with two silver or copper alloy threads (the threads are dark on the X-ray photograph, which seems to indicate that they were copper alloy), following the edges of the plate (fig. 4.106). The base of the plate consists of a geometric pattern of lines and a semi-circular band filled with silver dots. A degenerated animal style ornament of braided ladder band ending in three bird heads with long beaks intersects the silver plated middle field of the plate. Some additional copper alloy and/or silver threads are integrated in the ornament, but these are difficult to distinguish. It is identified as the plate of a plate buckle on the basis of the semi-circular ornament on the base of the plate which may indicate the former location of the shield tongue base. A resembling but smaller plate is also present (56-6-1.2). The X-ray shows that it has an ornament comparable to the one on the large plate; it consists of braided band filled with a single thread and ends in two bird's heads. Other iron fragments are also present, of which one shows two possible rivets; it is not clear whether more belt fittings were originally present. The larger and smaller plates indicate that a (multiple) belt set consisting of a plate buckle, counter plate and additional smaller (triangular?) plates might have been originally present in this grave. A buckle loop is also present in corroded condition (56-5-1); it has an outer length of c. 4.7 cm and might have been connected to the larger plate. Similar belt fittings with silver plating and bichrome inlays are classified as Siegmund's type Gür4.8, which dates to Rhineland phase 9 (640-670).⁵²⁷ The Franken AG classify them as Gür4.8A on the basis of

the silver plating in combination with an animal style ornament. This type dates to their phase 8 (640/50-670/80).⁵²⁸

Strap end: iron, silver (or copper alloy) inlays
37 (37-1-1); 65 (65-1-1)

Three corroded iron fragments (37-1-1) were recorded as finds from grave 37 in the catalogue of Beckers and Beckers; one is still present in corroded condition. The X-ray photo shows that it is a relatively long and broad iron strap end with decoration (fig. 4.107). The decoration consists of circles and spirals of silver (or maybe copper alloy) inlays which cover the entire strap end surface. The strap end has a length of 6.5 cm and a width of 2.6 cm. It was found nearly in the middle of the burial pit, 145 cm from the short western wall, which results in a find location in the middle of the eastern half of the second wooden container in this grave, thus close to the presumed former location of the upper legs. Belt fittings with similar spiral ornamentation of silver inlays are for example known from grave 6 of the cemetery of Niederstotzingen; this grave is dated to 650-700.⁵²⁹ The other datable find from grave 37 is a red bowl, which is dated to the relatively long date range 510/20-640/50.

An iron strap end with two iron rivets, a length of 10.0 cm and a width of 3.0 cm was in the catalogue of Beckers and Beckers recorded as find from grave 65. An iron strap end with a length of c. 9.9 cm and a width of 2.6 cm without find number is available in the collection. It is on the basis of its length assigned to grave 65. It is present in corroded condition and covered with mineralised textile remains. The X-ray photograph shows that it was decorated with a regular animal style ornament with additional silver and maybe copper alloy threads, which intersects the silver plated middle field. The animal style ornament consists of intertwining bands ending in four bird heads. The middle field is bordered with some zones of three short silver stripes, and the base of the plate is decorated with a geometric ornament of silver threads.

Belt fittings with similar ornaments are classified as Siegmund's type Gür4.7, which dates to Rhineland phase 9 (640-670)⁵³⁰, and Franken AG phase 8 (640/50-670/80).⁵³¹

Strap fittings: iron, silver inlays
0 (0-0-0)

Two iron fittings with inlays (fig. 4.108) are identified on an X-ray photograph but are without find numbers. The larger fitting has a length of 5.2 cm. It is decorated with a geometric pattern of presumably silver inlays. The decoration pattern consists of a sin-

gle braided band formed by a single silver thread and filled with a ladder band and a single silver thread or maybe some silver plating. The braided band is surrounded by a pattern of straight silver stripes. Two rivet holes can be observed in the short ends of the plate, and maybe these were also present in the long ends. It belonged to an extended set of horse gear fittings.⁵³² The second plate is not as complete; its remaining length is 1.7 cm. It is assumed to form a set with the larger plate since it has comparable (rivet) holes in its ends and it shows remnants of what seems to be a similar geometric pattern of inlays.

Belt fittings, copper alloy, gilded: cut out spaces, engraved decoration, wooden plates with garnet inlays
12 (12-3-1.1; 1.2; 1.3; 1.4; 1.5; 1.6; 1.7)

A set of belt fittings, consisting of a plate buckle, two rectangular back plates and two additional plates, was found in grave 12 (fig. 4.109). Some detached wood fragments and two corroded iron fragments are also identified as parts of this set. The belt fittings were found as an articulated ensemble near the hilt of the sword, in a greasy accumulation of decayed wood and leather, in the middle of the eastern half of the grave and nearly at the bottom of the grave. The decayed body left a dark soil discoloration in the middle of the grave; the set of belt fittings was found at the presumed former location of the waist.⁵³³

The belt set was carefully restored by Ypey in 1971-1973, and was published in detail thereafter in 1973.⁵³⁴ The following description of the separate fittings will be partly based on this extended analysis since some specific details of the disbanded fittings were only visible during the restoration process of the composite belt fittings (fig. 4.10). The restored belt fittings are now fixed onto a display board and it was considered wise to leave them as such. The fittings were in a poor condition when they became available for Ypey's restoration; the copper alloy elements were corroded and parts were gone.

The restored set consists of a copper alloy plate buckle with a D-shaped hollow plate and three domed copper alloy rivets. An oval loop with an oval section and a shield tongue is attached to the plate with a wrapped and slotted construction. The buckle loop and tongue are without decoration, but the front of the plate shows an engraved decoration and a pattern of open spaces.

Two zones of cut out spaces can be observed: the outer zone consists of eight drop open spaces in a ring along the edge of the D-shaped plate. The inner zone consists of four drop shaped to diamond shaped open spaces forming a cross. The open spaces create an illusion of crossing bands (similar to the braided bands on iron

(525) Siegmund 1998, 32-33. (526) Müssemeier *et al.* 2003, 21. (527) Siegmund 1998, 32-33. (528) Müssemeier *et al.* 2003, 21. (529) Paulsen 1967. (530) Siegmund 1998, 32. (531) Müssemeier *et al.* 2003, 21. (532) See Oexle (1992) for similar rectangular fittings of horse gear: Schretzheim grave 345 (Tafel 111), Dörverden grave 60 (Tafel 197). Recently a rectangular mount of horse gear with a similar decoration was found in Uden grave 6 (excavation ARCHOL (Leiden) /University of Leiden, unpublished). (533) Beckers/Beckers 1940, 301. (534) Ypey 1973.

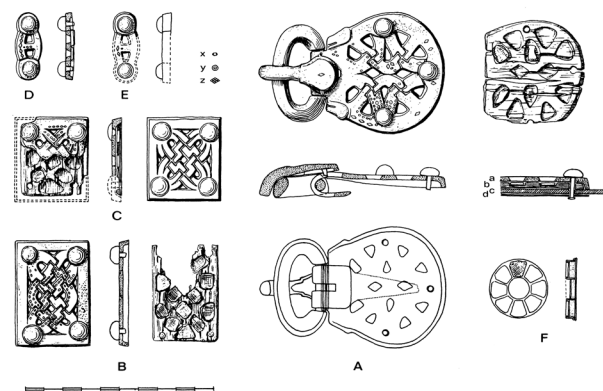
Fig. 4.109
Copper alloy belt fittings with engraved decoration and open spaces and wooden plates with gold foil and garnet inlays, grave 12 (scale 1:1).



belt fittings inlaid with silver). On these 'bands' an engraved geometric decoration was applied. The engravings might have covered the entire plate, but this cannot be established with certainty. Where the 'bands' around the inner zone of open spaces cross four engraved swastika's can be observed. The 'bands' themselves seem to have been decorated with engraved or stamped-in dot-in-circle ornaments and on the outer 'band' some engraved or stamped in diamond shapes with a fine raster can be observed; these ornaments might have covered the entire outer 'band'.

In the publication on the restoration of the plates it is mentioned that the copper alloy plate buckle and one copper alloy back plate were attached to a substance consisting of rust and sand. Inside this substance textile remnants were discovered, or, more precisely, imprints of decayed textile. This substance could not be preserved. Ypey observed that the textile imprints were those of double twill cloth, but the actual consistency of the fibre could not be established. The rust covered a thin iron plate at the back of the plate buckle. It was observed that the pins of the copper alloy plate buckle rivets fixed this thin plate; the leather belt

Fig. 4.110
Drawing Ypey 1972/73: Copper alloy belt fittings, with engraved decoration and open spaces and wooden plates with gold foil and garnet inlays, grave 12 (scale 1:4).



was thus fixed in between the copper alloy plate buckle and the thin iron plate. A thin plate of wood was discovered after the thin iron plate was removed. The plate of wood has the same shape and dimensions as the hollow plate of the plate buckle; it fits exactly underneath it. Ypey identified it as a plate of fine nerved wood, of for example a pear tree. The plate was 0.35-0.45 cm thick. Twelve sunken fields with a depth of 0.2 to 0.22 cm were created in the wooden plate and match with the locations of the cut out spaces in the copper alloy plate. The sunken fields are somewhat larger than the open spaces in the copper alloy plate and are trapezium or triangular to drop shaped. In four of these twelve sunken fields garnet stones were preserved.⁽⁵³⁵⁾ One of these stones was mentioned to be 'trapezium' shaped and is 0.13 cm thick. Thin gold foil with a fine raster was present underneath it. More irregular garnets, broken, and 0.24 to 0.255 cm thick, were preserved in two other sunken fields. Gold foil was not observed underneath these two stones. It can be imagined that all the sunken fields originally held garnets with gold foil underneath them since gold foil is generally applied underneath garnet stones used in various objects such as garnet disc brooches. The restoration of the belt fittings also showed some remnants of the gilded layer covering the copper alloy plates, which Beckers and Beckers also observed; the gilded layer is not visible anymore.

The two back plates and additional plates were also restored. The larger of the two rectangular back plates has a length of 5.4 cm and a width of 3.9 cm. It is hollow, as the plate of the plate buckle, and has four domed copper alloy rivets and fourteen open spaces, which also created an illusion of 'crossing bands'. The geometric decoration on the 'bands' consists of engraved or stamped in circles. Swastikas were applied there where the 'bands' cross. The wooden plate underneath the hollow copper alloy plate was not completely preserved, but the majority of the garnets and the gold foils underneath them were preserved in the sunken fields in the wooden plate matching the cut out spaces in the rectangular copper alloy plate which was fixed on top of it. Three garnets were preserved underneath the copper alloy plate. All the garnets of this rectangular back plate were preserved; they were restored and eventually placed in the matching sunken fields in the wooden plate.

Less is preserved of the second, smaller, rectangular back plate. It has a length of 3.8 cm and a width of 3.2 cm. Three, of originally four, copper alloy rivets are present. A considerable part of the hollow copper alloy plate is gone, as it is of the similar shaped wooden plate fixed underneath it. It can however be established that this back plate was executed in the same style as the plate buckle and the larger back plate. It has an engraved geometric pattern applied around the open spaces on the surface of the copper alloy plate. And although difficult to observe, it can be assumed that it was similar to the pattern on the larger back plate. Sunken fields

were created in the wooden plate matching the cut out spaces in top copper alloy plate; they were originally filled with garnets and gold foil. This wooden plate shows nine sunken fields for garnets, but more will have been present. This back plate was restored but not completed; the wooden plate underneath the copper alloy plate was kept visible and shows one gold foil and one garnet.

Two additional oval plates belong to this belt set and are executed in the same style as the plate buckle and back plates. The copper alloy oval plates have protruding extremities with copper alloy domed rivets. The plates consist of two drop shaped open spaces. The matching sunken field in the wooden plates underneath them originally held gold foil and garnets. Two garnets are preserved in one of the two additional plates. Of the other plate only the protruding extremities with copper alloy rivets are preserved; the middle field with cut out spaces and garnets were completed and as such a plate similar to the first additional plate was reconstructed. The two additional plates were hollow, and were covered with an engraved or stamped in geometric pattern executed in line with the patterns on the other plates.

The restoration and inspection of the belt fittings also revealed that a thread was wound seven times around the shield of the shield tongue; these are now gone. Two mineralised leather fragments of the belt are preserved and fixed onto the display board. One must realize that the belt fittings today convey a very different image from that in the Merovingian period. They had a shiny gold surface with red garnets with gold foil below them. When light fell on it in specific angles the garnets with gold foil must have had a glittering effect. The whole belt thus was a sparkling whole!

It is difficult to date this belt fitting set since comparable specimens are not known to me. Ypey dates the belt set to the end of the sixth and maybe the beginning of the seventh century, mainly on the basis of the swastika ornament, the rounded belt fittings (which point to the late sixth century), the braided ornament and the by him discerned animal heads at the base of the plate of the plate buckle.⁽⁵³⁶⁾ This is a good starting point. First, the belt fittings can indeed be classified and dated as a variant of the copper alloy belt fittings with rounded plates of Siegmund's type Gür3.2b, but these are without the open spaces and garnets. This Siegmund type dates to Rhineland phase 6 (570-585)⁽⁵³⁷⁾. Secondly, copper alloy belt fittings with open spaces can for example be classified as L/P/V type 165 (560/70-630/40). But these have rectangular plates. Thirdly, belt fittings with garnets can for example be classified as types L/P/V 142, 146 and 147 (470/80-520/30), but the garnets on these belt fittings are placed there in cloisonné style, which is not comparable to the open spaces, showing the garnets in the wooden plates underneath, of the Stein belt fittings. Fourth, copper alloy belt fittings with round plates, often gilded, and with engraved decoration can for example be classified as L/P/V types 157 and 158 (560/70-630/40, but predominantly to c. 580-600).

(535) Before their restoration the belt fittings were in such a bad condition that it can be expected that a number of garnets became detached and went missing. (536) Ypey 1957/58, 548-550. (537) Siegmund 1998, 27.

This last argument seems to be the strongest. The shape of the plate resembles a form regularly encountered in French cemeteries. Altogether, dating the Stein belt fittings to the end of the sixth century seems a plausible option, and the grave is dated accordingly. The sword and lance head for this grave are no longer present in the collection.

Simple buckles: iron

15 (15-2-1); 56 (56-5-1); 57 (57-4-1); 60 (60-4-1)

A round iron object (15-2-1) from grave 15 is preserved in corroded condition. It is not restored; it is for now identified as the loop of a buckle. Beckers and Beckers identified a round iron object with a hole in the middle in this grave; this description might refer to this buckle loop. It was found near the western wall of the grave in association with a fire steel and knife or seax. Other details were not given and are difficult to establish on the basis of the available corroded object.⁵³⁸

Beckers and Beckers mention the find of a buckle loop (56-5-1), found at a depth of 90 cm and 60 cm from the western wall in the middle of grave 56.⁵³⁹ A corroded iron object with original find number VIA 102/7 is present; this find number matches with grave 56. Dimensions were not given and are difficult to establish on the basis of the available corroded object. It seems to be an oval to rectangular loop with a rod around which the base of a tongue could have been wrapped. The tongue is now gone.

The simple iron buckle 57-4-1 was mentioned by Beckers and Beckers to have been found to the right of the body, close to the southern wall in the middle of grave 57.⁵⁴⁰ An iron fragment from this grave is present and might be the tongue of the buckle. The rest of the buckle is not available anymore. The tongue is thicker towards its base: it was thus a buckle with a shield tongue or club shaped tongue.

In the catalogue of Beckers and Beckers an iron buckle (60-4-1) is recorded as find from grave 60.⁵⁴¹ It is present as a severely corroded specimen without tongue in a box in which many other iron fragments are stored. It was not possible to establish the actual dimensions of the buckle. It was found in the middle of the grave in association with a fire steel.

Small belt fittings: copper alloy, hinged construction

56 (56-1-1)

Copper alloy plate buckle 56-1-1 has a plate (broken, approximately half of the plate is gone) with a remaining length of 2.5 cm and a base width of 1.9 cm (fig. 4.111). The buckle loop has a maximum length of 3.3 cm and a minimum length of 2.3 cm; the associated strap had a comparable width. The plate is hollow and is attached to the buckle loop with a hinged construction on which some mineralised textile/leather remains are preserved. The remnant of one loop, which fixed the plate buckle to the belt, can be observed at the back of the plate. The buckle loop is oval and has a D-shaped

Fig. 4.111
Small copper alloy belt fitting with hinged construction, grave 56 (scale 1:2).



section. The tongue extremity of the shield tongue is bent over the buckle loop. The plate buckle was found 55 cm from the southern wall and 40 cm from the western wall of grave 56 and thus at the presumed former location of the upper body, assuming it was a w-e orientated burial.

Siegmund suggests that hinged constructions (type Gür3.3 and 3.4) are chronological significant characteristics. In his typology hinged constructions occur on plate buckles with loops at the back of the plates, decorative (fake) rivets and cast decorations. The plate buckles of Siegmund's typological groups are larger than the Stein specimen, but it can nonetheless be identified as variants of these Siegmund types and can be dated accordingly to Rhineland phase 8 (610-640).⁵⁴² It can also be classified as L/P/V type 138, of which the examples are, however, only shoe fittings; the buckle from Stein was most probably used as an additional fitting in the set of waist belt fittings with associated sword and seax. L/P/V type 138 dates to their phases MR1-MR2 (600/10-660/70).⁵⁴³

Purse fitting: copper alloy

32-2-1⁵⁴⁴

A triangular copper alloy plate with an opening at the broad side (4 cm) of the plate was found along the southern wall, in the middle of grave 32.⁵⁴⁵ This object is no longer present in the collection. In view of its description and the reference in the catalogue to a belt fitting the object might have been a small plate buckle with fixed plate. The other finds from this grave are a number of beads found near the presumed former location of the head and some fragments of a biconical pot found near the presumed former location of the feet. The find location of the 'plate buckle' indicates that it might have been a fastener of a purse.

Belt fittings, iron: missing

65 (65-2-1); 72 (72-1-1)

Three iron fragments (65-2-1), two triangular and one iron rivet, were also recorded as finds from grave 65. They might be a plate buckle and counter plate of with one rivet became detached from one of the plates. They were found not far from the strap end.

An iron plate buckle (72-1-1) was in the catalogue of Beckers and Beckers recorded as find from grave 72.⁵⁴⁶ Specifics given are the round buckle loop with a length of 4 cm and the triangular plate with a length of 5 cm and a base width of 3 cm. On the basis of these descriptions the plate buckle can be classified as type Siegmund Gür4.5 which dates to Rhineland phase 8 (610-640).⁵⁴⁷

Jewellery

Fig. 4.112
Copper alloy bracelet, grave 7 (scale 1:2).



Bracelet

7 (7-1-1)

A copper alloy bracelet from grave 7 is an open bracelet with a diameter of 7.0 cm and has only slightly expanding extremities (fig. 4.112). The extremities show an engraved or cast pattern but the surface of the bracelet is considerably weathered, which makes it difficult to identify the pattern: it consists of six circular lines in between which two zones of V-shapes or triangles can be discerned. The bracelet was found at one end of the grave, it is not mentioned which end. The only other find from this grave, which is for a considerable part disturbed, is an iron plate of a plate buckle or counter plate.

Wührer classifies similar specimens as type A.3.8 (*Kolbenringe* with cast or engraved geometric ornaments)⁵⁴⁸. There are only a few examples of this type, of which the distribution pattern is more or less restricted to Northern France, Belgium and the Rhineland, predominantly between Mayen and Koblenz. Wührer claims that the specimens with triangular elements date to the younger phases of the Merovingian period (JM: 600-720); the other examples, as the one from Obbicht, also classified as type A.3.8 but with a different ornament, can already be found in the sixth century (AMI-JM in the chronology scheme of Ament⁵⁴⁹).

The bracelet can also be classified as Siegmund's type Rng1.2: open arm rings with thickened extremities with engraved decoration. This type dates to Rhineland phase 8 (610-640).⁵⁵⁰ The Franken AG maintained this type and date it to their phases 5-8 (565-670/80), but predominantly to phases 6-7 (580/90-640/50).⁵⁵¹ Legoux, Périn and Vallet classify bracelets on the basis of substance: their group of copper alloy bracelet consist of both decorated and undecorated examples. Type 338 dates to their phases MA1-MA3 (470/80-600/10), but are also current thereafter.⁵⁵² On the basis of all these typologies and associated date ranges the bracelet from grave 7 is dated to 580/90-640/50.

Beads

Of the 114 beads present in the collection of beads from Stein, 112 are known from seven graves (table 4.13). Two additional polychrome beads are also present, but these are without find number. Twenty-two beads went missing after excavation, of which some could be classified and dated on the basis of the provided descriptions in the original catalogue of graves. Of the beads present 100 are monochrome, twelve are polychrome and two are of amber. The overview of the one hundred monochrome beads in table 4.14 shows the variety of these glass beads in the cemetery and also the beads of different substances; in Stein only two amber beads were identified. The variety of the monochrome beads can be compared with Siegmund's typo-chronology of Rhineland beads (table 4.2), which shows that not all the Stein beads can be classified and dated on the basis of this typo-chronology. The tables show that opaque beads are predominant in Stein, as are the yellow, blue and red bead and the small miniature beads, the barrel shaped and biconical beads. The beads are analysed as explained in the section on the Sittard-Kemperkoul beads. In the following the beads are discussed per grave; this description will provide an overview of the variety of beads per string or grave.

The beads from grave 11

11 (11-2-1)

Beckers and Beckers refer to two glass beads, one yellow cylindrical glass bead with brown decoration, and one rectangular yellow glass bead with red decoration, as finds from grave 11. One bead is assigned to this grave on the basis of its original find number (VIA 28), which seems to match with this grave (fig. 4.113). It is in fact a red/brown long cylindrical glass bead with yellow dots/bands, which matches with the description of the yellow cylindrical bead in the catalogue (the decoration and base colour were identified

Table 4.13
Number of beads per grave.

context	#	missing	monochrome	polychrome	amber
11	1	1		1	
19		4			
22	31	9	25	6	
23	13		13		
30	21	2	18	2	1
32	29	1	26	2	1
38	1		1		
51	16	5	16		
0	2		1	1	
Total	114	22	100	12	2

(538) Beckers/Beckers 1940, 301-302. (539) Beckers/Beckers 1940, 315. (540) Beckers/Beckers 1940, 316. (541) Beckers/Beckers 1940, 317. (542) Siegmund 1998, 27-28. (543) Legoux/Périn/Vallet 2004, 16, 30, 53. (544) No longer preseten in the collection. (545) Beckers/Beckers 1940, 306. (546) Beckers/Beckers 1940, 319. (547) Siegmund 1998, 31-32. (548) Wührer 2000, 41-44. (549) Ament 1976. (550) Siegmund 1998, 80. (551) Müssemeier 2003 *et al.*, 39. (552) Legoux/Périn/Vallet 2004, 19, 40, 54.

Shape Colour	Red opaque	Red translucent	Green opaque	Green translucent	Yellow opaque	Yellow translucent	Blue opaque	Blue translucent	Orange opaque	Orange translucent	Black opaque	Black translucent	Brown opaque	Brown translucent	White opaque	White translucent	Colorless transparent	Silver Überfang perle	Gold Überfang perle
	RO	RT	GO	GT	YO	YT	BO	BT	OO	OT	BLO	BLT	BRO	BRT	WO	WT	CT	SU	GU
1								3							2				
2																			
3																			
4									1										
5																			
6								2											
7																			
8																			
9																			
10																			
11			1																
12																			
13																			
14																			
15																			
16																			
17																			
18							8	2							1				
19	8		1				3		1						1				
20																			
21																			
22																			
23																			
24							1												
25																			
26	1						1												
27	1																		
28																			
29	3				2			6			2				4				
30				1	30										1				
31																			
32																			
33																			
34																			
35			2		1		1	1							1				
36																			
37																			
38																			
39																			
40																			
41																			
42																			
43																			
44			2		1		1				2				1				
45																			
46																			
47																			
48																			
49																			
50																			
#shapes	4	0	4	1	4	0	6	5	2	0	2	0	0	0	7	0	0	0	0
#beads	13	0	6	1	34	0	15	14	2	0	4	0	0	0	11	0	0	0	0

Cristall	Amethyst (various orms)	Shell discs	Opaque general	Translucent general	Amber	# colors	# beads	Shape
C	AM	S	OG	TG	A			
						2	5	1
						0	0	2
						0	0	3
						1	1	4
						0	0	5
						1	2	6
						0	0	7
						0	0	8
						0	0	9
						0	0	10
						1	1	11
						0	0	12
						0	0	13
						0	0	14
						0	0	15
						0	0	16
						0	0	17
						3	11	18
						5	14	19
						0	0	20
						0	0	21
						0	0	22
						0	0	23
						1	1	24
						0	0	25
						2	2	26
						1	1	27
						0	0	28
						5	17	29
						3	32	30
						0	0	31
						0	0	32
						0	0	33
						0	0	34
						5	6	35
						0	0	36
						0	0	37
						0	0	38
						0	0	39
						0	0	40
						0	0	41
						0	0	42
						0	0	43
					1	6	8	44
						0	0	45
						0	0	46
						0	0	47
						0	0	48
					1	1	1	49
						0	0	50
0	0	0	0	0	2			
0	0	0	0	0	2			

Table 4.14
Classification of the monochrome beads from Stein.

reversely). The rectangular bead is not present in the collection anymore. The location of the beads could not be established. The only other find from this grave is a biconical pot.

The beads from grave 22

22-2-1

Beckers and Beckers mention that 40 beads of various shapes and colours were found 60 cm from the western wall and 35 cm from the long walls of grave 22; that is at the supposed former location of the head of presumably a child (the burial pit had a length of 115 cm). In the available collection 31 beads are assigned to grave 22 (fig. 4.113). Of these beads 6 are polychrome beads. One double bead (22-2-1.8) is white, opaque, cylindrical with red waves. It is classified as type S-Per 32.2 (610-705).⁵⁵³ Two beads (22-2-1.9) are red, opaque, cylindrical, double connected with white waves. They are classified as S-Per35.7 (610-705). One bead (22-2-1.10) is red, opaque, long cylindrical with yellow bands; it could not be classified and dated on the basis of the mentioned typo-chronologies. Two double beads (22-2-1.11) are white, opaque, globular compressed, with blue waves, classified as Koch-Schretzheim type 34,7 (590/600-620/30).⁵⁵⁴

Of the 25 monochrome beads one (22-2-1.1) is blue, opaque, stretched biconical. Two (22-2-1.2) are blue, opaque, cylindrical twisted. Four (22-2-1.3) are white, opaque, cylindrical twisted. One (22-2-1.4) is yellow, opaque, cylindrical twisted. Eight (22-2-1.5) are blue, opaque, globular compressed. Three (22-2-1.6) are red, opaque, cylindrical twisted. Two (22-2-1.7) are black, opaque, cylindrical twisted. Two (22-2-1.12) are yellow, opaque, small globular compressed, classified as S-Per33.3 (485-705).⁵⁵⁵ One (22-2-1.13) is green, opaque, cylindrical. One (22-2-1.14) is blue, opaque, globular compressed, triple connected. The cylindrical twisted beads can be classified as variant of Siegmund’s form group 47.4, which date mainly to 610-705.

This string of beads is clearly characterised by the spiral thread beads, of which thirteen beads in six colours are present. These beads are dated as a variant of Siegmund’s from group 47.4 (twisted transparent beads) to 610-705. The date range assigned to the polychrome beads is 590-705; the accorded date ranges are considerably long but start all around 600. The other monochrome beads are more difficult to date; the accorded date range 485-705 is chronological insignificant. Altogether, the majority of the beads are dated to the seventh century, but might also date earlier, and one decorated bead is dated after 610. It was decided to date the grave on the basis of the biconical pot to phase IIa (565-610/20), which is somewhat earlier than the date ranges to which similar

(553) Siegmund 1998. (554) Koch 1977. (555) Siegmund 1998.

Fig. 4.113
The beads from graves 11, 22, 23, 30, 32, 38, 51 and beads without find numbers (scale 1:1).



beads are generally dated; this date range is however not in conflict with the date ranges assigned to the beads. Since bead typo-chronologies are on a whole rather unreliable, the date range assigned to the biconical pot from this grave was decisive for its dating.

The beads from grave 23

23 (23-2-1)

Glass beads of various shapes and colours were found 80 cm from the (western) short wall and 60 cm from the long wall of the burial pit; they were thus in all probability deposited as a necklace. It was mentioned that they resemble the beads from grave 22; of the thirteen beads from grave 23 four are indeed twisted monochrome glass beads of two different colours which are similar to the twisted beads from grave 22 (fig. 4.113). The beads are on the basis of their original find number (VIA 56) assigned to this grave; the place of this find number in the range of find numbers provides a best

match with grave 23. It is not known what the original number of beads found in this grave was, but the reference in the catalogue to the discovery of ‘some’ bead indicates that this number was probably not that high.

The thirteen beads are all monochrome glass beads of which three (23-2-1.1) are blue, transparent, cylindrical and twisted. One (23-2-1.2) is green, opaque, barrel shaped, classified as S-Per36.2 ((555) 610-(670) 705). One (23-2-1.3) is yellow, opaque, cylindrical twisted. One (23-2-1.4) is yellow, opaque, cylindrical. One (23-2-1.5) is blue, opaque, cylindrical. One (23-2-1.6) is yellow, opaque, almond. One (23-2-1.7) is white, opaque, cylindrical. One (23-2-1.8) is green transparent, globular compressed (GT30/Siegmund group 46: 485-555 / 610-705). One (23-2-1.9) is white opaque barrel shaped (WO19 / Siegmund group 32: 610-705). One (23-2-1.10) is white opaque, globular compressed (WO30 / Siegmund group 32: 610-705). One (23-2-1.11) is yellow opaque, globular compressed (YO30 / S-Per 33.3: 485-705).

Again the cylindrical twisted beads are dated as a variant of Siegmund’s from group 47.4 (twisted transparent beads) to 610-705. This single other dated bead is also dated to 610-705. The other finds from this grave are a biconical pot (dated tot 570-610) and some indeterminate iron fragments. The complete string might date to the beginning of the seventh century in view of the date range accorded to the biconical pot.

The beads from grave 30

Twenty-five glass beads of various colours and shapes and one broad amber bead were found in the middle of grave, 58 cm from the long north-west orientated wall; it was suggested that they were deposited as a bracelet. Beads with original find numbers VIA 61 and VIA 65 are present. The ensemble with find number VIA 61 consists of 21 beads among which one amber bead. The ensemble with find number VIA 65 consists of 29 beads (without an amber bead). It is therefore decided to assign the beads with find number VIA 61 to grave 30 and those with find number VIA 65 to grave 32 (fig. 4.113).

The ‘bracelet’ consists thus of 21 beads in the present collection of which sixteen (30-4-1.1) are yellow, opaque, small globular compressed beads, classified as type YO30 or S-Per33.3 (485-705). One (30-4-1.2) blue, transparent, globular bead which could not be dated on the basis of the available typo-chronologies, and two (30-4-1.3) red, opaque, long cylindrical beads with white threads which is classified as type Koch-Schretzheim 42,13 (565-590/600). One (30-4-1.4) blue, opaque, short cylindrical could not be dated and one (30-4-1.5) fragmented amber bead was also difficult to date precisely.

The other finds from this grave are two biconical pots which date to the second half of the sixth century and a palm cup which might date somewhat later. The date ranges accorded to the single dated decorated bead is 565-590/600 and the dated monochrome beads are accorded a rather long date range; the string might thus date to the second half of the sixth century.

The beads from grave 32

The available string consists of 29 beads, of which two are polychrome and one is of amber (fig. 4.113). The catalogue refers to thirty beads, found 70 cm from the long northern wall and 59 cm from the short western wall, thus near the location of the head.

One (32-4-1.4) is blue, opaque, long cylindrical, four sides with yellow dots. One (32-4-1.8) is black opaque, long cylindrical with red, white and blue bands. Of the 26 monochrome beads one (32-4-1.1) is green, opaque, almond shaped. One (32-4-1.2) is red, opaque, long cylindrical. Eight (32-4-1.3) are red, opaque, barrel shaped. Two (32-4-1.5) are white, opaque, globular. Two (32-4-1.6) are black, opaque, almond shaped. Two (32-4-1.7) are green, opaque, short cylindrical. One (32-4-1.9) is blue, transparent,

globular. One (32-4-1.10) is blue, transparent, long cylindrical. One (32-4-1.11) is white, opaque, almond. One (32-4-1.12) red, opaque, stretched biconical. One (32-4-1.13) is indistinct, opaque, irregular (weathered). One (32-4-1.14) is white, opaque, globular compressed, classified as S-Per 32.3 ((570) 610-(640) 705) One (32-4-1.15) is blue, opaque, almond shaped. Two (32-4-1.16) are blue, transparent, globular compressed. One (32-4-1.17) is orange barrel shaped, classified as type S-Per34.1 ((570) 610-(640) 705).

The other finds from this grave are the fragments of a biconical pot and a purse fitting (missing), which are difficult to date. The two decorated beads could not be dated on the basis of the available typo-chronologies of beads. Of the monochrome glass beads especially the almond shaped beads are typical forms of the seventh century. The other beads date mainly to the seventh century; the string can thus be dated to the seventh century.

The bead from grave 38

38 (38-1-1)

In the catalogue one blue bead was recorded as the single find from grave 38; its find location was not given. It is a blue transparent glass bead, globular with a diameter of 1.0 cm (fig. 4.113). It cannot be dated to an exact date range within the Merovingian period.

The beads from grave 51

51-1-1

Beckers and Beckers, mention 21 beads (7 yellow, 3 green, 8 brown, 2 white, 1 natural) found 50 cm from the western wall and 60 cm from the southern wall of grave 51, thus near the presumed location of the head. Sixteen beads with find number VIA 94 are assigned to grave 51 on the basis of this find number which forms the best match with this grave (fig. 4.113) although the prominent long cylindrical blue bead on the available string is not referred to in the catalogue.

The string consists of only monochrome beads of which one (51-1-1.1) is the blue, opaque/transparent, long cylindrical one. Long cylindrical transparent beads are generally known as expels of combination groups A-C, which date early in the Merovingian period, (440-555).⁵⁵⁶ Two (51-1-1.2) are small yellow, opaque, globular compressed and classified as type S-Per 33.3 (485-705). Three (51-1-1.3) are blue, opaque, barrel shaped. One (51-1-1.4) is orange, opaque, short cylindrical. The other finds from grave 51 are a biconical pot dated to 570-585 (610) and a simple ring dated to 520/30-630/40. The other dated beads are assigned to date range 485-705; the string is dated to a grave of the end of the sixth and beginning of the seventh century on the basis of the other finds.

(556) Siegmund 1998, 64.

Beads: missing

The catalogue mentions the find of four beads at the bottom of grave 19. These beads are now no longer present, but are described as one (19-1-1) blue-white bead, two (19-1-1.2) yellow beads, and one (19-1-1.3) yellow bead with fine copper alloy threads covering its surface. The other find from this grave was a biconical pot, which is also missing and could not be dated. It remains uncertain to which phase(s) the string dates.

Beads: without find numbers

o (0-0-7.1; 0-0-7.2)

Two beads are without find number (fig. 4.113). One is a blue, transparent, cylindrical twisted bead. It is classified as type BT29 and Siegmund from group 47.4, which dates to Kombinationsgruppe: (F) H-I ((555-670) 610-705). The second is a polychrome bead; it is a red, opaque, cylindrical, double bead with white opaque undulating threads and yellow opaque edge trails. It is classified as Koch-Schretzheim type 58,1 (565-620/30).

Brooches

11 (11-3-1); 57 (57-5-1)⁵⁵⁷

The bow of a Roman copper alloy brooch was found in grave 11 (fig. 4.114). It was found in the grave of a child, in which also some beads and a biconical pot were found.

A fragment of an iron brooch with knobs, found to the right of the body, close to the western wall, was recorded as a find from grave 57 in the catalogue of Beckers and Beckers. It might have been wrongly recorded as an iron brooch, since they are generally made of copper alloy, silver or gold.

Fig. 4.114
Cooper alloy brooch, grave 11 (scale 1:2).



Weaponry

Fig. 4.115
Shield boss from grave 8 and shield boss rivets from grave 58 (scale 1:2).



Shield bosses

8 (8-9-1); 58 (58-1-1; 58-6-1)

The iron fragments of the shield boss (8-9-1) from grave 8 are restored and completed; the reconstructed specimen has diameter of 17.8-18.8 cm and a height of c. 7 cm (fig. 4.115). The cone is domed but low; it has a height of 2.7 cm. Remnants of a knob on top of the cone are not present, but since it is a restored specimen it is not certain whether a knob was originally present or not. It is for now identified as a boss without knob. The rivets used to attach the boss to the wooden shield are gone; their location and number cannot be reconstructed since the rivet holes are not visible anymore, probably due to its fragmented condition and quite rigorous restoration. The shield boss was found in fragmented condition; it was not recorded where in the grave these fragments were found. The other finds from this richly furnished grave of a man are a sword, seax, fire steel, knife, belt fittings and fragments of a palm cup.

The shield boss is classified as Siegmund's type Sbu5 (relatively high wall and relatively squat cone without knob), which dates to Rhineland phase 8 (610-640).⁵⁵⁸ The relatively flat cone is a feature on the basis of which it is classified as Franken AG's type Sbu5A (6-9: 580/90-710).⁵⁵⁹

Five iron rivets with slightly domed solid heads and straight pins were recorded as finds from grave 58 in the initial catalogue, of which four (58-1-1), with a diameter of 2.9 cm, are now present (fig. 4.115). They are in all probability the rivets which attached a shield boss to the wooden shield. Remnants of this wooden shield and the shield boss grip are also present (58-6-1), but a complete shield boss cannot be reconstructed on the basis of these remnants.

(557) No longer present in the collection.

Seaxes

The seaxes from the cemetery are classified and dated as described in the section on the seaxes from the Sittard cemetery (table 4.4).

Seax: Schmalsaxe

29 (29-1-1)

Iron seax 29-1-1 from grave 29 is present in fragmented and corroded condition; it is not restored, cleansed or conserved yet. The fragments consist of two large iron lumps of which one is pointed and one is hollow: the iron core inside the layer of corrosion might have disappeared. The two lumps seem to be the tip and shaft of the seax. The length of the seax recorded by Beckers and Beckers is 40.0 cm and the blade width 3.5 cm. It was found 35.0 cm from the northern wall and 70.0 cm from the western wall, with the tip pointing east.⁵⁶⁰ The seax was the only find from this grave. The dimensions and features of the seax cannot be recorded independently from the observations of Beckers and Beckers. They usually recorded the total length of seaxes, which indicates that its blade length was probably not as long as 40.0 cm; it will have been around 30.0 cm. A classification of this seax as *Schmalsax* on the basis of these dimensions seems plausible, although an identification as *leichter Breitsax* might also be possible.

The Franken AG date *Schmalsaxe* (Sax 1) from the end of their phase 3 to the end of phase 7 (510-640/50) although predominantly to phases 4-5 (510/25-580/90).⁵⁶¹ Siegmund dates *Schmalsaxe* to Rhineland phases 4-7 (530-610).⁵⁶²

Seaxes: leichter Breitsaxe

54 (54-1-1); 72 (72-2-1)

Iron seax (54-1-1) has a total length of 43.0 cm, a blade width of 4.5 cm and a blade length of 30.5 cm. Wood and leather remains are preserved on this seax, which is available in corroded condition. It was found alongside the long southern wall, with its tip pointing east, and thus to the presumed right of the now completely decomposed body. The only other find from this grave was a knife, found in close association with the seax.

An iron seax was recorded as find from grave 72.⁵⁶³ Its recorded length is 37.0 cm, its blade width 5.0 cm, and hilt length 13.0 cm. Wood remains were preserved on the hilt and a rivet was observed. The other finds from this grave are a belt fitting and a biconical pot. The locations of the finds could not be recorded. A seax with original find number VIA 161 is present in the collection; it might match with this grave. The seax is present in corroded condition but a rivet is not present although wood remains are. Its dimensions are not that different from the recorded dimensions, on the basis of which it is identified as a *leichter Breitsax*.

(558) Siegmund 1998, 109. (559) Müssemeier *et al.* 2004, 52. (560) Beckers/Beckers 1940, 305-306. (561) Müssemeier *et al.*, 2003, 45. (562) Siegmund 1998, 92-93. (563) Beckers/Beckers 1940, 319. (564) Müssemeier *et al.*, 2003, 45. (565) Siegmund 1998, 93-94. (566) Siegmund 1998, 94. (567) Müssemeier *et al.* 2003, 46. (568) Beckers/Beckers 1940, 317. (569) Müssemeier *et al.* 2003, 46. (570) Siegmund 1998, 94. (571) Müssemeier *et al.* 2003, 45.

The Franken AG date *leichter Breitsaxe* (Sax 2.1) to their phases 5-8 (565-680), although predominantly to phases 6-7 (580/90-640/50).⁵⁶⁴ Siegmund dates this type (Sax 2.1) from Rhineland phase 7 to the middle of phase 9 (585-655).⁵⁶⁵

Seaxes: schwerer Breitsaxe

8 (8-4-1); 49 (49-1-1).

Iron seax 8-4-1 from grave 8 has a blade length of 37.5, a blade width of 5.1 cm, and an iron hilt core with a length of 11.9 cm. The seax was found connected to the sword due to post-depositional corrosion. It is now detached from the sword and completely cleansed and restored. Some wood remains are preserved around the iron hilt core. The seax was close to the long southern wall of the burial pit. A plate buckle and matching back plate were found in the proximity of the seax hilt. The other finds from this richly furnished grave of a man are a lance head, fire steel, knife, belt fittings associated with the sword belt and fragments of a palm cup. On the basis of its dimensions the seax is classified as Siegmund type Sax2.2⁵⁶⁶ and Franken AG type Sax2.2.⁵⁶⁷

A severely corroded iron seax (49-1-1) with a total length of 52.6 cm is assigned to grave 49 on the basis of its original find number (VIA 86), which provides a best possible match with this grave. A seax with a length of 60.0, a blade width of 5.0 cm and a hilt with and length of 23.0 cm and some wood remains is recorded as find from grave 49 in the catalogue of Beckers and Beckers.⁵⁶⁸ The hilt of the preserved seax has a length of c. 16 cm; it can be presumed that the rest (6 cm) deteriorated or broke off after the analysis of Beckers and Beckers. The blade length of the present seax is 36.5 cm and its width c. 4.5 cm. Together with the original 23.0 cm of the hilt it had a total length of c. 60.0 cm, which is in line with the initial observed length of the seax. The seax was found 10.0 cm from the long southern wall, in the middle of the grave, with the tip pointing east. It was thus deposited to the presumed former right side of the now completely decomposed body. Other finds from grave 49 are a knife, a nail, and some indeterminate iron fragments, as mentioned in the catalogue of Beckers and Beckers. On the basis of its dimensions it can be classified either as *schwerer Breitsax* (Franken AG type 2.2) or *leichter Breitsax* (Sax2.1: 580/90-640/50). The Franken AG classify *schwerer Breitsax* as type Sax 2.2, which dates to their phases 6-9 (580-710), although predominantly to the end of phase 7 and phase 8 (640-670/80).⁵⁶⁹ Siegmund dates type Sax 2.2 to Rhineland phases 9-10 (640-705).⁵⁷⁰ The Franken AG date *leichter Breitsaxe* (Sax 2.1) to their phases 5-8 (565-680), although predominantly to phases 6-7 (580/90-640/50).⁵⁷¹ Siegmund dates this type (Sax 2.1) from Rhineland phase 7 to the middle of phase 9 (585-655).⁵⁷²

Seaxes: missing

40 (40-3-1); 72 (72-2-1)

An iron seax (40-3-1) was recorded as a find from grave 40;⁵⁷³ this seax is no longer present in the collection. It was found in corroded condition and had a total length of 30.0 cm and a hilt length of 5.0 cm; it was thus a rather small seax and in all probability a *Schmalsax*. The only other find from this grave is a biconical pot and some pottery fragments. The locations of the finds in the grave could not be recorded. The Franken AG date *Schmalsax* (Sax 1) from the end of their phase 3 to the end of phase 7 (510-640/50) although predominantly to phases 4-5 (510/25-580/90).⁵⁷⁴ Siegmund dates *Schmalsaxe* to Rhineland phases 4-7 (530-610).⁵⁷⁵

Arrow heads

18 (18-3-1); 64 (64-3-1; 64-4-1⁵⁷⁶; 64-5-1)

An iron rod (18-3-1) was found in the middle of the section of the grave, close to its short western wall.⁵⁷⁷ It seems to be the socket of an arrowhead, present among the heap of corroded iron fragments in a box holding remnants from grave 18.

Three arrowheads were in the original catalogue recorded as finds from grave 64.⁵⁷⁸ Two of them are present in the collection. They were found in the north-eastern corner of the grave, thus close to the presumed former location of the left foot. The other finds from this grave are iron and copper alloy belt fittings, a simple copper alloy ring and a biconical pot.

Arrowhead 64-3-1 has a pointed blade and a length 8.0 cm; similar specimens are not known to me and it is therefore difficult to date and classify. Arrowhead 64-4-1 was described as an arrowhead with a diamond shaped blade and a length of 8.5 cm and a blade width of 2.5 cm. This arrowhead is no longer available but arrowheads with diamond shaped blades are classified as L/P/V type 23 (open shaft) and type 25 (closed shaft). Type 23 dates to L/P/V phases PM-MA3 (440/50-600/10)⁵⁷⁹ and type 25 dates to MA1-MR1 (470/80-630/40).⁵⁸⁰ Iron arrowhead 64-5-1 has a leaf shaped blade and a closed shaft and is restored. It has a length of 8.2 cm, a blade width of 1.7 cm and a shaft diameter of 1.1 cm. This specimen is classified as L/P/V type 26 which dates to their phases MA1-MR1 (470/80-630/40).⁵⁸¹ Wood remains from one of the arrowhead sockets are stored separately (64-9-1).

Lance heads: closed sockets

8 (8-1-1); 55 (55-1-1); 0 (0-0-10)

Iron lance head 8-1-1 from grave 8 has a total length of 25.9 cm, a blade length of 11.5 cm and a blade width of 3.6 cm. The lance head has a closed shaft and its base has a diameter of 2.9 cm. The

blade is leaf to diamond shaped and relatively short compared to the shaft. It was found along the long southern wall, in association with a sword, a seax and belt fittings. The ensemble was deposited to the right of the now completely decomposed body, assuming it was a w-e orientated burial. Other finds from this grave are a knife, fire steel, a shield boss and fragments of a glass vessel. The lance head is heavily restored. The restoration report mentions that during the first restoration a clear diamond shape blade was created, but that it is not clear whether it represents the original shape of the blade. The second restoration corrected the diamond shape and created an oval or leaf shaped blade; the arguments that led to this decision are not clear apart from the remark that severe polish traces were discovered on the blade which were ascribed to the first restoration activities.

The lance head is classified as Siegmund's type Lan2.2 on the basis of its relative blade length (< 0,52) and closed socket. This type dates to the end of Rhineland phase 7 and the beginning of phase 8 (c.600-625).⁵⁸²

Iron lance head 55-1-1 from grave 55 is severely corroded and falling apart. It has a (remaining) length of 22.2 cm, and seems to have a closed socket with a diameter of c. 3.0 cm. The shape of the blade cannot be established, but seems to be relatively narrow and not much broader than the socket. Beckers and Beckers refer to a closed socket with a nail going through it; this could not be observed. The lance head was found 15.0 cm from the southern wall and 5.0 cm from the eastern wall, in a somewhat oblique position. It was thus deposited to the right of the lower body, assuming it was a w-e orientated burial. The other finds from this grave are a spouted pot and a number of iron fragments which seem to be rivets; they might have been attached to the lance head. On the basis of the available information it is difficult to classify the lance head precisely; since the head is relatively long it might be a lance head of Siegmund's type groups Lan2.4 (phase 8B-10: 625-705) or Lan2.5 (phases 8B-9: 625-670).⁵⁸³

An iron lance head with a closed socket and wood remains of the shaft is present in the collection. The tip of the blade is gone, but the length of the diamond shaped blade (15.5 cm) seems to be of approximately the same length as the socket. Since it is not complete the exact blade/socket index cannot be established; it can thus not be classified and dated unambiguously.

Lance head: indeterminate

15 (15-3-1)

Some iron fragments (15-3-1), in poor condition, are of a lance head. They were recorded as remnants of a seax in the catalogue of Beckers and Beckers.⁵⁸⁴ The lance head was found close to the western grave wall, and thus to the presumed left of the decom-

posed body, in association with a fire steel and an object which seems to be the loop of a buckle. The recorded length of the lance head was 22.0 cm and the blade width 3.5 cm. The length of the preserved articulated fragments is 27.0 cm, which is longer than the recorded 22.0 cm, but this is a result of its fragmented condition. The fragments on the X-ray photo seem to indicate that it has an open socket, but this is not certain. It features will became clear after restoration.

Lance head: missing

12 (12-1-1)⁵⁸⁵

Iron lance head 12-1-1 with a recorded length of 18.0 cm, was found at some distance from the eastern wall with the tip pointing north.⁵⁸⁶ It was a relatively rich grave with a sword and a set of remarkable belt fittings. It is not possible to classify or date the lance head on the basis of this information alone.

Sword

8 (8-2-1.1); 0 (0-0-4)

Iron sword 8-2-1.1 from grave 8 has a blade length of 65.5 cm and width of 4.2 cm. The length of the remaining iron hilt is 2.9 cm. A copper alloy plate buckle and plate were found attached to the blade. Beckers and Beckers observed that the sword and seax were found attached to one another.⁵⁸⁷ The restoration report shows that the sword was present in corroded and fragmented condition. It also mentions that the tip of the sword was wrongly identified; under the corrosion layer a knife and fire steel were discovered. It is not certain whether the corroded lump, and thus the knife and fire steel, was found in close association with the sword, but this might have been the case in view of its first identification as sword tip. The sword is heavily restored; it was found in fragmented condition and the tip and edges were completed. The sword was found close to the eastern grave wall. Other finds from this richly furnished grave of a man are a seax, shield boss, lance head, belt- and strap fittings and fragments of a palm cup.

An iron sword of which the original find number cannot be matched with a grave in which a sword was recorded as find is present. It has a blade length of 61 cm. Iron swords without pommels or other additional elements cannot be dated precisely.

Sword: missing

12 (12-2-1)

An iron sword with a length of 85.0 cm and a blade width of 5.0 cm was recorded as find from grave 12. It was found at some distance from the eastern grave wall with its tip pointing north.⁵⁸⁸ A sword

Fig. 4.116
Axe, grave 60 (scale 1:2).



with a find number matching with this grave is not present in the collection, but a sword without find number is; this might be the sword from grave 12 (now with find number 0-0-4; see the section of the catalogue of finds without find number or context information). It has a total length of 72.5 cm. The difference with the dimensions of the sword from grave 12 given in the original catalogue may be due to its post-excavation deterioration, but this is not certain.

Axe

60 (60-2-1)

Iron axe 60-2-1 was found not far from the short western wall of grave 60, thus near the presumed former location of the head. The blade of the axe has a length of 19.0 cm and the cutting edge a length of 6.6 cm (fig. 4.116). Wood remains were not preserved in the oval shaft opening. The other finds from this grave are a biconical pot, fire steel, knife, buckle and some metal fragments. Axes with nearly straight upper edges are classified as Siegmund's type FBA2.1, which dates to Rhineland phases 6-7 (570-610).⁵⁸⁹

(572) Siegmund 1998, 93-94. (573) Beckers/Beckers 1940, 312. (574) Müssemeier *et al.* 2003, 45. (575) Siegmund 1998, 92-93. (576) No longer present in the collection. (577) Beckers/Beckers 1940, 302 (578) Beckers/Beckers 1940, 317-318. (579) Legoux/Périn/Vallet 2004, 14, 24, 52. (580) Legoux/Périn/Vallet 2004, 14, 24, 52. (581) Legoux/Périn/Vallet 2004, 14, 24, 52. (582) Siegmund 1998, 102. (583) Siegmund 1998, 102-103. (584) Beckers/Beckers 1940, 301-302.

(585) No longer present in the collection. (586) Beckers/Beckers 1940, 301. (587) Beckers/Beckers 1940, 300. (588) Beckers/Beckers 1940, 301. (589) Siegmund 1998, 107. (590) Guido 1999, 23-25. (591) Guido 1999. (592) Guido 1999, 17, 23-25, Plate 2. (593) Legoux/Périn/Vallet 2004, 19, 41, 54. (594) Beckers/Beckers 1940, 314. (595) Legoux/Périn/Vallet 2004, 19, 41, 54. (596) Legoux/Périn/Vallet 2004, 19, 41, 54. (597) Beckers/Beckers 1940, (598) Beckers/Beckers 1940,

Belt appendages/utensils

Various objects generally known to have been attached to the belt are either gender specific objects such a spindle whorls or chatelaines for woman, fire steels for men or neutral objects such as knives and simple rings.

Spindle whorl / disc bead: glass, black, decorated
57 (57-7-1)

The black plano-convex glass disc bead from grave 57 is a rather rare object with a supra-regional distribution (fig. 4.117). Red trails are applied around the hole and on its side edge; a white zig-zag trail covers the rest of the upper surface. The bead was found 70.0 cm from the southern wall and 75.0 cm from the western wall; measured from the burial pit walls this indicates a find location at the presumed former location of the waist; it was probably deposited as a belt appendage or maybe inside a purse. The bead is associated with the burial of a child since the body imprint had a length of 117 cm and the coffin a length of 150 cm. The other finds from this grave are a biconical pot dated to 580/90-610/20, a ring (probably a bracelet), now missing, some belt fittings which are difficult to date precisely, a fragment of a pair of tweezers (missing), and a fragment of an iron brooch (also missing).

Disc beads similar to the one from grave 57 are known from the Anglo-Saxon world. In publications on this find group the various functions of disc beads are discussed: they are identified as spindle whorls (found to the left side of the waist) or sword beads (found predominantly to the left of the body).⁵⁹⁰ Straight and zig-zag trails are common on large Anglo-Saxon disc beads, but the examples with this type of decoration all have shapes different from the plano-convex disc bead/spindle whorl from grave 57. These specimens are predominantly dated to the sixth century.⁵⁹¹ Guido classified similar disc beads on the basis of their colour. The disc bead from grave 57 is classified as Guido type 2vii: large black plano-convex beads with decoration. They are dated to the period not long after the disintegration of the western empire. In Anglo-Saxon England they are predominantly known from south-east England.⁵⁹²

On the basis of the datable finds from grave 57 it is concluded that the bead was deposited in grave 57 in the second half of the sixth century, after it had been in circulation for some time before.

Simple rings: iron
18 (18-4-1); 51 (51-2-1.1)

An iron fragment with a hole appeared to be a simple iron ring on the X-ray photograph, with a diameter of c. 3.0 cm. Beckers and Beckers mention that a copper alloy mount was found on top of it; this find is no longer present in the collection.

A simple iron ring (51-2.1.1) was found in grave 51 attached to a number of other objects as a result of corrosion.⁵⁹⁴ It is now avail-

Fig. 4.117
Spindle whorl/disc bead, grave 57
(scale 1:1).



able as a single corroded object in a box in restoration laboratory Restaura; it is not restored yet. The diameter of the ring was in the catalogue recorded as 4.0 cm. It was found 10.0 cm from the northern wall and 90.0 cm from the western wall, thus to the left of the presumed former location of the upper body.

Simple iron rings are classified as Legoux, Périn and Vallet type 357, which date to their phases MA2-MR1 (520/30-630/40).⁵⁹⁵

Simple rings: (iron), missing
56 (56-4-1); 57 (57-3-1); 58 (58-5-1)

A number of rings were recorded as finds, but are no longer available in the collection. The simple iron ring from grave 56 was found 60.0 cm from the western wall in the middle of the grave. Simple iron rings are classified as Legoux, Périn and Vallet type 357 (phases MA2-MR1: 520/30-630/40).⁵⁹⁶

An open iron ring, thus probably a bracelet, was found close to the southern wall in the middle of grave 57, thus to the right of middle section of the body (right arm?) assuming it was a W-E orientated burial.⁵⁹⁷ It is difficult to date this ring.

A simple ring, not further specified was found in grave 58. It had a diameter of 4.0 cm; it is difficult to classify this ring on the basis of this scarce information alone.

Simple rings: copper alloy
64 (64-2-1); 65 (65-3-1)

The simple copper alloy ring (64-2-1) from grave 64 has an outer diameter of 3.2 cm and an inner diameter of 2.1 cm. It was found in the middle of the grave. The other finds from this grave are three arrowheads, belt fittings and a biconical pot. A closed copper alloy ring (65-3-1) with a diameter of 3.0 cm was found at the bottom in the middle of grave 65.⁵⁹⁸ Simple copper alloy rings are difficult to date to a restricted phase within the Merovingian period.

Rods: iron
51 (51-2-1.2; 51-2-1.3); 58 (58-4-1)

Two iron rods (51-2.2 and 51-2.3) were recorded as finds from grave 51.⁵⁹⁹ Rod 51-2.2 was bent at one extremity and had a length of 10.0 cm and a width of 3.0 cm. Rod 51-2.3 had a length of 15.0 cm, a width of 2.0 cm and a pointed extremity. The two rods are

now present in corroded condition. The rods were found in association with a simple iron ring, 10.0 cm from the northern wall and 90.0 cm from the western wall, thus to the right of the presumed former location of the upper body.

The iron ring rod from grave 58 is incomplete, a considerable part of the rod and its (pointed) extremity are gone. The loop of the ring rod forms one part with the rod and is not closed. It has a length of 6.1 cm and a loop diameter of 1.8 cm. Iron ring rods are in the typo-chronology of Legoux, Périn and valet classified as type 353, which dates to their phases MA3-MR3 (520/30-700/10).⁶⁰⁰

Fire steels
8 (8-3-2); 15 (15-1-1); 60 (60-3-1); 0 (8-0-1)

Iron fire steel 8-3-2 was found attached to a knife (8-3-1). It is a triangular fire steel with curved extremities. Since it is severely restored (nearly half of it was completed) it cannot be certain whether it is an exact copy of its original shape. The reconstructed length is 9.2 cm and its width is 2.6 cm. It was at first identified as the detached tip of the sword on the basis of which it is assumed to have been found in the proximity of the sword near the long eastern wall of the grave. The other finds from this richly furnished grave of a man are, next to the sword, a seax, a shield boss, belt fittings and a palm cup.

One half of iron fire steel 15-1-1 from grave 15 seems to be preserved as a corroded fragment; it is not restored and conserved and is hard to identify as a remnant of a fire steel. It might also be of the seax or knife from this grave. It was found close to the western grave wall, thus presumably to the left of the now decomposed body. Beckers and Beckers did not provide more details.

Beckers and Beckers recorded that an iron fire steel (60-3-1) was found in grave 60.⁶⁰¹ Unfortunately, it is no longer present as a complete specimen. In the restoration laboratory a box with many iron fragments from grave 60 is stored; fragments of the completely fragmented iron fire steel might be present. It will be very difficult to reconstruct objects from the pile of iron fragments, which are parts of a variety of objects. The catalogue did not record the dimensions of the fire steel. It was found in the middle of the grave, in association with a small buckle.

An iron fire steel with curved extremities, a length of 9.2 cm, and wood remains preserved at one side has a find number which matches with grave 8; since a fire steel is already assigned to this grave, and a second one was not recorded as find, it remains uncertain whether it originally belonged to this grave.

Fire steels are difficult to date precisely⁶⁰²; the graves in which they are found are dated on the basis of a number of other chronological indicative finds.

Tweezers
57 (57-6-1)

A fragment of a pair of tweezers was found to the right of the decomposed body of a child, which left a shadow in wooden container grave 57. It is no longer present in the collection. Tweezers are regardless of their appearance classified as type 322 of Legoux, Périn and Vallet, which dates to their phases MA2-MA3 (520/30-600/10).⁶⁰³

Knives
8 (8-3-1); 49 (49-3-1); 51 (51-3-1); 54 (54-2-1); 56 (56-3-1); 60 (60-9-1); 66 (66-5-1); 0 (8-0-2; 8-0-3); 0 (0-0-9)

Iron knife 8-3-1 was found attached to a fire steel 8-1-2.5 and wood remains are preserved around its iron hilt core. A small rivet was attached to the blade of the knife; it is not clear what its function was. Since the corroded and connected knife and fire steel were at first identified as the detached tip of the sword (as mentioned in restoration report) it might be assumed that they were found not far from the sword, which was found alongside the long eastern wall of the grave. Its blade has a length of 9.2 cm. The other finds from this grave are, apart from the sword and fire steel, a seax, shield boss, belt- and strap fittings and a palm cup.

Iron knife 49-3-1 is severely corroded; it is not cleansed or restored yet and the shape of the blade cannot be identified. Beckers and Beckers mention that it had a length of 16.0 cm (including the hilt) and a blade width of 2.0 cm. It was found in the middle of the grave. The other finds from this grave are a seax, an iron nail and some indeterminate iron fragments.

A flat iron object, probably a knife without hilt, with a length of 14.0 cm, was found 10.0 cm from the northern wall and 90.0 cm from the western wall of grave 51.⁶⁰⁴

Beckers and Beckers mention the find of a second iron seax or a knife (54-2-1) in grave 54; its recorded length is 17.5 cm (including or excluding the hilt of 5 cm, this is not known), and its blade width is 3.0 cm.⁶⁰⁵ The object was found in association with the seax at a depth of 120 cm, alongside the long southern wall. It is therefore presumably a knife, since the presence of two seaxes in a grave is rare, but the combination of a seax and knife is common. Wood and leather remains were preserved on this knife as the catalogue mentioned. In the restoration laboratory a fragmented knife is present with find number VIA 102; the place of this number in the list of find numbers seems to match with grave 54 and thus with the presumed find of the knife in this grave.

The iron knife (56-3-1) from grave 56 has a recorded length of 10.0 cm in the initial catalogue. It was found 90.0 cm from the western wall and 55.0 cm from the northern wall.⁶⁰⁶ Only the hilt with some wood remains is present.

(599) Beckers/Beckers 1940, 314. (600) Legoux/Périn/Vallet 2004, 19, 41, 54. (601) Beckers/Beckers 1940, 317. (602) Siegmund 1998, 118. (603) Legoux/Périn/Vallet 2004, 19, 39, 54. (604) Beckers/Beckers 1940, 314. (605) Beckers/Beckers 1940, 314. (606) Beckers/Beckers 1940, 315.

Beckers and Beckers refer to fragments of an iron knife (60-9-1) found dispersed throughout grave 60.⁶⁰⁷ It might be present in the restoration atelier, in a box in which many iron fragments from grave 60 are stored. It will, however, be very difficult to reconstruct objects with the pile of iron fragments, which obviously belonged to different objects.

A knife hilt (66-5-1) with find number 144/147 is present in the restoration atelier; this find number has a best match with grave 66, but a knife hilt or knife were not recorded as finds in the catalogue. An iron knife with curved back and straight cutting edge and a blade length of 11.0 cm (8-0-2), and a knife (8-0-3) with wood and leather remains on its hilt and blade, a blade length of 9.4 cm, and an upward pointing tip have find numbers matching with grave 8. Since a knife is already assigned to this grave and a second and third knife were not recorded as finds, it is not certain whether they actually belonged to grave 8.

An iron knife in corroded condition and with a blade length of 11.0 cm is present in the collection; it is however without find number.

Plate/Mounts

57 (57-1-1; 57-2-1)

Two iron mounts, one was flat and bent and the other had wood remains preserved on it, were recorded as finds from grave 57. They were found in the north-eastern corner; they might have been coffin mounts. A number of iron fragments with find number VIA 115 are present in corroded condition; they might form the iron mounts (57-1-1) identified by the excavators.

Another iron mount (57-2-1), found in the south-eastern corner of the coffin, was described as a large flat iron mount with heads of nails, found together with nail fragments. A rectangular iron mount of which one corner is missing but on which heads of nails are visible, is present as find number VIA 114. It has a length of 6.5 cm and a width of 6.0 cm. It is present in corroded condition, but might be a back plate of a belt.

Pottery

The collection of pottery vessels from the Stein graves is quite large; the variety consists of fine ware pottery vessels such as jars, bottles, bowls and biconical pots, and coarse ware pottery vessels as egg shaped pots and globular pots. Numerous vessels were found in fragmented condition but the majority is now restored and completed.⁶⁰⁸

Fine pottery: jar

Find number: 41 (41-1-1)

A red biconical jug with one handle and a modest spout was found in grave 41 (fig. 4.118). It was found in fragmented condition but is now restored and completed; the actual supplemented parts are difficult to discern from the original parts but it seems as if approximately 75% of the original pot is present. The jar has a height of 23.0 cm, a belly diameter of 19.7 cm and a mouth diameter of 11.6 cm. The upper wall is decorated with three zones of two grooves, in between which single lines or double lines of rectangular roulette stamp impressions are applied. The handle is attached to the rim, and ends just beneath the middle of the upper wall. Grave 41 was recorded as a destroyed grave, and other finds were not observed as were the original find locations of the fragments. It can be assumed, in view of the condition of the grave, that the jar was originally complete when deposited. It might have been broken due to an early reopening of the grave, which can also explain the absence of a number of fragments of the pot. However, other post-depositional processes might have also caused its fragmented and incomplete condition. Red jars with decoration are rather rare. Jars similar to the one from Stein are known from Meerveldhoven grave 24 (dated to the first half of the seventh century on the basis of a set of belt fittings with plates with five rivets and a glass tumbler), and one is known from Vrijthof grave 228 which could not be dated independently from the jug.⁶⁰⁹

It can be classified as one type in the group of alternative biconical pot forms, namely type Kwt4.4. Pots of this type are elongated biconical pots with spout, handle and foot plate; the Stein vessel shows all these features except for the foot plate. It is for now dated as type Kwt4.4 to Rhineland phase 8 (610-640).⁶¹⁰ This date corroborates with the date of the Meerveldhoven jar.

Fine pottery: bowl of Siegmund's type Sha2.21

37 (37-2-1)

Fragments (37-2-1) of a red bowl were found in grave 37 (fig. 4.119). The bowl is now restored and completed; approximately 50% of the original vessel is present. It is a carinated bowl on a foot stand (the foot was completely preserved), with a straight lower wall, slightly concave upper wall and outward standing rim, which is not thickened. It has a slightly asymmetric appearance, which is probably a result of its initial fragmented and incomplete

condition. The reconstructed height of the bowl is 5.8 cm and its mouth diameter is 15.4 cm. The bowl was found in the north-eastern corner of the grave, close to the presumed former location of the feet. Other finds from this grave are some indeterminate iron fragments and a belt fitting. Siegmund classifies similar bowls as type Sha2.21, which dates to Rhineland phases 5-8 (555-640).⁶¹¹ The Franken AG maintained this type but date it to their phases 4-7 (510/25-640/50).⁶¹²

Fine/coarse pottery: bowl of Siegmund's type Sha2.42/Shaz.5

46 (46-3-1)

Fragments of a red bowl were found on a heap, 6.0 cm from the eastern wall and 25.0 cm from the southern wall, in grave 46. Approximately 30% was left of the original bowl on the basis of which a complete reconstruction was made (fig. 4.120). It could be established that it was a bowl of a coarse, but smoothed, ware, with sand/gravel inclusions and with a flat bottom (remnants of the bottom were preserved). The reconstructed bowl has a height of 8 cm and a bottom diameter of 6.6 cm. The bowl is classified as either Siegmund's type Sha2.42, which dates to Rhineland phases 8-9 (610-670)⁶¹³ or maybe type Sha2.5 (it cannot be excluded from the group of carinated bowls with certainty) which dates to Rhineland phases 7-8 (585-640).⁶¹⁴

Fig. 4.118
Red jar, grave 41 (scale 1:4).



Fine pottery: biconical pots (general remarks)

The biconical pots from the Stein graves (table 4.5 and 4.15) are classified as either Siegmund's type group 2 (biconical pots with a pronounced carination, a straight upper wall without ridge and with or without decoration, although never with roulette stamp decoration) or type group 3 (pots with straight upper walls, pronounced carination, roulette stamp decoration and or ridges on the upper wall). Their specifics are in the following discussed per Siegmund type.

Fine/coarse pottery: biconical pot of Siegmund's type 2.11/2.12

59 (59-1-1)

The biconical pot from grave 59 is a grey pot of a fine to coarse ware in which some large gravel inclusions can be observed (fig. 4.121). The pot was found in fragmented condition but is now restored and completed; approximately 90% of the original pot is present. It is rather asymmetric and has a height of 12.6 to 13 cm. The decoration on the upper wall consists of a zone of three grooves underneath the rim and a similar zone just above the carination in between which single stamp impressions of undulating vertical lines with a length of 1.5 cm are applied. The pot was found in the south-eastern corner of the grave and was the only find from this grave. The identification of the basic pot form (which depends on its height/belly index) cannot be established unambiguously since it is rather asymmetric; it can be identified as a pot with either basic form 2 or 4. In line with these basic forms and the deco-

Fig. 4.119
Red/orange bowl type Siegmund Sha2.21, grave 37 (scale 1:4).



Fig. 4.120
Brown bowl type Siegmund Sha2.42/Shaz.5, grave 46 (scale 1:4).



(608) The condition of the vessels at the time of their excavation was not consequently recorded. Their original condition was also established on the basis of the restoration reports by Restaura in which the state of the vessels before the first restoration round was recorded. It is assumed that this condition was similar to the condition in which they were found. (609) Meerveldhoven: Verwers 1978, 280-281; Maastricht-Vrijthof: Kars 2011, 192, fig. 6, 1644-1. (610) Siegmund 1998, 132. (611) Siegmund 1998, 154-156. (612) Müsseseier *et al.* 2003, 67. (613) Siegmund 1998, 156. (614) Siegmund 1998, 156.

(607) Beckers/Beckers 1940, 317.

Table 4.15
The biconical pots from Stein. H=Heigth, B=Belly diameter, M=Mouth diameter, BF=Basic Form, G=Group (Siegmund 1998).

Pot	H	B	M	BF	G	Type
59-1-1	12.6-13.0	16.2	12.0	2/4	2	Kwt2.11/2.12
30-1-1	12.8	15.9	12.4	4	2	Kwt2.12
36-1-1	12.4	15.5	12.8	4	2	Kwt2.12
28-1-1	11.5	14.0	9.3	4	2	Kwt2.12
1-6-1	19.9	23.3	18.9	4	2	Kwt2.22
52-1-1	13.0	17.0	11.0	2	2	Kwt2.31
50-1-1	12.5	16.5	14.5	1	2	Kwt2.31
18-1-1	10.5	12.7	7.9	4	2	Kwt2.32
63-1-1	10.3	11.2	8.5	4	2	Kwt2.32
56-8-1	15.0	15.5	11.1	5	2	Kwt2.32
22-1-1	8.5	9.9	7.2	4	2	Kwt2.42
64-6-1	10.0	10.8	7.3	4	2	Kwt2.42
11-1-1	7.7	7.7	5.5	5	2	Kwt2.43
25-1-1	18.3	19.5	13.0	5	3	Kwt2.12/3.12
23-1-1	11.3	13.3	8.8	4	3	Kwt3.11
24-1-1	15.2	17.9	12.2	4	3	Kwt3.12
51-4-1	11.4	13.8	9.6	4	3	Kwt3.12
58-2-1	17.0	19.5	12.5	4	2/3	Kwt3.12
53-1-1	15.0	17.0	9.5	4	3	Kwt3.12
56-7-1	9.5	10.4	7.3	4	3	kwt3.12
66-3-1	10.3	10.7	6.7	5	3	Kwt3.13
1-5-1	11.0	14.0	10.3	2 (4)	3	Kwt3.21/3.22
26-1-1	11.0	12.0	8.5	4	3	Kwt3.22
30-2-1	11.2-11.7	12.3	8.8	5/4	2/3	Kwt3.22
60-1-1	15.5	17.5	13.0	4	3	Kwt3.22
61-1-1	13.5	15.5	9.8	4	3	Kwt3.22
67-1-1	9.7	9.0	6.4	4	3	Kwt3.22

Fig. 4.121
Biconical pot type Siegmund Kwt2.11/2.12, grave 59
(scale 1:4).



Fig. 4.122
Biconical pots type Siegmund Kwt2.12, graves 28, 30 and 36
(scale 1:4).



ration of single stamps and grooves the pot can be classified as either type Siegmund Kwt2.11 or Kwt2.12. Type Kwt2.11 dates to Rhineland phases 4-5 (530-570)⁶¹⁵ and type Kwt2.12 to Rhineland phase 4 (530-555).⁶¹⁶ The Franken AG classify similar pots as type Kwt2A which dates to their phases 4-5 (510/25-580/90).⁶¹⁷

Fine pottery: biconical pots of Siegmund's type Kwt2.12
28 (28-1-1); 30 (30-1-1); 36 (36-1-1)

The grey-brown biconical pot from grave 28 was found in fragmented condition (fig. 4.122). A considerable part of the pot was completed although it is difficult to tell the original and completed parts apart. The reconstructed pot has a height of 11.5-12.6 cm and is rather asymmetric. The upper wall is decorated with three zones of one groove, in between which two zones of one row of single stamp impression of irregular undulating vertical lines of c. 1 cm are applied. It was baked relatively hard and the carination is more rounded than pronounced. The dark shade covering the outer surface of the pot might indicate that it was a smoked specimen, but this is not certain. The pot was found 20 cm from the short eastern wall, in the middle of the grave, thus close to the presumed former location of the feet. It was the only find from this grave.

The biconical pot from grave 30 was found as a complete specimen and has a height of 12.8 cm (fig. 4.122). The smoked outer surface is weathered and shows the lighter past underneath. Its upper wall is decorated with two zones of three grooves in between which single stamps of vertical rectangular grids of two columns and six rows of small square impressions were applied. It was found 45 cm from the long southern wall and 40 cm from the short eastern wall of the grave and was thus found close to the presumed former location of the feet. A smaller biconical pot (30-

2-1) fell over and was leaning against the larger biconical pot. The other finds from this grave are a palm cup and a number of beads identified as bracelet.

Biconical pot 36-1-1 is a light grey pot with a height of 12.4 cm (fig. 4.122). It was found as a complete specimen, apart from some fragments of the rim that were found detached; they are now glued together with the pot. The pot is decorated with seven grooves covering the entire upper wall. One row of single stamps of rectangular grids filled with two columns and five rows of small rectangular impressions are applied on the middle of the upper wall; the grooves cross these single stamp impressions. The pot was found 60 cm from the western wall and 45 cm from the southern wall; it was however depicted near the short eastern wall in the original cemetery plan. It is not certain what its original find location was; the written information is followed which indicates that it was found close to the presumed former location of the head, which is a find location deviant from the general find locations of biconical pots (close to the feet).

The three pots are classified as Siegmund's type Kwt2.12, the oldest form of biconical pots with straight upper walls, which dates to Rhineland phase 4 (530-555).⁶¹⁸ They are the oldest available biconical pots (together with 59-1-1) from the Stein cemetery. The Franken AG classify pots similar to 28-1-1 as type Kwt2A which dates to their phases 4-5 (510/25-580/90),⁶¹⁹ and pots similar to 30-1-1 and 36-1-1 as FAG Kwt2B which dates to their phases 4-5 (510/25-580/90) and sporadically somewhat later.⁶²⁰

Fine pottery: biconical pot of Siegmund's type 2.22
1 (1-6-1)

The large white-grey biconical pot 1-6-1 from grave 1 was found in fragmented condition but it is now restored and completed; it is difficult to tell the completed and original parts of the pot apart since the added parts have a similar colour as the original parts and some product is also applied on the original parts, but approximately 75% of the original pot seems to be present (fig. 4.123). The reconstructed pot has a height of 19.9 cm. Its entire upper wall is decorated with three rows of single stamp impressions: the upper and lower rows consist of circular outlines filled with triangular impressions resulting in a radial pattern of lines. The middle row consists of rectangular grids with rounded corners filled with two columns and five rows of small rectangular impressions. Although details of the grave could not be recorded Beckers and Beckers mention that pottery fragments of more than one pot were found scattered throughout the grave. This might indicate that the grave was reopened. Another, but smaller, biconical pot could also be reconstructed with the available fragments; other pots could not be reconstructed. The pot is classified as Siegmund's type Kwt2.22 which dates to Rhineland phase 8A (610-625).⁶²¹ The Franken AG

classify similar pots as type Kwt2C which dates to their phases 7-8 (610/20-670/80).⁶²²

Fine pottery: biconical pots of Siegmund's type 2.31
50 (50-1-1); 52 (52-1-1)

The pottery fragments found scattered throughout grave 50 were glued together; approximately 50% of the grey/black biconical pot with a height of 12.5 cm was missing and completed (fig. 4.124). The decoration on the upper wall consists of two zones of four prominent grooves. The condition of the outer surface indicates that it was a smoked specimen of which the thin dark top layer is considerably weathered showing the lighter, brown, past underneath. Other finds are not known from this grave.

The fragments of a biconical pot (52-1-1) found scattered throughout grave 52 were glued together and the missing parts completed; the reconstructed pot has a height of 13.0 cm and approximately 30% of the original pot is present (fig. 4.124). It

Fig. 4.123
Biconical pot type Siegmund Kwt2.22,
grave 1 (scale 1:4).



(615) Siegmund 1998, 129. (616) Siegmund 1998, 129. (617) Müssemeier *et al.* 2003, 58. (618) Siegmund 1998, 129. (619) Müssemeier *et al.* 2003, 58. (620) Müssemeier *et al.* 2003, 58-59. (621) Siegmund 1998, 129. (622) Müssemeier *et al.* 2003, 59.

Fig. 4.124
Biconical pots type Siegmund Kwt2.31,
graves 50 and 52 (scale 1:4).



is a brown grey pot of fine burnished ware, decorated with two grooves beneath the neck and two grooves just above the carination. The rest of the upper wall in between the grooves is not decorated. Other finds from this grave are various wood fragments which might have been of a bowl. The pot is classified as Siegmund's type 2.31, of which it is mentioned that the upper walls are generally completely covered with grooves.⁶²³ In view of this remark and the location of the grooves on the upper wall of the pot from grave 52, it can be wondered whether the upper wall was not initially intended to be entirely covered with grooves.

The two pots have a different appearance but are both classified as Siegmund's type Kwt2.31 on the basis of metric criteria and the decoration of grooves. Their different appearances might be caused by the fact that this type consists of pots of basic form group 1-3; pot 52-1-1 has basic form 2 and pot 50-1-1 basic form 1. Siegmund's type Kwt2.31 dates to Rhineland phase 5 (555-570).⁶²⁴ The Franken AG classify similar pots as type Kwt3A, which dates to their phases 4-5 (510/20-580/90) and occur sporadically in phase 6 (580/90-610/20).⁶²⁵ They do not differentiate between squat and elongated pots with grooves.

Fine/coarse pottery: biconical pots of Siegmund's type 2.32
18 (18-1-1); 56 (56-8-1); 63 (63-1-1)

Biconical pot 18-1-1 is of a fine to coarse ware and was found as a complete specimen (fig. 4.125). The grey pot has a height of 10.5 and its upper wall is decorated with seven prominent grooves; a zone of four grooves underneath the neck and a zone of three

grooves on the middle of the upper wall. The pot was found 30 cm from the short eastern wall and 25 cm from the long northern wall, thus at the supposed former location of the feet. The other finds from this grave are indistinct among which some mounts, probably belt fittings.

The brownish biconical pot (56-8-1) from grave 56 is of a fine burnished ware with obvious pottery grid inclusions and a somewhat weathered surface of which the lower part of the pot shows black stains; it is clearly a smoked specimen (fig. 4.125). The upper wall is decorated with five shallow grooves and the pot has a height of 15 cm.

The fragments of a grey biconical pot found in grave 63 were glued together and missing parts completed (fig. 4.125). The reconstructed pot of fine burnished ware has a height of 10.3 cm and is decorated with five prominent grooves covering nearly the entire surface of the upper wall. It might have been a smoked specimen since some faint weathered black traces can be observed on its outer surface. The find location of the fragmented pot was not established and other finds are not known from this grave.

The three pots have rather different appearances but are all classified as Siegmund's type Kwt2.32 on the basis of metric criteria and the grooves. The only resemblance between the pots from graves 18 and 63 is the considerable number of grooves covering nearly the entire upper walls. Siegmund's type Kwt2.32 dates to Rhineland phases 4-5 (530-570).⁶²⁶ Similar pots are classified as Franken AG type Kwt3A, which dates to their phases 4-5 (510/20-580/90) and sporadically to phase 6 (580/90-610/20).⁶²⁷

Fine pottery: biconical pots of Siegmund's type Kwt2.42
22 (22-1-1); 64 (64-6-1); 0 (0-0-1)

Biconical pot 22-1-1 is a grey pot with a height of 8.5 cm (fig. 4.126). The prominent groove on the shoulder of the pot is not identified as a decorative element similar to the groove decorations on other biconical pots, but rather as a pronounced transition from belly to neck; it is therefore identified as a pot without decoration. Traces of the smoked, but now weathered dark top layer can be observed. The pot was recorded as a find from the middle section of the supposed former location of the feet, and was thus presumably found close to the short eastern wall of the grave. Since the restoration report is not available it cannot be determined whether the pot was found in complete or fragmented condition (some of the added parts of the restored pots from Stein are difficult to tell apart from the original parts).

The black biconical pot of fine burnished ware from grave 64 has a height of 10.0 cm, is without decoration and shows some red stains and production grooves on the lower wall (fig. 4.126). Traces of a thin weathered dark top layer can be observed, which indicate that it was a smoked specimen. The pot was found in the

middle of the supposed former section of the grave associated with the feet, which is presumably close to the short eastern wall (this was not explicitly indicated). Other finds from this grave are belt fittings, three arrowheads, and a simple ring.

A biconical pot without decoration was found in fragmented condition but is now restored and completed; approximately 95% of the original pot is present (fig. 4.126). The find number indicates that it was found in grave 76, but this grave was never excavated; it remains unknown what the actual find circumstances of this pot were. It is classified as Franken AG type Kwt4A (4-7: 510/25-640/50).

The three undecorated pots are classified as Siegmund's type Kwt2.42, which dates to Rhineland phase 7 (585-610).⁶²⁸ The Franken AG classify similar pots as type Kwt4A, which dates to their phases 4-7 (510/25-640/50).⁶²⁹

Fine pottery: biconical pots of Siegmund's type Kwt2.43
11 (11-1-1); 0 (0-0-3)

The biconical pot from grave 11 was found in fragmented condition but is now restored and completed; approximately 80% of the original pot is present (fig. 4.127). It is a small brown-grey pot of fine burnished ware with a height of 7.7 cm and is without decoration. The find location could not be recorded according to Beckers and Beckers. Other finds from this grave are some beads and a Roman copper alloy brooch.

A brown biconical pot without decoration and with a weathered smoked surface was found in fragmented condition but is now restored and completed; approximately 90% of the original pot is present (fig. 4.127). It has a height of 16.0 cm, and its upper wall is much higher than the lower wall. The find number indicates that it was found in grave 77, but this grave was never excavated; it remains unknown what the actual find circumstances of this pot were.

Fig. 4.125
Biconical pots type Siegmund Kwt2.32,
graves 18, 56 and 63 (scale 1:4).



Fig. 4.126
Biconical pots type Siegmund Kwt2.42,
graves 22, 64 and 0 (scale 1:4).



(623) Siegmund 1998 129. (624) Siegmund 1998, 129. (625) Müssemeier *et al.* 2003, 59. (626) Siegmund 1998, 129-130. (627) Müssemeier *et al.* 2003, 59. (628) Siegmund 1998, 130. (629) Müssemeier *et al.* 2003, 60.

Fig. 4.127
Biconical pots type Siegmund Kwt2.4,
graves 11 and o (scale 1:4).



Fig. 4.128
Biconical pot type Siegmund Kwt3.11, grave 23 (scale 1:4).



The two pots are classified as Siegmund's type Kwt2.43, which dates to Rhineland phases 8-9 (610-670).⁶³⁰ The Franken AG maintained this type and date it to their phases 6-9 (580/90-710).⁶³¹

Fine pottery: biconical pot of Siegmund's type 3.11
23 (23-1-1)

Biconical pot 23-1-1 was found in fragmented and incomplete condition; it is now restored and completed and approximately 70% of the original pot is present (fig. 4.128). The reconstructed pot has a height of 11.3 cm and a black grey weathered surface with a red brown core; it is a smoked specimen with a thin dark top layer, now weathered. The upper wall is decorated with single lines of rectangular roulette stamp impressions covering nearly the entire upper wall. The upper lines are applied somewhat more irregularly than the lower lines. The pot was found in the south-western corner of the grave, close to the presumed former location of the head. The decoration is identified as Siegmund's early roulette stamp group: the pot is accordingly classified as type Kwt3.11, which dates to Rhineland phases 6-7 (570-610).⁶³² The Franken AG classify pots with similar decoration as type Kwt5A which dates to their phases 5-6 (565-610/20).⁶³³

Fine (to slightly coarse) pottery:
biconical pots of Siegmund's type 3.12
24 (24-1-1); 51 (51-4-1); 53 (53-1-1); 56 (56-7-1); 58 (58-2-1)

The light grey biconical pot from grave 24 is of a coarse to fine ware; some sand or small pebble inclusions can be observed (fig. 4.129). It has a height of 15.2 cm and a slightly rounded carination. The upper wall is decorated with three zones of single lines of rectangular roulette stamp impressions. The find location of the pot

was not recorded and other finds are not known from this grave. The Franken AG classify similar pots as type Kwt5A, which dates to their phases 5-6 (565-610/20).⁶³⁴

The grey biconical pot from grave 51 was found in fragmented condition (fig. 4.129). The pot is now restored and completed; approximately 80% of the original pot is present. The pot has a height of 11.4 cm and the entire upper wall is decorated with single lines of complex roulette stamp impression consisting of crosses alternating with vertical stripes; the roulette stamp is applied five to six times as a spiral. It is identified as a roulette stamp of the early group (since it is an uninterrupted pattern). The outer surface is covered with a thin dark top layer, now weathered and showing the lighter paste underneath. It was clearly a smoked specimen. The pot was found 40 cm from the southern wall and 60 cm from the western wall. The Franken AG classify biconical pots with similar decorations as type Kwt5G, which dates to their phases 5-6 (565-610/20).⁶³⁵

The grey biconical pot from grave 53 was restored on the basis of a number of fragments (53-1-1) and completed for a considerable part; approximately 40% of the original pot is present (fig. 4.129). The reconstructed pot has a height of 15.0 cm and its upper wall is decorated with two zones of single lines (2-4) of rectangular roulette stamp impressions, applied underneath the three grooves. The decoration is identified as a roulette stamp of the early group. The pot is the only find known from this grave; the find location could not be established. Similar pots are classified as Franken AG type Kwt5A which dates to their phases 5-6 (565-610/20).⁶³⁶

Grey biconical pot 56-7-1 from grave 56 was found as a complete specimen except for a small rim fragment, which is gone (fig. 4.129). The thin dark top layer of the pot is weathered and shows the lighter paste underneath; it is clearly a smoked specimen. The pot has a height of 9.5 cm and the upper wall is decorated with

Fig. 4.129
Biconical pots type Siegmund Kwt3.12, graves 24, 51, 53, 56 and 58 (scale 1:4).



three grooves underneath which one zone of single lines of small square roulette stamp impressions applied three to four times. The pot was found 35 cm from the eastern wall, in the middle of the grave, thus close to the presumed former location of the feet. Similar pots are classified as Franken AF type Kwt5A which dates to their phases 5-6 (565-610/20).⁶³⁷

Biconical pot 58-2-1 from grave 58 was found in fragmented condition; the fragments are glued together and missing parts

completed and approximately 75% of the original pot is present (fig. 4.129). The reconstructed pot has a height of 17.0 cm and is decorated with three relatively deep and broad grooves underneath the neck and five, less deep and broad, grooves on the upper wall. In between the grooves on the upper wall a pattern of oblique lines seem to be engraved, thus not applied with a stamp. It was recorded that fragments of the two pots known from this grave were found scattered throughout the grave, which indicates that the grave was reopened. The other pot could not be reconstructed. Other finds from this grave are some iron and copper alloy fragments, which the excavators interpreted as decoration of the wooden coffin. The decoration on the upper wall of the pot is difficult to classify, since it was probably not applied with a stamp, but resembles roulette stamp decorations of the early group, since it are single uninterrupted lines. It is therefore classified as Siegmund's type Kwt3.12.

The five biconical pots have roulette stamp decorations of the early group (single uninterrupted lines); in combination with their metric features they are classified a Siegmund's type Kwt3.12, which dates to Rhineland phase 6 (570-585) and sporadically to phase 7 (585-610).⁶³⁸

Fine pottery: biconical pot of Siegmund's type 2.12/3.12
25 (25-1-1)

The brow-grey biconical pot from grave 25 is for some part completed, which may have caused its asymmetric appearance (fig. 4.130). The pot has a height of 18.3 cm and the surface of the re-

(630) Siegmund 1998, 130. (631) Müssemeier *et al.* 2003, 60. (632) Siegmund 1998, 130. (633) Müssemeier *et al.* 2003, 60-61. (634) Müssemeier *et al.* 2003, 60-61. (635) Müssemeier *et al.* 2003, 62. (636) Müssemeier *et al.* 2003, 60-61. (637) Müssemeier *et al.* 2003, 60-61. (638) Siegmund 1998, 130.

Fig. 4.130
Biconical pot type Siegmund
Kwt2.12/3.12, grave 25 (scale 1:4).



Fig. 4.131
Biconical pot type Siegmund
Kwt3.21/3.22, grave 1 (scale 1:4).



Fig. 4.132
Biconical pot type Siegmund Kwt3.13,
grave 66 (scale 1:4).



constructed pot shows a considerably weathered thin dark top layer showing the lighter brownish past underneath. The upper wall is decorated with one zone of four grooves underneath the neck and one zone of three grooves on the middle of the upper wall, alternating with two zones of one line of stamp impressions consisting of vertical rectangular grids filled with two columns and four rows of impressed squares. The grids seem to have been applied irregularly which indicates the use of a single stamp but since the restoration makes a clear observation of the decoration difficult it might also be a complex early roulette stamp. The biconical pot is

the only find known from this grave and it was found in the middle of the section close to the eastern wall of the grave, thus close to the presumed former location of the feet.

Identifying the decoration as single stamp impressions warrants a classification of the pot as Siegmund type Kwt2.12, which dates to Rhineland phase 4 (530-555);⁶³⁹ its identification as a pot with decoration of the early roulette stamp group (complex single line of roulette stamp impressions) results in a classification as Siegmund's type Kwt3.12, which dates to Rhineland phases 6-7 (570-610).⁶⁴⁰

Fine pottery: biconical pot of Siegmund's type 3.21/3.22
1 (1-5-1)

Biconical pot 1-5-1 from grave has a grey surface and a height of 11.0 cm (fig. 4.131). A considerable part of the pot is gone, and the reconstructed parts do present a reliable image of the original decoration. The original parts of the upper wall seem to indicate that it was decorated with three or four zones of multiple lines (two?) of irregular rectangular roulette stamp impressions (late group of roulette stamps). The grave was considerably disturbed but it was nonetheless observed that the fragments of this pot, and others, were found scattered throughout the grave. One other biconical pot (1-6-1) could be reconstructed with the uncovered fragments. The belly/height index classifies it just within basic from group 2. Since the pot is restored and completed basic form group 4 is also be considered as an option. Depending on the basic ground form the pot is classified either as type Kwt3.21 (ground form 2), which dates to Rhineland phase 7-8 (585-640),⁶⁴¹ or type Kwt3.22 (ground form 4), which dates to the end of phase 7 and phase 8A (600-625).⁶⁴² According to the Franken AG it is a pot of type Kwt5B which dates to their phases 5-7 (565-640/50).⁶⁴³

Fine pottery: biconical pot of Siegmund's type 3.13
66 (66-3-1)

Biconical pot 66-3-1 from grave 66 was found in complete condition; some shallow cracks can be observed on its surface but these did not cause a disintegration of the pot before its discovery (fig. 4.132). It is a black pot with a height of 10.3 cm. The upper wall is decorated with a single line of square roulette stamp impressions applied four times; the decoration is identified as the early roulette stamp group of Siegmund.⁶⁴⁴ It has a thin dark top layer, somewhat weathered showing the lighter paste underneath. It is thus a smoked specimen. The pot was found in the middle of the grave, 70 cm from the short eastern wall and thus near the presumed former location of the feet. The other finds from the grave are a plate buckle and an iron nail. The pot is classified as Siegmund's type 3.13, which dates to Rhineland phases 6-7 (570-610).⁶⁴⁵ The Franken AG classify similar pots as type Kwt5A which dates to their phases 5-6 (565-610/20).⁶⁴⁶

Fig. 4.133
Biconical pots type Siegmund Kwt3.22, graves 26, 30, 60, 61 and 67 (scale 1:4).



26-1-1



30-2-1



60-1-1



67-1-1



61-1-1

Fine pottery: biconical pots of Siegmund's type 3.22
26 (26-1-1); 30 (30-2-1); 60 (60-1-1); 61 (61-1-1); 67 (67-1-1)

Biconical pot 26-1-1 is a soft baked product with a considerably weathered surface (fig. 4.133). The pot is nearly complete; the missing parts are not completed. It was found with some fragments detached, which are now added to the pot. The pot has a height of 11.0 cm and its upper wall is decorated with three single lines of square grids filled with three columns and two rows of small rectangular impressions. It is a complex interrupted roulette stamp and belongs thus to the late group of roulette stamps.

(639) Siegmund 1998, 129. (640) Siegmund 1998, 130. (641) Siegmund 1998, 130-131. (642) Siegmund 1998, 131. (643) Müsseseimer *et al.* 2003, 61. (644) Siegmund 1998, 126-128. (645) Siegmund 1998, 130. (646) Müsseseimer *et al.* 2003, 60-61. (647) Müsseseimer *et al.* 2003, 62. (648) Müsseseimer *et al.* 2003, 62.

The pot was found 37 cm from the northern wall, in the middle of the grave. Pots with similar decoration schemes are classified as Franken AG type 5F, which dates to their phases 5-7 (565-640/50).⁶⁴⁷

The dark grey biconical pot from grave 30 was found as a complete specimen, apart from a small rim fragment which is gone (fig. 4.133). It has a somewhat weathered thin dark top layer showing the lighter grey paste underneath; it is thus a smoked specimen. The pot has a height of 11.2-11.7 cm and its upper wall is decorated with one zone of one deep groove, two shallower grooves and one shallow groove. Above the grooves one line of roulette stamp impressions of crosses can be observed. The roulette stamp impressions applied beneath the grooves are similar. The roulette stamp decoration is identified as a complex interrupted roulette stamp and is thus a stamp of the late group. The pot was found 45 cm from the long south-eastern wall of the grave and 40 cm from the short north-eastern wall, thus close to the presumed former location of the feet. The other finds from the grave are a large biconical pot, a palm cup and beads. This smaller biconical pot fell over and was found leaning against the larger biconical pot. Pots with similar decoration schemes are classified as Franken AG type 5F, which dates to their phases 5-7 (565-640/50).⁶⁴⁸

Biconical pot 60-1-1 was found in fragmented condition (fig. 4.133). The fragments are glued together and form a grey biconical pot of which the missing parts are completed; approximately 50% of the original pot is present. The height of the reconstructed pot is 15.5 cm and its upper wall is decorated with four lines of square roulette stamp impressions applied multiple times; it is identified as a roulette stamp of the late group. The fragments were found

close to the short north-east orientated wall of the grave and thus close to the presumed former location of the feet. The other finds from this grave are an axe, fire steel, buckle, knife and numerous metal fragments. The Franken AG classify similar pots as type Kwt5B, which dates to their phases 5-7 (565-640/50).⁶⁴⁹

The black biconical pot from grave 61 was found in fragmented condition; the fragments are glued together and missing parts completed (fig. 4.133). The restored pot has a height of 13.5 cm and a relatively long upper wall, which is decorated with three grooves and two zones of three to four lines of small square roulette stamp impressions. This roulette stamp is identified as one of the late group. The pot was the only find from this grave, apart from three small Roman pottery fragments and a rim fragment of a red pot. The biconical pot was found close to the short north-east orientated wall, thus close to the presumed former location of the feet. The Franken AG classify similar pots as type Kwt5B, which dates to their phases 5-7 (565-640/50).⁶⁵⁰

Brown/red biconical pot 67-1-1 from grave 67 was found in a fragmented condition but is now restored and completed; approximately 70% of the original pot is present (fig. 4.133). The height of the reconstructed pot is 9.7 cm and the upper wall is decorated with two zones of three lines of square roulette stamp impressions. It is identified as a roulette stamp of the late group. The pot was the only find from this grave and its find location was not recorded. It is classified as Franken AG type Kwt5C, which dates to their phases 7-8 (610/20-670/80).⁶⁵¹

All the pots with ground form 4 and with roulette stamp decorations of the late group are classified as Siegmund’s type 3.22, which dates from the end of Rhineland phase 7 to phase 8A (600-625).⁶⁵² The date ranges assigned to the pots on the basis of the typo-chronology of the Franken AG shows some variation.

Fine pottery: biconical pot fragments, roulette stamps of the early group
45 (45-2-1); 62 (62-1-1)

Wall fragments of a grey-black biconical pot with a smoked surface are known from grave 45. The upper wall is decorated with single lines of uninterrupted reversed and straight V-shaped roulette stamp impressions. They decoration is classified as Franken AG type Kwt5G/H (5-7: 565-640/50)⁶⁵³ and Siegmund types Kwt3.11/3.12/3.13 (6-7: 570-610).⁶⁵⁴

Fine pottery: biconical pot fragments, roulette stamps of the late group
45 (45-1-1); 65 (65-4-1); 69 (69-1-1)

Wall fragments with the rim of a grey biconical pot were found in grave 45 (fig. 4.37). The decoration on the upper wall consists of three zones of five lines of rectangular roulette stamp impressions, and can thus be identified as a stamp of the late group.

Table 4.16
The spouted pots from Stein. H=Heigth, B=Belly diameter, M=Mouth diameter, BF=Basic Form, G=Group (Siegmund 1998).

Pot	H	B	M	BF	G	Type
34-1	17.5	21.0	14.0	4	3	Kwt3.12
55-4	20.3	24.5	15.5	4	3	Kwt3.12
57-8	16.5-17.2	21.5	13.4	4	3	Kwt3.12

Six fragments of a grey biconical pot, one wall fragment with rim, one bottom fragment and four wall fragments were found in grave 65. The fragments show that the upper wall was decorated with three zones of four lines of square roulette stamp impressions. The fragments were found in the middle close to the short eastern wall of the grave.

In grave 69 many fragments of a biconical pot (69-1-1) were found; the pot is not restored yet. The fragments show three zones of four lines of rectangular roulette stamp impressions; it is thus a roulette stamp of the late group.

The described fragments with roulette stamp decoration of the late group can be classified as Siegmund’s types Kwt3.21/3.22/3.23, which date to Rhineland phases 7-8 (585-640).⁶⁵⁶ The Franken AG classify pots with similar decoration patterns as type Kwt5B, which dates to their phases 5-7 (565-640/50), or type Kwt5C, which dates to their phases 7-8 (610/20-670/80).⁶⁵⁷

Fine pottery fragments: indeterminate
19 (19-2-1); 32 (32-3-1); 58 (58-3-1)

Fragments of a ‘blue-grey’ biconical pot with rounded carination and decoration on the upper wall were found in grave 19.⁶⁵⁸ They are present in the collection but difficult to classify and it is not certain whether they were of a biconical pot.

Grey pottery vessel fragments were found 90 cm from the eastern wall, in the middle of grave 32.⁶⁵⁹ A pot could not be reconstructed with these shards according to Beckers and Beckers. In the restoration atelier a number of grey fragments of what seemed to be a biconical pot are present; it will indeed be difficult to reconstruct a pot. The shards cannot be classified and dated.

Fragments (58-3-1) of a smoked biconical pot were found in grave 58. The original height of the pot could not be reconstructed. The smoked surface is somewhat weathered, showing the lighter grey past underneath.

Fine pottery: biconical pots, missing
40 (40-2-1); 72 (72-3-1)

A biconical pot, grey, with a decoration pattern similar to that one the pot from grave 1 was found in grave 40.⁶⁶⁰ It had a height of 11.5 cm. The pot is no longer present in the collection and it is not clear to which pot from grave 1 is referred.

A black biconical pot with lines of irregular square roulette stamp impressions and an indented bottom and with a height of

13.0 cm was found in grave 72.⁶⁶¹ It is now no longer present in the collection.

Fine pottery: spouted pots
The number of three spouted pots in the Stein cemetery is lower than the number found in the two nearby cemeteries of Sittard-Kemperkoul and Stein. Spouted pots are in fact biconical pots with a spout and handle, and thus considered to be a special form within the groups of biconical pots. The rims of spouted pots can be simple or can have added inward turned collars with conspicuous decoration.⁶⁶² The Stein pots are all rather common with only slightly outward folded simple rims. They are classified and dated on the basis of the biconical pot classifications schemes of Siegmund and the Franken AG (table 4.16).

Fine pottery: spouted pots of Siegmund’s type 3.12
34 (34-1-1); 55 (55-4-1); 57 (57-8-1)

Spouted pot 34-1-1 from grave 34 is grey, has a height of 17.5 cm, and has a rounded carination (fig. 4.134). The pot was found in fragmented condition but is now restored and completed. The restoration report of the second restoration mentions that the parts which formed the carination of the pot were not available. It was in this second round of restoration restored in line with the shape made in the first round of restoration; it is therefore not at all certain whether the rounded carination represents its original shape. The original fragments are of an impure coarse ware containing small pebbles and sand. The handle is attached to the rim and upper wall, just above the carination. It has two vertical grooves. The spout is attached to the upper wall, opposite to the handle. The decoration on the upper wall consists of a six single lines of square roulette stamp impressions. The pot was found in a corner of a nearly completely destroyed grave; it was not recorded in which corner this was. The restoration report of Restaura refers to cremation rests that were discovered inside the pot; grave 34 might thus have been a cremation grave consisting of a small pit with the vessel holding cremation remains. The cremation remains are not available anymore, and other finds were not found in association with this pot. The Franken AG classify pot with similar decoration schemes as type Kwt5A, which dates to their phases 5-6 (565-610/20).⁶⁶³

The fragments (55-4-1) of a black vessel from grave 55 were at the time of excavation and the first restoration round not long thereafter identified as fragments of a biconical pot with two handles. During the second restoration project in de 1990s it was discovered that evidence for the second handle was not at all present, and that this handle was added to the vessel by mistake. The newly restored vessel shows that it was in all probability a spout-

ed pot with one handle (fig. 4.134). The upper wall part, where the spout was originally present, is gone. The single remaining handle is attached to the rim and ends on the middle of the upper wall. The inner rim has a pronounced indentation in which a lid could be placed. The reconstructed pot as a height of 20.3 cm and the upper wall is decorated with four lines of uninterrupted complex roulette stamp impressions, namely intercutting diagonal stripes forming irregular V-shapes. Since a considerable part of the pot was completed it is difficult to decide whether the roulette stamp was applied as spiral or separate lines; the latter seems to be the case. The fragments of the spouted pot were found scattered close to the northern wall of the grave. The roulette stamp is identified as a stamp of the early group since it is an uninterrupted pattern. The pot is therefore classified as Siegmund’s type Kwt3.12. The Franken AG classify pots with similar decorations as type Kwt5F, which dates to their phases 5-7 (565-640/50).⁶⁶⁴

In grave 57 several fragments (57-8-1) of a black spouted pot were found together in the south-eastern corner of the grave (fig. 4.134). The pot probably broke after the wooden container collapsed. The pot was restored and the missing parts completed, except for the spout, which former presence is only indicated by a round hole opposite to the handle. The handle has a width of 3.5 cm, and has two grooves. It is attached to the rim and ends on the upper wall, just above the carination. The height of the pot is 16.5-17.5 cm. The upper wall is decorated with multiple lines of triangular roulette stamp impressions, and belong thus (as a complex stamp) to the late group of roulette stamps. The Franken AG classify pot with these impressions as type Kwt5D which dates to their phase 6 (580/90-610/20).⁶⁶⁵

The three spouted pots are all classified as Siegmund type Kwt3.12 which dates to the end of Rhineland phase 7 and the beginning of phase 8B (c.600-c.630).⁶⁶⁶

(649) Müssemeier *et al.* 2003, 61. (650) Müssemeier *et al.* 2003, 61. (651) Müssemeier *et al.* 2003, 61. (652) Siegmund 1998, 131. (653) Müssemeier *et al.* 2003, 62-63. (654) Siegmund 1998, 130. (655) Siegmund 1998, 130. (656) Siegmund 1998, 130-131. (657) Müssemeier *et al.* 2003, 61. (658) Beckers/Beckers 1940, 302. (659) Beckers/Beckers 1940, 306.

Fig. 4.134
Spouted pots type Siegmund Kwt3.12, graves 34, 55 and 57 (scale 1:4).



Coarse pottery: egg shaped pot of Siegmund's type Wwt2.22/ Wwt2.21
43 (43-1-1)

Fragments (43-1-1) of a black egg shaped pot were found in grave 43 (fig. 4.135). The fragments were glued together, and the pot was for a considerable part completed; approximately 55% of the original pot is present. The restored pot has a height of 14.2 cm and shows that the thin dark top layer is somewhat weathered showing the lighter past underneath; it is clearly a smoked pot. It was recorded that the grave was disturbed, probably by an early reopening, and that the fragments of the pot were found in the top layer of the grave. Other finds are not known from this grave.

Siegmund classifies egg shaped pots on the basis of a number of indexes and differentiates between early and late egg shaped pots.⁶⁶⁷ Since the Stein specimen has an elongated shape and a height of more than 14.0 cm (although only slightly more) it belongs to the late group. On the basis of the relevant indexes of the pot (the diameter of the bottom (7.0 cm) in relation to the height (14.2 cm) = 0.49, and the diameter of the belly (12.8) in relation to the height (14.2) = 0.9) it is classified as Siegmund's type Wwt2.22. This type dates to Rhineland phases 10-11 (670-740).⁶⁶⁸ In view of the restored condition of the pot and the fact that the indexes are close to the values that differentiate between Wwt2.21

and 2.22, a classification as Wwt2.21 should also be considered. Type Wwt2.21 dates to Rhineland phase 10 (670-705), and thus to a date range ending somewhat earlier than the range associated with Wwt2.22.⁶⁶⁹ The pot belongs to the later burial phases of the cemetery.

Coarse pottery: globular pots
14 (14-1-1); 17 (17-3-1);

A grey globular pot of coarse ware with sand and volcanic inclusions was found in grave 14 of a child (fig. 4.136). It was found in two fragments, 32.0 cm from the short northern wall and 15.0 cm from the long eastern wall, thus close to the presumed former location of the feet. The pot is now restored and has a height of 10.0 cm. The only other finds from this grave are an iron buckle and two associated copper alloy rivets (as the original catalogue mentioned).

A resembling globular pot, darker grey, baked hard and of a semi-coarse ware (some gravel inclusions and maybe volcanic inclusions can be observed) with a considerably weathered surface, was found in grave 17 (fig. 4.136). The pot was found 30.0 cm from the eastern wall and 30.0 cm from the northern wall. It was found in fragmented condition but is now restored and completed; approximately 70% of the original pot is present. The reconstructed

height is 10.0 cm. The only other finds from this grave are a copper alloy rivet and some indeterminate fragments.

The two pots are, although 'globular' not entirely similar to the globular pot from grave 42 (see below) and are neither obvious egg shaped pots of the late group. Since both late egg-shaped pots and globular pots are dated to the seventh century the two globular pots from grave 14 and 17 are for now dated accordingly. Globular and egg shaped pots are quite rare in Merovingian cemeteries in the southern Netherlands. When two almost identical globular pots appear in one cemetery one can ask whether these pots were products of nearby workshops.

Coarse pottery: globular pot (of Siegmund's type Kwt4.12?)
42 (42-1-1)

Grey globular pot 42-1-1 has an outward folded rim in which a deep groove for a lid is applied (fig. 4.137) The pot is of a coarse ware and tempered with gravel and sand. The inclusions seem to point to a production centre in the Eifel (Germany). It was found as complete specimen and has a height of 12.9 cm and a flat bottom. The pot has a globular belly, which egg-shaped pots do not have; it might however fall within the same category. Similar pots from grave contexts are known from Bergeijk (one grey pot from grave 53 and one orange pot from grave 110)⁶⁷⁰ and from Maastricht-Vrijthof (one black pot from grave 36)⁶⁷¹. The two pots from the Bergeijk cemetery are not dated to an exact phase, but the early seventh century is suggested as a plausible option on the basis of the associated grave inventory of one of the specimens. The authors noticed that the pots showed remains of black smoke or other black residue, as is also observed on the Vrijthof pot. This indicates that the pots were used for cooking.

Siegmund identified similar pots as type Kwt4.12; pots of coarse ware, rounded carination and concave inner rim, and mentioned that they are difficult to date precisely within the Merovingian period but refers to an undisturbed grave inventory dated to Rhineland phase 10 (670-705) in which a pot of this type was found. Siegmund mentioned four specimens in his research area and three in Krefeld-Gellep.⁶⁷² Dating the Stein pot to the seventh century seems a plausible option.

Pottery vessel: beaker?
0 (0-0-2)

A small orange vessel with an elongated but globular body is labelled as being found in grave 76, but this grave was not excavated; it remains unknown what the actual find circumstances of this pot were. The vessel has an incurved upper part but is without neck and has a simple rim. It has a flat bottom and a height of 9.6 cm (fig. 4.138). This pot is of an exceptional form not seen in other Merovingian cemeteries. It could also be an indication for a local pottery workshop.

Pottery fragments: missing
1 (1-1-1; 1-2-1; 1-3-1; 1-4-1); 40 (40-1-1)

In grave 1 various pottery fragments were mentioned to have been found; they are not available anymore. In grave 40-1-1 fragments of grey pottery with red stripes were mentioned to have been found; they are not available anymore.

Fig. 4.135
Egg shaped pot, grave 43 (scale 1:4).



Fig. 4.136
Globular pots, graves 14 and 17 (scale 1:4).



Fig. 4.137
Globular pot, grave 42 (scale 1:4).



(660) Beckers/Beckers 1940, 299. (661) Beckers/Beckers 1940, 319. (662) See for example the overview of spouted pots from Bergeijk (Theuvs/Van Haperen 2012, 104-106, fig. 6.38). (663) Müssemeier *et al.* 2003, 60-61. (664) Müssemeier *et al.* 2003, 62. (665) Müssemeier *et al.* 2003, 61-62. (666) Siegmund 1998, 130. (667) Siegmund 1998, 135-138. (668) Siegmund 1998, 142-143. (669) Siegmund 1998, 142. (670) Theuvs/Van Haperen 2012, 112-114, fig. 6.49, 35.91, 110.a. (671) Kars 2011, 194-195. (672) Siegmund 1998, 132.

Fig. 4.138
Beaker, unknown context (scale 1:4).



White pottery and terra sigillata shards
69 (69-4-1; 69-6-1)

Beckers and Beckers mention that, next to three indeterminate fragments and a copper alloy rivet and wood fragments, pottery shards were also found in grave 69⁶⁷³: a white pottery shard is known as VIA 154 in the restoration atelier, and a terra sigillata shard as VIA 153. On the basis of their original find numbers they are assigned to grave 69.

Terra sigillata: missing
4 (4-1-1); 5 (5-1-1; 5-2-1); 61 (61-2-1)

A terra sigillata bowl on a stand ring and barbotine leaf decoration was found at the bottom of grave 4, in one of the corners. It has a recorded height of 3.5 cm, a mouth diameter of 9.5 cm, and a bottom diameter of 4.0 cm.⁶⁷⁴ It is no longer present in the collection.

A terra sigillata beaker (Dragendorff 33) was recorded as a find from grave 5. It is not available anymore. The foot and wall fragments of another terra sigillata beaker were also recorded as finds from this grave. It was recorded that it had a height of 5.5 cm. It is now also gone.⁶⁷⁵

Glass vessels

Cone beaker/bell beaker
5 (5-3-1)

Two olive green wall fragments with rim (of original three) are recorded as finds from grave 5 (fig. 4.139). The fragments show air bubbles and vertical ribs, although very faint, starting 4 cm underneath the rim. The shape of the beaker is difficult to reconstruct, but the fragments might be of a conical beaker or bell beaker. The rim is straight and slightly thickened.

Palm cup: low and broad with outward rolled rim
8 (8-10-1)

Several blue glass fragments (8-10-1) from grave 8 were glued together and missing parts were substituted (fig. 4.139). The reconstructed vessel is a low and broad palm cup with a lenticular, indented bottom and a thick outward rolled rim with tubular cavity. Air buckles can be observed, which indicated that the quality of the glass was not that high. It was not recorded where in the grave the fragments were found, but it is part of a richly furnished grave of a man in which also a seax, sword, shield boss, lance head and belt- and sword fittings were found. The cup is without decoration, which is in Maul's typological scheme decoration type a. Evison described two different outward folded rims on undecorated, squat palm cups: one is only slightly outward bent and rolled leaving a circular cavity, and the other has a thickened rim end which is folded outwards and pressed on the outer wall, leaving a tubular hollow rim. The Stein cup has outward bent and rolled rim with a modest depth.

The palm cup cannot be classified with Siegmund's scheme: he only identified cups with broad outward folded rims and solid rounded rims.⁶⁷⁶ The rim of the Stein palm cup obviously is a form which fits somewhere in between these two rim forms. According to the typology of Maul it is a type Tumbler B1a, which dates to 570-680.⁶⁷⁷ According to Feyeux's classification it is a type 55.0, which dates to 550-620.⁶⁷⁸ Altogether, dating this palm cup to 580/90-670/80 seems a plausible option.

Palm cups: low, semi spherical body with straight walls, plain rim and ribs
30 (30-3-1)

Green palm cup 30-3-1 has straight walls, a simple rounded rim and a rounded base (fig. 4.139). It is of impure glass; multiple air bubbles can be observed. The cup has fifteen vertical ribs from bottom to approximately 1.5 cm underneath the rim. The majority of the ribs end at the transition from wall to bottom and some

are somewhat prolonged, though vague. Five round bosses are present at the bottom of the cup, on which the cup can be standing. Four bosses are applied at the transition from wall to bottom, and one is applied on the middle of the bottom. One faint rib is connected with the middle boss, but not with the other bosses. Examples of other cups show that the bottom ribs can be more prominent and can form cruciform patterns in which the bosses are integrated.⁶⁷⁹ The cup has a height of 7.5 cm. It was found 45.0 cm from the long south-eastern wall and 40.0 cm from the short north-eastern wall. The palm cup fell over and found close to the large biconical pot. Another biconical pot and numerous beads are also known from this grave (of a woman).

This palm cup falls in the category low and semi-spherical cups and resembles the three palm cups with ribs from Sittard. These however, have slightly different bottoms and a number of twelve vertical ribs of which four come together at the bottom forming a cross. The majority of the ribs on the Stein beaker do not reach the bottom and the five bulges on the bottom of the Stein cup are not present on the Sittard cups. Maul classified the patterns formed by the ribs and bulges on the bottoms of palm cups; the bottom of the Stein cup can be classified as bottom type P5, which refers to a 'five point pattern'.⁶⁸⁰ The palm cup is classified as Maul type A1b (half spherical cup with straight walls, smooth rim, and a ribbed surface)⁶⁸¹, which she dates to Stufe AM III-JM I (560/70-630/40).⁶⁸² A similar specimen, although light green, was found in Kent.⁶⁸³ The possible areas of provenance were referred to as the Rhineland, northern France and Belgium. This vessel from Kent has a hollow inward rolled rim, which is referred to as a late feature of similar palm cups dated to the sixth and seventh centuries.⁶⁸⁴ This feature is absent on the Stein specimen, which might indicate that it dates somewhat early in the proposed date range. The cup from Kent, moreover, shows sixteen ribs, which is an even number and in equilibrium with the four outer bosses on the bottom: it was mentioned that each boss was at the end of two connecting ribs (2x4=8) and that in between the bosses other pairs of ribs are present (4x2=8), resulting in sixteen regularly applied ribs. The ribs and bosses are not that neatly applied on the Stein cup: it has an uneven number of ribs which are not completely in harmony with the four bosses at its bottom. Moreover, the bosses themselves are neither applied regularly.

Similar palm cups are classified as Siegmund's type Gla 2.1, which is a rather general type of palm cup dating to Rhineland phase 7 (585-610).⁶⁸⁵ The Franken AG, who maintained the Rhineland type, date them to their phases 6-7 (580/90-640/50).⁶⁸⁶ Other typological studies identified more specific types. Feyeux for example classifies palm cups as the ones from Stein as sub-group 55.3km (palm cups with vertical ribs and additional features produced in a mould; in the case of Stein the five bosses), which dates to the second half of the sixth century and the beginning of the seventh cen-

Fig. 4.139
Glass vessels, graves 5, 8 and 30 (scale 1:2).



tury.⁶⁸⁷ In view of the alternative classifications and associated date ranges it appears that Siegmund's criteria for these palm cups are coherent chronological indicators but that his date ranges is somewhat narrower than those of the other typological studies. The date range 580/90-640/50 of the Franken AG seems a plausible option for the Stein cup.

Rivets

8 (8-7-1); 14 (14-3-1); 17 (17-1-1); 60 (60-5-1); 69 (69-3-1)

A number of rivets of which it is not clear to which object they originally belonged are present in the collection. One fragment of what seems to be of a copper alloy rivet with a diameter of 1.3 cm is assigned to grave 8; it might have belonged to the large iron belt fittings of which some of the original copper alloy rivets are gone.

The remnants of two copper alloy rivets were recorded as finds from grave 14. They were found close to the western wall, underneath and attached to the buckle (14-3-2) from this grave, but are no longer available in the collection.

The catalogue mentions that copper alloy rivets were found in the upper fill of grave 17; a round copper alloy object is present and might be one of the rivets referred to in the catalogue since its original find number (VIA 43) matches with his grave.

A copper alloy knob (60-5-1) was recorded as find from grave 60. It was found in association with an iron fragment close to the former location of the head. It might be present as a severely corroded specimen in a box holding many iron fragments from this grave.

A fragment of a copper alloy rivets is present as find from grave 69; it is not clear to which object it originally belonged.

(673) Beckers/Beckers 1940, 319. (674) Beckers/Beckers 1940, 299. (675) Beckers/Beckers 1940, 299. (676) Siegmund 1998, 166. (677) Maul 2002, Band II, 253, 317. (678) Feyeux 2003, 37, fig. fig. 13, T.55.0. (679) See for example the cup from grave 136 Vieuxville (Tresors de Wallonie, 155, object 84); the cup from Kent (Evison

2008, cat. numb. 91). (680) Maul 2002, 258, Abb. 23. (681) Maul 2002, Band II, 253. (682) Maul 2002, Band I, 151-152. (683) Evison 2008, 59, cat. numb. 91. (684) Evison 2008, 16. (685) Siegmund 1998, 166. (686) Siegmund 1998, 166; Müssemeier *et al.* 2003, 69-70. (687) Feyeux 2003, 37, Fig. 13, T.55, T.55.3k.

Nails

23 (23-3-1); 46 (46-2-1); 49 (49-5-1); 60 (60-8-1); 66 (66-2-1); 0 (0-0-6)

An iron nail was found in approximately the middle of the grave, in association with a decorated iron belt fitting; a corroded iron is present in the collection.

Beckers and Beckers mention that six iron nails (46-2-1) were found dispersed throughout grave 46. Iron fragments, in a very bad condition, are present; they might be fragments of the six nails.

The iron nail from grave 49 is in available in corroded and incomplete condition. It was found at a depth of 90 cm, close to the northern wall in the middle of the grave. Other finds from this grave are a seax, a knife, and some indeterminate iron fragments.

Fragments of an iron nail (60-8-1) were recorded as finds from grave 60. They might be present in the box in which many iron fragments from grave 60 are stored but it will be difficult to reconstruct objects from the pile of iron fragments, which obviously belonged to different objects. The recorded fragments were found scattered throughout the grave.

An iron nail was found in the proximity of the plate buckle from grave 66, which was found close to the northern wall, in the middle of the grave. It is no longer available in the collection.

Four iron nails (0-0-6), probably coffin nails are known from the cemetery, but are without find number.

Of all the graves in which iron nails or fragments of iron nails were found only grave 60 held a wooden container. Iron nails are generally identified as wooden container nails, but in view of the absence of wooden containers in the majority of the graves and their find locations inside the graves other meanings might be considered.⁶⁸⁸

Fragments: copper alloy

18 (18-5-1)

The copper alloy fragments (18-5-1) from grave 18 are the parts of what was in the catalogue of Beckers and Beckers identified as a chain link. The fragments are not restored, and it is in fact difficult to identify them as such. The fragments were found towards the western wall, in the middle of the grave, thus near the presumed former location of the head. Some other copper alloy fragments were mentioned to have been found at the same location as the identified chain link; for now they are identified as parts of the same object. Other finds from this grave are a seax, knife and a number metal objects which seem to be belt fittings. Copper alloy chain links are generally known from the graves of women.

Fragments: iron

12 (12-4-1; 12-5-1); 17 (17-2-1); 37 (37-1-2); 46 (46-1-1; 46-4-1); 49 (49-4-1); 54 (54-3-1); 55 (55-2-1; 55-3-1); 56 (56-2-1); 60 (60-9-1; 60-10-1; 60-11-1; 60-12-1); 69 (69-2-1); 0 (0-0-8)

Numerous iron fragments from a number of graves are present in the collection; their restoration might reveal their original function.

From grave 12 an indeterminate iron fragment with wood remains is present (12-4-1), as are three indeterminate iron fragments, of which one is triangular and one seems to be the hilt of a knife. They might all be fragments of a knife.

Two indeterminate iron fragments were found in the lower part of grave 17; they are no longer present in the collection.

Two indeterminate iron fragments were recorded as finds from grave 49. One was described as a triangular shaped object with a length of 13.0 cm of which one extremity has a width of 4.5 cm and the other a width of 1.5 cm. It is now present in a fragmented and corroded condition and appeared to be belt fittings of type Bülach (49-2-1.1 and 1.2: see the section on belt fittings). The other indeterminate fragment (49-4-1) was described as a ‘pear shaped’ object, but its dimensions were not given. It is no longer present in the collection. The object was found at a depth of 90 cm, close to the northern wall, in the middle of the grave. The other finds from grave 49 are, next to the belt fittings, a seax, a knife and an iron nail.

A number of mall iron fragments; presumably of an iron buckle are assigned to grave 54 on the basis of the original find number. The associated card refers to the fragments as those of a buckle, but this is not certain.

Three corroded iron fragments (37-1-2) were recorded as finds from grave 37 in the initial catalogue. The X-ray photo shows that the smaller fragments are remnants of nails. The fragments were found nearly in the middle of the grave, 145 cm from the short western wall of the grave.

Various iron fragments (46-1-1) were found at a depth of 180 cm in grave 46, among which a corner mount of probably a wooden container; the fragments are no longer present in the collection. A part of an iron knife or seax (46-4-1), found along the southern wall of this grave was also recorded as find; a rectangular fragment which might be the hilt of a knife or seax is present in a corroded condition.

Iron fragments were in the initial catalogue recorded as find from grave 55; it was recorded that four fragments seemed to be rivets, of which three (55-2-1) were found lying in a row, 55.0 cm from the southern wall, and one (55-3-1) was found 40 cm from the northern wall. The two other fragments were indeterminate of which one had wood attached to it. In the restoration atelier several corroded iron fragments, with wood, are present; they might be the fragments referred to in the catalogue.

Iron fragments (56-2-1) were in the catalogue mentioned to have been found in grave 56. They are described as two indeterminate iron fragments, found 90 cm from the western wall and 55 cm from the northern wall, at a depth of 90 cm. Fragments, falling apart, are in poor condition present in a box in the restoration atelier.

Indeterminate iron fragments were found 60 cm from the western wall in the middle of grave 56; they are present in corroded condition but it cannot be established to what sort of object(s) they actually belonged.

Various iron fragments (58-6-10, some with rivets, were recorded as find from grave 58 and were identified as the grip of a shield; they are no longer present in the collection.

Numerous iron fragments were found scattered throughout grave 60; the fragments are stored together in a box. Some objects can be identified on the basis of these remnants.

Fragment 60-6-1 is an iron fragment with a small round copper alloy fragment. It was found in association with a knob close to the former location of the head. Fragments 60-9-1 are fragments of and iron knife, fragments 60-10-1 are of an iron arrowhead, fragments 60-11-1 are of the socket of an iron arrow head, fragments 60-12-1 are of what might be the socket of an iron lance head.

Three amorphous indeterminate iron fragments (69-2-1) were recorded as finds from grave 69; an iron nail and indeterminate fragments are present.

A number of iron fragments, indeterminate (0-0-8) are known from the cemetery but are without find number.

Wood fragments

52 (52-2-1.1; 52-2-1.2); 60 (60-7-1); 69 (69-5-1)

The catalogue refers to thin ‘plates’ of wood (52-2-1.1), found nearly at the bottom of grave 52, 100 cm from the western wall and 90 cm from the southern wall, together with an indeterminate iron fragment (52-2-1.2). Iron corrosion coloured the wood fragments red. They might have been of a wooden bowl or of the coffin bottom. Five fragments are at present available in the restoration atelier. It is not clear what the corroded, more or less triangular shaped iron object (52-2-1.2) represents. It might a belt fitting plate (counter plate or plate of a plate buckle). Since the only other find from this grave is a biconical pot this conclusion cannot be emphasized with matching belt fittings. A nail shaped object, in a bad condition, is stored in a box with a note referring to grave 52; it remains nonetheless uncertain whether it belongs to this grave since it was not recorded in the initial catalogue.

Various wood fragments of the coffin were found in grave 60, and are also present in the available collection.

Some thin wood fragments, of which it was mentioned that they were not of a wooden container (coffin or chamber) were found scattered throughout grave 69.

All the preserved fragments indicate that several wooden objects might have been deposited in the Stein cemetery; organic materials as wood are the first to decay and only leave some minor traces.

Human remains

66 (66-4-1; 66-4-2)

Human bone fragments were found alongside the northern wall, in the middle of grave 66, as were some parts of a child’s skull in the north-western corner of the grave. These human remains are no longer present.

(688) See chapter 3 on nails in graves.

PART 2
INTERPRETATIONS

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5 The chronology of individual graves and chronological structure of the cemeteries

Table 5.1
The burial phases of Sittard, Obbicht and Stein in relation to the typo-chronology schemes of the Franken AG (2003) and the burial phases of Bergeijk (2012) and Posterholt (2013).

Franken AG 2003		Bergeijk 2012		Posterholt 2013		Sittard-Kemperkoul 2016		Obbicht-OM 2016		Stein-GB 2016	
Phase	Dates	Phase	Dates	Phase	Dates	Phase	Dates	Phase	Dates	Phase	Date
1-2	400-460/80										
3	460/80-510/20										
4	510/20-565			PH I	510/20-580/90	S-K I	510/20-565	O-OM I	510/20-565	S-GB I	510/20-565 (585)
5	565-580/90	BE I	565-640/50	PH II	580/90-640/50	S-KIIa	565-610/20	O-OMIIa	565-610/20	S-GBIIa	565-610/20
6	580/90-610/20					S-KIIb	565-640/50	O-OMIIb	565-640/50	S-GBIIb	565-640/50
7	610/20-640/50					S-KIIc	580/90-640/50	O-OMIIc	610/20-640/50	S-GBIIc	610/20-640/50
						S-KIId	610/20-640/50	O-OMIId	610/20-670/80	S-GBIId	610/20-670/80
8	640/50-670/80	BE II	640/50-670/80	PH III	640/50-670/80	S-KIIla	640/50-670/80	O-OMIII	640/50-670/80	S-GBIII	640/50-670/80
						S-KIIlb	640/50-c. 750				
9	670/80-710	BE III	670/80- c.750	PH IV	670/80- c. 750						
10	710->725										

es, a number of burial phases are constructed for each cemetery. This is not an unequivocal practice since the majority of the graves could not be dated to a single (Franken AG) phase (table 5.1). Bounded chronological phases (which do not overlap with other phases) with a significant number of graves were also impossible to create on the basis of the variable date ranges assigned to the graves of the three cemeteries. The datable graves are therefore assigned to three broad phases. The middle phases are for all three cemeteries relatively long and consist of the majority of the graves. It was decided to divide these middle phases in sub phases, which show some overlap (table 5.1). This practice made it possible to assign graves unambiguously to broad general burial phases for which the internal chronological development is represented by overlapping sub phases. The sub phases are slightly different for the three cemeteries, depending on the length of the date-ranges that could be assigned to the individual graves. The chronological significance of these sub phases is less straightforward than the general phases but they nonetheless contribute to the understanding of the chronological development of the three cemeteries. In what follows calendar dates are given for the graves discussed; they represent the phases in the studies of Siegmund and the Franken AG.

The Sittard-Kemperkoul burial phases

Of the 88 recorded graves one appeared to be wrongly identified (context 27: now a ‘discarded context’) and three are identified as possible inhumation graves. Grave goods were found in 64 of the 84 burials (table 5.2). The majority of the burials were intact and the finds assemblages discovered in these undisturbed graves can be assumed to represent the original constitution of the grave inventories, apart from the possible decayed organic goods. Some graves were partly destroyed by recent construction work or early

Table 5.2
The number of graves per Sittard-Kemperkoul burial phase.

Sittard-Kemperkoul burial phases	Number of graves
S-K I: 510/20-565	0
S-K IIa: 565-610/20	12
S-K IIb: 565-640/50	10
S-K IIc: 580/90-640/50	4
S-K IId: 610/20-640/50	11
S-K I+II: 510/20-640/50	3
S-K IIIa: 640/50-670/80	4
S-K IIIb: 640/50-c. 750	5
Graves with chronological indifferent finds	7
Graves without datable finds	16
Graves without finds	15
Discarded context	1
Total	88

grave reopening (see chapter 3). These graves are dated on the basis of the remaining finds. These date ranges are less certain than those assigned to the undisturbed graves, but nonetheless contribute to the chronological understanding of the cemetery. A number of finds documented in Zoetbrood’s thesis are now missing from the collection but are, if possible, classified and dated on the basis of the provided descriptions (see chapter 4 and the catalogue of graves and finds). For each Sittard burial (sub) phase a discussion follows on how many graves they consist of and on the basis of which arguments each individual grave is assigned to them.

Burial phase S-K I: 510/20-580/90

This burial phase is in all probability not present in the Sittard-Kemperkoul cemetery but is identified as a separate phase since a number of graves have relatively broad date ranges assigned to them. They start in this first phase, or even somewhat earlier, but

This chapter deals with the construction of the chronological burial phases for the three cemeteries and the decisions on the basis of which each individually dated grave was assigned to these burial phases. This chapter is therefore the basis for the detailed analyses of the chronological development and topography of the three cemeteries in relation to the possible history of the connected communities, which can be found in chapter 6, and change and continuity in various burial practices, which is discussed in chapter 7.

Dating individual graves: Methods and restrictions

It was not possible to date the grave goods and graves from the three cemeteries independently with current dating techniques such as seriation or the topo-chronological method. The datasets are too small for these techniques, and the interpretative problems with regard to the associated procedures and outcomes are also manifold.¹ Mortuary archaeologists, however, have stated that an independent typo-chronology scheme for the Meuse Valley and the neighbouring regions in the southern Netherlands and Belgium is required.² Such a scheme can offer new insights and produce chronological overviews which are more consistent than those obtained on the basis of typo-chronology schemes external to the Meuse Valley. Since this scheme is not yet developed, the dating of the grave goods and graves from Sittard-Kemperkoul, Obbicht-Oude Molen and Stein-Groote Bongerd depends com-

pletely on the available typo-chronology schemes from other regions. The most important are those of Siegmund³ and the Franken AG.⁴ They include the wide range of finds from cemeteries in the Middle Rhine area and the *Kölner Bucht*. The problems associated with the use of these schemes in short relate to the cultural differences between these research areas and the area of the three cemeteries in the vicinity of the Meuse River⁵; local differences with regard to material culture and the associated date ranges are not covered in the available typo-chronology schemes of other regions. These problems are partly counterbalanced with the dating of the graves from Sittard, Obbicht and Stein to relatively broad date ranges (table 5.1).

The graves of the three cemeteries are accorded date ranges on the basis of all their dated finds, but not all the finds have similar chronological significance. The date ranges assigned to various types of prominent belt fittings have proven to be strong chronological indicators on a supra-regional level.⁶ Pottery production shows differences on a local level, although within the margins of the general convention; regional typo-chronology schemes of pottery are thus not completely interchangeable.⁷ Common beads, especially those without decoration, appear to be difficult to date to restricted date ranges, as is the variety of utensils such as for example knives and fire steels.⁸

The date ranges assigned to the graves are thus not an average of the date ranges assigned to the associated grave finds, but are reasoned ones. This reasoning can for each grave be found in the following sections. On the basis of the established grave date rang-

((1) See for a discussion of dating techniques and the problems involved Kars 2011; 2014. (2) Theuws/Van Haperen 2012, 142. (3) Siegmund 1998. (4) Müssemeier et al. 2003. (5) This is for instance visible in the distribution patterns of many objects that have their densest circulation either in the Meuse valley or the Rhine valley (Theuws/Van Haperen 2012, 185). (6) See the discussion of the role of belt fittings in chronological systems by Koch 2001, 26-44. (7) See for instance the differences between biconical pots and their decoration in northern France, on the one hand; and Belgium, the Netherlands and the Rhineland on the other (Legoux/Périn/Vallet 2004 and Müssemeier *et al.* 2003) (8) The correspondence analyses of beads by Siegmund and Müssemeier et al. show a dense clustering of beads in the centre with only relatively few beads at both extremes dating to the late Roman/early Merovingian period at one end and to the late Merovingian period at the other end (Siegmund 1998, 57-58 and Tafel 2; Müssemeier et al. 2003, 35-36 and Abb. 1).

end in S-K II (565-640/50). They may thus theoretically belong to the first burial phase, but it is more likely that they date somewhat later and belong to the phases to which the majority of the Sittard graves are dated (table 5.2; fig. 6.2). With the analytical identification of this first burial phase it is thus not claimed that burial activities actually took place this early in the burial ground of Sittard-Kemperkoul; the burial objects might date to this early phase, but the associated graves quite certainly date to the phases thereafter.

Burial phase S-K II: 565-640/50

The majority of the datable Sittard graves date to 565-640/50; to be exact 37 graves. Moreover, four graves could not be more precisely dated as to burial phase I and II (see the following sections). It can be assumed that these graves actually date to phase S-KII, which results in a phase that includes nearly half of all the Sittard graves. Another set of graves have date ranges assigned to them which are chronologically insignificant; they may also date to S-KII. Since the burial phase S-KII consists of a large number of Sittard graves it is divided in four sub phases: S-K IIA-IId (table 5.2). These sub phases show some overlap because the variety of date ranges assigned to the graves hindered the establishment of relatively short and clearly bounded phases. Nonetheless, these overlapping sub phases contribute to a better understanding of the chronological development of the cemetery (see also chapter 6).

Burial phase S-K IIA: 565- 610/20

This first sub phase, S-K IIA ((table 5.2; fig. 6.2 and 6.3), is a period of c. 50 years and counts 12 graves (5, 6, 13, 15, 16, 24, 26, 28, 37, 46, 50 and 78). Grave 5 is dated on the basis of a biconical pot, a lance head and an axe. The other finds from this grave could not be dated or are chronologically insignificant, as for example the shears and fire steel. The biconical pot and axe are dated not later than 610/20 in all the classification schemes used. The date range of the axe starts at 565/70 and that of the pot at 565 or c. 600, depending on the classification scheme used. The date range assigned to the lance head starts at 565 or 585 and ends at 620 or 640. It is decided to date this grave to S-K IIA.

Grave 6 was dated on the basis of a biconical pot alone. Other finds, apart from a pottery shard (not precisely datable), were not found in this grave. The pot dates to 565-610/20; the grave is dated accordingly. Grave 13 also was dated on the basis of a biconical pot alone (570-610); the grave is dated to the same date range.

The single find from grave 15 is a palm cup which dates to the end of the sixth and the beginning of the seventh century on the basis of three different typo-chronology schemes; grave 15 fits in the date range of burial phase S-K IIA.

Multiple finds were discovered in grave 16. The egg-shaped pot and palm cup (missing, dated on the basis of the description in

Zoetbrood's thesis) are considered to be more reliable chronological indicators than the string of beads. However, a problem arises: the egg-shaped pot dates to 670-740 and the palm cup (on the basis of three typo-chronology schemes specifically designed for glass vessels) to the second half of the sixth and beginning of the seventh century; or the glass beaker is an old object within the assemblage, or the egg-shaped pot entered the grave later. This latter option is the most plausible since the pot was found in a small pit which disturbed the original outline of the grave and is thus of a later date. The ensemble of beads falls within the date range 485-705 and can date as early as the palm cup. Since the egg-shaped pot is in all probability not an original component of the grave goods assemblage, the grave is dated to burial phase S-K IIA.

Grave 24 was dated on the basis of a biconical pot (date range: 530-640) and lance head (date range: 565-625). The pot could not be classified more precisely than three Siegmund types; two of these types date the pot to 530-570, and one type dates it around 640. The grave is therefore dated to phase S-K IIA.

An assemblage consisting of belt fittings (565-610/20), a palm cup (550-610) a lance head (565-620/40) and a seax (530-610) dates grave 26 to phase S-KIIa rather unambiguously.

Grave 28 is dated on the basis of a biconical pot and lance head. They both date to 565-610/20, although the lance head is accorded a date range ending around 640 by the Franken AG. It is decided to date the grave to phase S-K IIA, although the possibility that the grave dates to the next sub phase is not completely rejected.

The belt fittings, an axe, and a set of rivets from grave 37 all have date ranges which fall within phase S-K IIA. The shears and arrow head from this grave could not be dated more precisely as to the entire Merovingian period; they are non-indicative.

Grave 46 is dated on the basis of a pottery jug alone; this object forms a rather feeble basis for the dating of this grave since it is rather difficult to date unambiguously. The jug dates, according to the typology scheme of Siegmund, to 585-610 and thus within the date range of phase S-K IIA. According to the Franken AG, however, the date range associated with this type of jug starts as early as 510/20 and ends around 580/90. The string of beads (four beads) from this grave falls within the date range 590/600-705 and is not considered to be a reliable chronological indicator. The beginning of the accorded date range, however, falls within the date range of phase S-KIIa; its date range is thus not incompatible with the jug. It is for now decided to take the date range of Siegmund for similar jugs as a basis for the dating of this grave.

Grave 50 is dated on the basis of a biconical pot alone; its accorded date range (570-600) falls within the date range of phase S-K IIA.

The lance head with closed socket dates grave 78 to 585-625 (Siegmund); since it is the single datable find from this grave it is dated to S-K IIA.

In conclusion it should be mentioned that a number of the graves are dated on the basis of pottery vessels alone. These finds provide a feeble chronological basis since the typo-chronology schemes are assumed to be based on specific regional characteristics as opposed to other categories of objects such as prominent belt fittings. Of the eleven graves of this phase, six have obvious masculine objects such as lance heads and axes. Only two graves have obvious feminine objects: strings of beads. This finds category is unfortunately not a strong chronological indicator. Altogether, the graves of men (5, 24, 26, 28 and 37) are the reliable markers of burial phase S-KIIa.

Burial phase S-K IIb: 565-640/50

This burial phase was identified as a sub phase of c. 100 years because a considerable number of the Sittard graves could not be accorded narrower date ranges. Phase S-K IIb includes ten graves: 9, 11, 14, 19, 32, 34, 36, 76, 77 and 81 (table 5.2; fig. 6.2 ad 6.3).

Grave 9 could be dated on the basis of a biconical pot (585-640 or alternatively 565-640/50)⁹ and a biconical pot fragment (585-640). The dating of the pot is based on the typo-chronology of Siegmund and the Franken AG. It is decided to date it on the basis of the longest date range assigned to the pot.

Grave 11 contained approximately 700 beads. The date range assigned to these beads is 485-705 and is insignificant. The other datable finds from this grave are a biconical pot (565/600- 620/640) and a fragment of a comb with case (530-610). The belt fittings were difficult to date. The grave can thus not be dated more precisely as to phase S-K IIb. The beads match with this date range; none have date ranges assigned to them which start after 640, and only a few are obvious older specimens within the assemblage of grave goods.

Grave 14 is dated on the basis of an extended range of finds: two plate buckles with counter plates (565-610/20), a biconical pot (555-570) a copper alloy bowl (510/20-580/90), a seax (585-655) and a lance (565-640/50). It is decided to date the grave on the basis of the extended date range of the seax and lance head: 565/585-640/50. The early date range of the copper alloy bowl was not considered decisive; it is not impossible that it was an old object in a younger assemblage of finds. In view of the counter plates and biconical pot the grave might also date earlier, to S-K IIA (565-610/20).

Grave 19 could only be dated with a biconical pot fragment. The decoration was indicative for its type identification and dating to 565-630/40.

Grave 32 is dated on the basis of two biconical pots (510/20-565 or 570-640 and 570-610 or 610-640). The date ranges assigned to the pots show differences: the different classification schemes provided different dates for one pot and the other pot could not be classified unambiguously. It is therefore decided to date this grave to a relatively long phase. The beads from this grave are not chronologically indicative.

Grave 34 could be dated with a biconical pot (600-640) and a lance head (565-620 or 640); it is decided to date the grave to S-K IIB on the basis of the date ranges assigned to the lance head since, as mentioned before, pottery vessels are not necessarily strong chronological indicators.

Grave 36 is dated on the basis of a biconical pot (total date range of more than one possible type: 510/25-640) and a back plate (585-640). Although the biconical pot could not be classified unambiguously, the date range of the possible types enables the dating of this grave to S-K IIB. It is considered unlikely that this grave dates to S-KI, since this phase is poorly represented in the cemetery.

Grave 76 is dated on the basis of a spouted pot, which is assigned the exact date range 610-640 according to Siegmund and 565-640/50 according to the Franken AG. A key, also found in this grave, cannot be dated more precisely as to 470-610 and thus to a date range ending before that of the spouted pot. The glass bell beaker from this grave is dated to 550-600; the consulted typo-chronologies show some discrepancies but they do not date it after 600. It is nonetheless decided to date the grave to the rather broad date range of phase S-K IIb. The date ranges of the other datable finds from this grave, the strap end and finger ring, show overlap with it.

Grave 77 was dated on the basis of a lance head alone which falls within the date range 565-640 according to Siegmund. According to the classification scheme of the Franken AG, the lance head dates to the previous phase (S-KIIa: 565-610/20). Since this is the single datable find from this grave, it is safe to place it in the broader phase S-K IIB.

Grave 81 contained a biconical pot (565-640/50), jug (585-610), dish (510-650) and lance head (565-620). The jug was alternatively classified and dated to 400-485 and would, according to this classification, be an old element in the grave goods assemblage. Dating this grave to S-K IIB seems the most plausible option.

Sub phase S-K IIb includes four graves with obvious masculine grave inventories (seaxes and lance heads), and two with obvious feminine inventories (beads). Two of these graves also contained belt fittings (11 and 14). The other graves were dated on the basis of pottery or a glass vessel alone. Unfortunately, the grave inventories could not provide more precise dates.

Burial phase S-K IIC: 580/90-640/50

This phase is shorter than phase S-K IIb; it starts somewhat later, but ends around 650 as phase IIB. This narrower phase is of course more indicative for the reconstruction of the chronological development of the cemetery. The other, broader, phases serve to underline the discovered patterns. Burial phase S-K IIC lasts c. 65 years and consists of four graves: 30, 33, 39 and 71 (table 5.2; fig. 6.2 and 6.3).

Grave 30 was dated on the basis of belt fittings (610/20-640/50), a lance head (565-640/50) a biconical pot (565-640/50) and a seax (580/90-640/50); it seems plausible to date this grave to a date range ending around 640/50 on the basis of the belt fittings, which

(9) When dates and alternative dates are mentioned the first refers to phases and date ranges defined by Siegmund 1998, the second to phases and date ranges defined by Müssemeier et al. 2003. (10) Groups of narrow graves belong to the late phase of the cemeteries at Bergeijk and Posterholt. See Theuws/Van Haperen 2012; De Haas/Theuws 2013.

are reliable chronological indicators, but starting around 580/90 on the basis of the other finds, and thus to S-K IIC.

Grave 33 contained a biconical pot and a spouted pot (both dated to 580/90-640/50). The Franken AG date the biconical pot earlier (510/25-580/90) than Siegmund; in view of the poor presence of burial phase S-K I, it is for now decided to follow the Siegmund date range and thus to assign this grave to burial phase S-K IIC.

Grave 39 is dated on the basis of a pottery bottle (565-640/50) and a seax (510/25-580/90; sporadically appearing until 640/50); placing this grave in S-K IIC on the basis of the bottle seems a plausible option since the date range of the seax ends around 640/50.

Grave 71 contained a biconical pot which dates to 585-610 (Siegmund) and 510/25-640/50 (Franken AG). The finger ring from this grave is dated to 560/70-660/70 (L/P/V) and the bracelet is chronologically insignificant. It seems a plausible option to date this grave to S-K IIC, although it might also date later in the Merovingian period.

Burial phase S-K IId: 610/20-640/50

This is the shortest sub phase in the general phase S-KII; it lasts approximately 40 years (table 5.2; fig. 6.2 and 6.3). This sub phase consists of ten graves: 3, 20, 31, 41, 47, 49, 79, 84, 86, 87 and context 29 (finds without grave context; a possible grave).

Grave 3 could be dated on the basis of a ribbed beaker (600-700) and biconical pot. Depending on the classification scheme used, the biconical pot is dated to 565-640/50 or 600-625. The knife from this grave is not indicative for the dating of the ensemble of grave goods. It is decided to take the beginning of the date range of the ribbed beaker as a starting point of the date range assigned to the grave.

Grave 20 was dated on the basis of belt fittings (610/20-640/50). An axe (565-610/20) and a seax (585-655) were also found in this grave. Because belt fittings are generally accepted as rather strong chronological indicators it is decided to date this grave to phase S-K IId, which implies that the axe is an old item within the grave.

Two belt fittings (610-640), a biconical pot (510/25-580/90), and two lance heads (565-640/50) are identified as context 29, an ensemble of finds without traces of a grave construction or pit. It is decided to date this ensemble to phase S-K IId on the basis of the belt fittings; the biconical pot is thus assumed to be an older object within the assemblage (if they originally belonged together).

The belt fittings from grave 31 date this grave to 610-640. The biconical pot might date earlier: depending on the classification scheme used, to 530-555 or to 510/25-640/50. The two finds date this grave, however, not later than 640/50. The seax from this grave might date later: to 640-705 according to Siegmund and to the broader range 580-710 according to the Franken AG. The sword from this grave was difficult to date. It is for now decided to date this grave on the basis of its belt fittings, and thus to phase S-K IId. The date range of the seax matches with this phase according to the Franken AG but not according to Siegmund.

Grave 41 is dated on the basis of a plate buckle (610-625). This

plate buckle was decisive because the seax from this grave could not be unambiguously identified as one of the Siegmund or Franken AG seax types.

The single find from grave 47 is a biconical pot which dates, according to Siegmund, to 610-640, but according to the Franken AG to 610/20-670/80. The grave is for now dated to S-K IId, but it might also date to a later phase.

A lance head, belt fittings and a spouted pot are the datable finds from grave 49. The lance head is dated to 625-705 according to Siegmund, and to 510/25-710 according to the Franken AG. The spouted pot is dated to 600-625 or 530-570 (Siegmund), and alternatively to 510/25-580/90 (Franken AG). The belt fittings are dated to 610-640, and the shield boss to a relatively long date range according to the Franken AG (585-710) and to a narrower date range according to Siegmund (610-640). It is decided to place the grave in S-K IId of which the date range is more or less an average of all the available date ranges and in accordance with the date range assigned to the belt fittings.

Grave 79 is dated on the basis of a strap end with silver inlays (610-640). The single datable bead from the string of beads was not decisive for the dating of this grave; its broad date range overlaps with S-K IId.

The belt fittings from grave 84 are dated to 610-640. The seax from this grave dates to 640/50-670/80 or alternatively to 640-705, and the seax rivets to 610-670. It is decided to place the grave in S-K IId on the basis of the belt fittings and the seax rivets.

Grave 86 is dated on the basis of belt fittings (610-640). The other datable finds, a lance, seax and biconical pot, all date, depending on the classification scheme used, to the second half of the sixth and to the seventh century. For now the grave is dated to S-K IId since belt fittings are rather strong chronological indicators.

Grave 87 was dated on the basis of a copper alloy bracelet, which Wührer dates to 600-720 and Siegmund to 610-640. The simple bronze rings from this grave are dated to 520/30-630/40 with the typo-chronology scheme of Legoux, Périn and Vallet. Considering the start of the date ranges accorded to the copper alloy bracelet, and the end of the date ranges accorded to the simple copper alloy rings (which are in line with Siegmund's dating of the identified bracelet), this grave is dated to 610/20-640/50 and thus to burial phase S-K IId.

The graves with belt fittings (20, 41, 79, 86 and those of context 29) seem to form the most reliable evidence for the reconstruction of the chronological development of the cemetery. This phase contained fewer graves with only a ceramic pot than the earlier phases. It contained a relatively large number of graves (20, 29, 41 and 86) with obvious masculine objects (axe, seaxes and lance heads) and two graves with obvious feminine objects (graves 79 and 87).

Burial phases S-K I + S-K II: 510/20-640/50

The graves assigned to burial phases S-K I and S-K II could not be dated more precisely as to these two first burial phases; three graves are concerned: 4, 80 and 82 (table 5.2; fig. 6.2). These graves

are the least indicative for the reconstruction of the chronological development of the cemetery. The following discussion evaluates whether they are more likely to date early or late in these two phases.

The single find from grave 4 is a spindle whorl which dates to 470/80-630/40. The grave can thus not be dated more precisely as to phases S-K I+II.

Grave 80 contained a considerable number of beads with a long date range. The spindle whorl from this grave dates to 470/80-630/40 and the biconical pot to 530-570 (Siegmund) or to 510/25-580/90 (610/20), according to the Franken AG. According to Siegmund, the biconical pot belongs to S-K I. Since burial phase S-K I is poorly represented in the Sittard cemetery, and the date ranges of the other objects from the grave cover a rather long period, it is decided to date this grave to burial phase I+II. It is unlikely, especially in view of the long date ranges of the other objects, that it dates to burial phase S-K I. The grave might, however, date early in burial phase S-K II.

The dish from grave 82 is dated to 555-640 (Siegmund) and 510-650 (Franken AG). The plate buckle from this grave was difficult to date. It is thus decided to place this grave in burial phases I+II; it is the most undisputable option.

Burial phase S-K IIIa: 640/50-670/80

The graves assigned to this phase date clearly later than those of the general phase S-K II. The four graves of this burial phase are 8, 25, 43, and 45 (table 5.2; fig. 6.2).

Grave 8 was dated on the basis of shoe fittings (610-640) and a palm cup (complete date range of the various typo-chronologies: 610/20-700, although predominantly 630/40-670/80). The single bead from this grave covers a lengthy date range. It is decided to date the grave on the basis of the palm cup to S-K IIIa. The shoe buckles might indicate that the grave dates early in this phase.

Grave 25 is dated on the basis of the equal armed brooch: 630/40-670/80. The beads are considered to be less indicative for the chronological phasing of the grave. Their date range covers the period 555-705.

The equal armed brooch from grave 43 dates this grave to 630-670/80, and thus to S-K IIIa. The beads from this grave are missing; the plate buckle is severely corroded and cannot be classified and dated.

Grave 45 contained a plate buckle and counter plate, which date to 640-670; the grave is thus dated accordingly and can be considered as rather unambiguous evidence for this burial phase.

Burial phase S-K IIIb: 640/50-c.750

Burial phase S-K IIIb starts at the same time as phase IIIa, but has a longer date range. The graves assigned to this phase are 40, 53, 59, 64 and 73 (table 5.2; fig. 6.2). This section discusses why the graves could not be assigned to a narrower phase, and whether it is indeed possible to identify them as the youngest graves with finds of the cemetery.

Grave 59 is one of the few graves that can be dated after 670 with complete certainty. The silver earring is a late specimen within the Merovingian burial record and dates to 670-705. The beads from this grave are dated to longer date ranges, which also cover phase IIIb. The simple iron rings date earlier (520/30-630/40), according to Legoux/Perin and Vallet, but their typo-chronology scheme is frequently different from those of Siegmund and the Franken AG, most probably because their research area is a 'culturally' different one. Simple iron rings are not dated by Siegmund or the Franken AG.

Grave 40 could only be dated on the basis of its lance head. It dates to 520/25-710 according to the Franken AG, to 625-705 according to Siegmund, and to 630/40-670/80 according to Legoux, Périn and Vallet. It is decided to date this grave to the last burial phase with grave goods of the cemetery, since this is the least disputable option. Again, this grave is not an unambiguous example of this burial phase.

Grave 53 is dated to 640-740 on the basis of a foldable knife. Other finds were not found in this grave. It might thus very well be one of the latest graves with grave goods in this cemetery.

Grave 64 is dated to S-K IIIb on the basis of the equal armed brooch (630/40-710). The single amber bead from this grave could not be dated precisely. This grave also might be one of the latest graves with grave goods in the cemetery.

Grave 73 could be dated only with one bead: 610-705 is its broadest date range. It belongs thus to a phase after 610. Placing it in the last burial phase with grave goods, however, is the least questionable option.

As mentioned, burial phases S-K IIIa and b have date ranges which start around 640; phase IIIa stops around 670, and burial phase IIIb is somewhat longer. Graves 59 is the only grave which can be dated to the last half of burial phase S-K IIIb, and thus after S-K IIIa. Graves 53 and 64 obviously date to S-K III, but it is not certain whether they date late or early in this phase; they might thus also date to phase S-K IIIa. The other graves assigned to burial phase S-K IIIb are roughly estimated to be the youngest graves with grave goods, but it is not certain where exactly in the second half of the seventh century or beginning of the eighth century they should be placed. It is safe to suggest that the graves of burial phase S-K III as a whole represent the last burial activities with object deposition in the cemetery. In chapter 6, the chronological development of the cemetery is discussed in more detail.

Graves with chronologically indifferent finds

A number of graves are chronologically indifferent: they contained finds that cannot be dated more precisely as to the entire Merovingian period or to a considerable broad date range exceeding those of the identified Sittard-Kemperkoul phases. The graves with only chronological indifferent grave goods are 2, 17, 23, 38, 57, 60, and 88 (table 5.2; fig. 6.2).

Grave 2 contained only beads; their assigned date ranges are

considerably broad. The grave is therefore identified as chronologically indifferent.

Grave 17 contained an unidentifiable object and a spindle whorl which is difficult to date.

The two arrow heads and the pair of shears from grave 38 are finds which cannot be dated precisely. The arrow heads date to 450-630/40 and the shears to 470/80-710. The grave can thus be dated to the entire Merovingian period.

Grave 23 contained only beads. Two types have a rather long date range: 485-705. The other types are dated to 580-705; it cannot be established to which S-K phase the grave belonged.

The datable beads from grave 60 fall within the date range 555-705; the grave cannot be dated to a specific Sittard-Kemperkoul burial phase.

A knife is the single find from grave 57; it cannot be dated precisely and neither can this grave.

Grave 88 contained a bead that is assigned a long date range, mounts which could not be dated, and a pottery shard of which the assigned type and thus date range is rather ambiguous. It is decided not to date this grave on the basis of such feeble evidence.

Graves without datable finds

A number of graves contained finds, but could not be dated on the basis of their grave inventories, mainly because the (remnants of the) finds were unidentifiable, and thus not datable (table 5.2; fig. 6.2). The graves with no other finds than unidentifiable objects are 1, 35, 44, 48, 63, 83 and 85 (see the catalogue of graves and finds). Of graves 12 and 18 only the beams were preserved; they may have contained finds. Since it is not certain whether they were originally without finds they are depicted as graves without datable finds on the plan. Grave 7, 10 and 21 are possible graves and are thus also depicted as graves without datable finds. A series of graves (52, 54, 55 and 56), which were only partly excavated and preserved because they were disturbed by a gas pipe trench, were probably part of the group without finds (see below) since their remains indicate that they were rather narrow graves which is a characteristic of the late graves without finds.¹⁰ Since it cannot be established with certainty whether they were originally without finds, they are for now depicted as graves without datable finds.

Graves without finds

Fifteen graves (22, 51, 58, 61, 62, 42, 65, 66, 67, 68, 69, 70, 72, 74 and 75) were in all probability all originally without finds (table 5.2; fig. 6.2). The outlines of the graves are intact, so it is safe to assume that they were undisturbed and originally without finds. These graves without finds are clearly confined to the north-western section of the cemetery and may represent the last burial activities to which some of the disturbed graves in this section also belong; this cannot be established with certainty (see the section on graves without datable finds). Graves 22, 51 and 62 are the only graves without finds which are located in other parts (the north-eastern, middle and southern segments) of the cemetery.

The total date range of the cemetery and the number of graves per phase

The finds from the graves in the cemetery of Sittard-Kemperkoul (S-K I-III) cover the time span 510/20-750; it is however unlikely that the burial ground was in use as early as the beginning of the sixth century. Only three graves were assigned date ranges which start around 510/20 but end around 640/50. In view of the frequent use of the cemetery in the second half of the sixth and first half of the seventh cemetery, it seems unlikely that these graves date to the beginning of the sixth century. Moreover, objects can be subject to prolonged circulation before being deposited. It is therefore also questionable whether a considerable number of graves were also actually present in the burial ground during the beginning of Sittard sub phase IIa (565-610/20). It is safe to suggest that the burial ground came into use in the course of the second half of the sixth century. The cemetery was intensively used around 600 and the first half of the seventh century.

The two burial phases covering the last phase of object deposition (S-K IIIa+b) in the second half of the seventh century and beginning of the eighth century do not represent an accurate image. Grave 59 is the only grave that can be dated after 670 and thus to the last half of burial phase S-K IIb, and thus without doubt after S-K IIIa; the other graves represent only the broad burial phase III; it is clear that they date after 640/50, but it is not certain whether they date after 670/80. The ten graves of burial phase S-KIII are roughly spoken the youngest graves with grave goods, but it is not certain whether they date as late as the beginning of the eighth century. It is therefore proposed that the practice of object deposition with the dead covers the period of approximately the second half of the sixth century to somewhere just before the end of the seventh century. The cemetery was in use for interments with objects for approximately 100 to 120 years.

However, the end of burial activities in the Sittard cemetery is not marked by the last burial phase of object deposition. The cluster of empty narrow graves in the north-western section of the cemetery seems to represent the last burial phase. This cluster counts eleven graves. They might be contemporary with the last graves with objects, but they can also be evidence of burial activities after object deposition with the dead stopped.

In view of the limited number of empty graves it is assumed that the burial ground was in use not long thereafter; a period of c. 120-130 years during which the burial ground was used seems therefore plausible, and it would have been abandoned around 700. The analysis of the chronological development of the cemetery as a whole, in relation to the possible history of the associated communities, will be discussed in more detail in chapter 6.

The Obbicht-Oude Molen burial phases

The cemetery of Obbicht-Oude Molen consists of sixty-four graves, according to the published records. One grave (grave 65) was depicted on the cemetery plan but was mentioned to have been found at some distance from the excavated cemetery (it is not known where exactly). Three graves appeared to consist of two distinct superimposed burials. The actual excavated cemetery consisted thus of sixty-seven burials and one isolated grave. Of the sixty-eight graves, fifty-five graves contained grave goods of which forty-five could be dated on the basis of these finds. The other ten graves contained finds which could not be classified or dated and one grave could not be dated more precisely as to the entire Merovingian period (table 5.3). The Obbicht burial phases are established on the basis of the date ranges accorded to the other graves (table 5.1).

Burial phase O-OM I: 510/20-565

Three graves can be identified as the earliest graves of the cemetery; graves 65 (the isolated grave), 17 and 21.

Grave 65 is dated to 450-550 on the basis of a glass jug alone. The other find from this grave is described by Beckers and Beckers as a globular burnished beaker of fine ware on a foot and with a straight neck; this description provides insufficient information for a more specific identification. On the basis of the glass jug it is decided to identify grave 65 as an early Merovingian grave. Unfortunately, the grave is only recorded as an isolated grave discovered when gravel was extracted from the *Hinsberg*. It is not known where exactly this was but since it was published in association with the cemetery of Obbicht, it is for now assumed to have been found at some distance, although not far, from the cemetery (its location on the cemetery plan is thus inaccurate; see also chapter 2). If the grave was found close to the excavated cemetery, it might stand for an early phase of the cemetery of which the other graves may have been destroyed.

Grave 17 is dated on the basis of two biconical pots. One pot is dated to 530-555 and the other one to 530-570 or 555-570, according to Siegmund. Both pots are dated to 510/25-580/90 according to the Franken AG. The grave belongs thus to the earliest phase of the cemetery according to the date ranges assigned to both pots.

Grave 21 is dated on the basis of a red pottery bowl alone, which is dated to 530-555. Since it has a prominent foot ring, the proposed early date range seems plausible. However, typo-chronologies of pottery vessels can depend on local characteristics. Considering grave 21 as one of the earliest graves of the cemetery on the basis of the dish alone remains questionable since it could also have been deposited in a grave of a later phase.

The first burial phase in Obbicht is thus identified on the basis of graves with pottery or glass vessels alone. In the phases thereafter other finds entered the graves.

Table 5.3
The number of graves per Obbicht-Oude Molen burial phase.

Obbicht burial phases	Number of graves
O-OM I: 510/20-565	3
O-OM IIa: 565-610/20	15
O-OM I+IIa: 510/20-610/20	1
O-OM IIb: 565-640/50	18
O-OM IIc: 610/20-640/50	3
O-OM I+IIc: 510/20-640/50	4
O-OM IId: 610/20-670/80	1
O-OM II: 565-670/80	1
O-OM I+II: 510/20-670/80	1
O-OM III: 640/50-670/80	2
Graves with finds now missing	3
Graves without datable finds	5
Graves without finds	11
Total	68

Burial phase O-OM II: 565-670/80

The majority of the Obbicht graves date to the period 565-670/80: to be exact thirty-eight graves or nearly half of the cemetery (table 5.3., fig. 6.6). Moreover, six graves could not be dated more precisely as to burial phase I or II (see the following section). Assuming that these graves actually date to phase O-OMII means that this phase consists of more than half of all the Obbicht graves. Another set of graves have date ranges starting in O-OM II but ending in phase O-OM III; these might also date to (the end of) phase O-OMII. Because burial phase O-OMII includes the majority of the Obbicht graves it is divided in four sub phases: O-OM IIa-d. And although it was not possible to draw sharp dividing lines between these sub phases, they do contribute to the understanding of the chronological development of the cemetery (see chapter 6).

Burial phase O-OM IIa: 565-610/20

Fifteen of the group of graves dated to broader phases O-OM II can be dated to sub phase O-OM IIa (565-610/20), namely graves 5, 6, 8, 11, 14, 15, 18, 20, 28, 29, 30, 31, 37B, 59, and 63 (table 5.3, figs. 6.6 and 6.7).

Grave 5 contained numerous finds of which the folded knife (missing) seems to be the strongest chronological indicator; it dates to 640-750. However, numerous other finds with variable date ranges are known from this grave. The belt fittings (although missing) are dated to 585-670 and the seax from this grave dates to 510/25-580/90 or alternatively to 530-610, the pair of tweezers to 520/30-600/10 and a second knife to 630/40-700/10. Altogether it is a very diverse assemblage considering the accorded date ranges. The tweezers and the common knife are known to be rather feeble chronological indicators, and the assemblage may not represent the original one (the grave was mentioned to have been disturbed by ‘ground works’). It is decided to date the grave on the basis of the end date of the seax, belt fittings and tweezers, and on the ba-

sis of the begin date of the belt fittings. The folded knife dates this grave late in the Obbicht burial ground. It is for now decided, since the knife is missing and the grave was not undisturbed, to consider it a wrongly identified find from this grave. Assigning it to phase O-OM IIa seems therefore a plausible option.

The biconical pot from grave 6 is dated to 565-610/20, and one of the two arrowheads to 470/80-600/10. The other arrow head is difficult to date. On the basis of the available finds the grave can be dated to phase O-OM IIa.

Grave 8 is dated on the basis of the biconical pot, which dates to 565-610/20. The iron ring and ring rod are dated to 520/30-630/40. The beads fall within date range 555-705, of which one decorated bead is dated to the more restricted range 590/600-620/30. Of a number of beads it is mentioned in the consulted typo-chronologies that they occur only sporadically before 610, and frequently thereafter. The grave is nonetheless dated to phase O-OM IIa on the basis of the date range accorded to the biconical pot; the date ranges of the other finds are considered to have less chronological significance but do not contest this date range.

The biconical pot from grave 11 dates to 565-610/20, the bottom fragment of a glass conical beaker to 510/25-610/20 (or even earlier (450-550) according to a number of typo-chronologies). The arrow head is dated to 470/80-630/40. Since arrow heads are rather difficult to date (the accorded date ranges are relatively long), the biconical pot is considered to be indicative for the dating of grave 11.

The biconical pot fragments, the single finds from grave 14, date to 565-610/20.

Grave 15 can only be dated on the basis of the decoration on biconical pot fragments; they are dated to 565-610/20, and the grave thus accordingly.

The spouted pot from grave 18 dates to 565-610/20, as does the grave since the only other find from this grave is a simple buckle which is difficult to date.

Grave 20 contained a number of finds, among which is a set of weapons. The chronological significant finds, since they are rather striking and rare, are the copper alloy vessel (dated to 565-610/20) and the claw beaker (c.580-700). The claw beaker has a rather long date range assigned to it; its single row of claws seems to indicate that it dates late within the proposed date range. The shield boss dates to 640-705 according to Siegmund, but his type of description does not match completely with its actual appearance. The Franken AG introduced an additional type Sbu5b, which matches better with the features of the shield boss from grave 20; this type dates to 565-580/90. The axe from grave 20 dates to 570-610, the seax to 565-710 and the lance head to 560/70-630/40. The biconical pot from this grave is dated to 565-610/20. Dating grave 20 to 565-610/20 seems a plausible option in view of all the date ranges assigned to the single objects. The single rows of claws on the claw beaker might therefore be an early feature in Obbicht.

A considerable number of finds from grave 28 is no longer present or in bad condition, namely a shield boss (corroded and frag-

mented) and a sword (missing), and only fragments of two biconical pots are present. A nearly complete spouted pot is dated to 565-610/20 on the basis of typo-chronologies for biconical pots. Since spouted pots are for the Rhineland observed to date somewhat later (585-c.630); the grave may also date to a later phase. The biconical pot fragments are dated to 565-640/50 and 510/25-580/90; the grave is on the basis of the available date ranges for now assigned to phase IIa, but it might also date somewhat later.

The weapons from grave 29 are either in bad condition or missing; the shield boss is not complete and available in corroded condition but can nonetheless be dated to 530-610, and only fragments of a lance head and presumably a seax are present; the lance head could be dated to 530-585. A horse bridle is also available in corroded condition, but can nonetheless be dated to 470-610. The two buckles from this grave are difficult to date. Dating the grave to 565-610/20 and not earlier seems a convincing option since the graves of the earliest phase contained only pottery vessels.

A sword and plate buckle were recorded as finds from grave 30 but are now only available as fragmented and corroded specimens. The shield boss is available and dated to 530-610, as is the axe which is dated to 570-610. The grave is dated to phase IIa on the basis of the axe and following the argument also used for grave 29.

Numerous finds are known from grave 31 of which the sword, one of the two knives, a seax, an arrow head and lance head are present in corroded and/or fragmented condition. The lance head can be dated to 585-625. The axe is present and is dated to 570-610; the grave is dated accordingly.

The biconical pot from grave 37B dates to 565-610/20. The glass vessel from this grave is incomplete but can nonetheless be dated to 510/25-610/20 or 520/30-630/40. The lance head, although available in fragmented condition, is dated to 530-555 or 570-585 on the basis of its description, but the X-ray photograph shows spiral bands which were originally applied around the socket; parallels from Niederstotzingen en Mungersdorf date to the seventh century. The belt fittings, knife and some fragments cannot contribute to the dating of this grave. The grave is dated to phase IIa, following the argument also used for graves 29 and 30; the lance head dates thus early within the date range assigned to lance heads with spiral bands.

Grave 59 is dated on the basis of pottery fragments alone; the spouted pot fragments are dated to 565-670/80 and the biconical pot fragments to 565-610/20; the grave is dated to 565-610/20.

Grave 63 is dated on the basis of biconical pottery fragments, which are dated to 570-610 or 565-610/20.

Phase O-OM I+IIa: 510/20-610/20

Grave 22 can only be dated to a relatively long date range (table 5.3, figs. 6.6 and 6.7). The available finds are a bottom fragment of a bell beaker, which can be dated to 510/25-610/20. The other finds are a pommel of a seax and some copper alloy fragments which are difficult to date. The grave can thus not be dated more precisely as to phases I+IIa.

Phase O-OM IIb: 565-640/50

Eighteen graves are dated to phase IIb (table 5.3, fig. 6.6). These are graves 1, 3, 4, 10, 12, 19, 23, 24, 32, 35, 36, 40B, 43, 47, 49, 52, 61 and 62.

Grave 1 is dated to phase IIb on the basis of a biconical pot (565-640/50 or 600-630), spindle whorl (470/80-640/50) and copper alloy belt fitting (520/30-630/40). On the basis of the date ranges accorded to the finds it is decided to date the grave to this phase. The objects do not date later than 640/50 and, although their first appearance is variable, 565 as a shared start is a plausible compromise.

Grave 3 is dated on the basis of a biconical pot fragment with decoration. The decoration dates it to 565-610/20 or alternatively to 565-640/50. The fragment alone is a feeble basis for the dating of this grave but other finds, apart from a terra sigillata shard, are not available.

Grave 4 contained a number of datable finds which are, however, considered to be rather feeble chronological indicators. The arrow head is on the basis of the typo-chronology of Legoux, Périn and Vallet dated to 440/50-600/10. On the basis of the same typo-chronology the simple iron ring is dated to 520/30-630/40 and the associated rod to 470/80-630/40. The single pottery fragment is on the basis of its decoration dated to 565-610/20. Three knives can be assigned to this grave on the basis of their find numbers, but only one was actually recorded as a find from this grave; it remains uncertain which one this was. One of the knives could be dated to 630/40-700/10, but cannot unambiguously contribute to the dating of grave 4. Only rivets and a rim fragment are present of a shield boss on the basis of which it cannot be dated. The seax is dated to a relatively long date range and is not indicative for the dating of grave 4, and some iron fragments identified as a belt fitting could not be dated precisely. The lance head from this grave is dated on the basis of its rivets to 560/70-630/40. Altogether, the grave is considered as a grave of phase O-OM IIb.

The biconical pot from grave 10 is dated to 565-640/50 and the copper alloy buckle to 520/30-560/70, or alternatively to 565-580/90 or 525-600; the grave is dated on the basis of the date range accorded to the biconical pot, but might also date to phase IIa.

The knife from grave 12 has an obvious chronological characteristic (the angled back), which dates it to 640/50-710. Since the cutting edge is not completely straight it remains, however, uncertain whether it is a genuine knife with an angled back. The biconical pot from this grave is dated to 600-630 and alternatively to 565-640/50. The seax known to have been found in this grave is missing, as is the second knife. In view of the proposed date ranges it seems plausible to date grave 12 to phase IIb; the knife is not considered to be a reliable indicator and the grave is dated on the basis of the biconical pot.

Grave 19 contained fragments of two biconical pots which date to 565-640/50. The beads from this grave fall within the date range 485-705, and are thus rather insignificant from a chronological viewpoint. The other finds from this grave are a conical tube

of which the function is obscure and for which no parallels are known to me. A buckle is present in corroded condition and cannot be dated. The grave is thus dated on the basis of the biconical pot shards alone.

The biconical pot from grave 23 is dated to 565-640/50 and the lance head with mid rib to 585-625. The arrow head is difficult to date, but the proposed date range 440/50-600/10 is not in conflict with phase O-OM IIb to which the grave is dated.

The red pottery dish from grave 24 dates to 555-640. The globular pot from this grave is difficult to date; it might be dated as a special form of biconical pot to 670-705 or as common globular pots, which are difficult to date more precisely as to the entire seventh century. The grave is for now dated to phase O-OM IIb, which indicates that the globular pot dates early within the date range proposed for globular pots.

The spouted pot from grave 32 dates to 570-640 or alternatively to 510/25- 580/90, and the glass palm cup to 620/30-670/80 or alternatively to 550-620. The grave is therefore dated to phase IIb (565-640), which is a reasonable compromise.

The plate buckle from grave 35 is incomplete but can nonetheless be dated to 585-670. The biconical pot from this grave is dated 585-640 or 570-610 (the pot could only be classified on the basis of the available descriptions since it is missing from the collection). The simple iron ring is dated to 520/30-630/40 and the beads fall within date range 570-705; these finds have less chronological significance. The grave is on the basis of the date ranges accorded to the plate buckle and biconical pot assigned to phase IIb.

Grave 36 is the burial of a woman and the richest grave of the Obbicht cemetery. The filigree brooch is dated to 585-610 or alternatively to 560/70-630/40. The decorative plate, which might have been part of a chatelaine, is dated to 610-640 or alternatively to 580/90-670/80. The bucket, although only available in fragmented and corroded condition, can be dated to 440/50-520/30, and the single biconical pot from this grave to 585-640 or alternatively to 565-640/50. The beads fall within date range 555-705. In view of the proposed date ranges, the grave can be dated to phase O-OM IIb. The bucket, if dated correctly, is an old object within the assemblage.

Grave 40 is a double grave. The lower burial (40B) contained two biconical pots of which one is dated to 565-610/20 and the other to 565-610/20, or alternatively to 510/25-640/50. The grave also contained a weapon set; the lance head is dated to 485-530 or 585-610 and the seax to 585-705, but the shield boss is missing and the sword is only available in fragmented condition and cannot be dated. The plate buckle is the only find, although incomplete, which can be dated to a rather restricted date range, namely to 610-640. Nonetheless, in view of the proposed date ranges, it is decided to date the lower burial to a date range starting somewhere before 610 and thus to O-OM IIb; it might date late within this phase.

The biconical pot from grave 43 is the only find from this grave; it is dated to 600-630 or alternatively to 565-640/50. The grave

is dated in accordance with this longer date range since pottery forms are in all probability influenced by local craftsmanship and the restricted Rhineland date range might not apply to the Obbicht pots.

Grave 47 can only be dated on the basis of some biconical pot fragments. They are dated to 565-640/50, as is the grave. The copper alloy mount from this grave is difficult to date, and other finds are not known from it.

The biconical pot from grave 49 dates to 600-630 or alternatively to 565-640/50, and the dish from this grave to 555-640. The beads fall within date range 485-705 and match thus with the date ranges to which the two vessels are dated and on the basis of which the grave is dated to phase O-OM IIB.

Grave 52 is dated on the basis of biconical pot fragments; they date to 570-610 or 565-640/50.

The single find from grave 61 is a biconical pot which is dated to 585-610 or alternatively to 510/25-640/50. The grave is dated to phase O-OM IIB, which seems a defensible compromise between the two proposed date ranges.

Grave 62 is dated on the basis of the spouted pot, which dates to the range 565-640/50. The knife and copper alloy fragments from this grave cannot be dated and thus this date range cannot be emphasized.

Burial phase O-OM IIC: 610/20-640/50

Only three graves could be dated to a rather restricted date range identified as burial phase IIC; these are graves 46, 51B and 57 (table 5.3, fig. 6.6). Grave 46 contained an iron plate buckle with matching back plate, both with silver geometric inlays, which can be dated to 610/20-640/50. The other datable finds from this grave are a biconical pot, dated to 625-670 or alternatively to 610/20-630/40, and a second biconical pot, dated to 530-555. This second pot is difficult to date because of its deviant appearance, and might be, if dated correctly, an old object within the assemblage of grave goods. The description of the fragmented lance head makes it possible to date it to 585-625 and the rivet associated with the lance head can be dated to 560/70-630/40. The seax from this grave is corroded and cannot be classified, and the knife and fire steel have no chronological significance. On the basis of the available date ranges and especially those of the belt fittings, this grave is dated to phase IIC.

Grave 51 is a double grave. The lower burial (51B) contained iron belt fittings, which could be dated to the restricted date range 610-640. The spouted pot from this lower burial is dated to 610-670 or alternatively to 510/25-640/50. The biconical pot is dated to 585-610 or alternatively to 510/25-640/50. Three seaxes have find numbers matching with this grave; which of the remaining two actually belonged to the lower burial is uncertain and their date ranges can as a consequence not be used. The lance head is not available but the pair of tweezers can be dated to 520/30-600/10. The lower burial is dated to phase IIC on the basis of especially the belt fittings; the other date ranges do not contest this decision.

Grave 57 is dated on the basis of the ceramic bottle which dates to 565-640, although predominantly to 610-640. The beads date to the date range 570-705 and do thus not show contestable discrepancies with the date range of the bottle, which dates the grave to phase IIC.

Burial phase O-OM I-IIIc: 510/20-640/50

Four graves were dated to phases I-IIIc; these are graves 7, 45, 48 and 53 (table 5.3, fig. 6.6). Grave 7 was destroyed and could only be dated on the basis of the biconical pot ascribed to it. The pot dates to 570-640 or alternatively to 510/20-610/20; it was decided to date this grave to the longest proposed range since the evidence for this grave is rather unreliable.

Grave 45 is dated on the basis of a ceramic spindle whorl alone; it dates to 470/80-630/40, which is a relatively long date range. The grave could only be dated accordingly. The grave is dated to phase I-IIIc since its creation before 510/20 seems unlikely.

A copper alloy strap end is the single find on the basis of which grave 48 can be dated; the strap end dates to 470/80-630/40. The grave is dated to phase I-IIIc since it is unlikely that it was created before 510/20.

Grave 53 is dated on the basis of a corroded shield boss alone. And although the shield boss cannot be classified or dated precisely, it was possible to assign it to date range 530-640. The grave is dated accordingly.

Burial phase O-OM IID: 610/20-670/80

The last sub phase of general phase O-OM II counts only one grave (64), which is a considerably lower number compared to the first two sub phases (table 5.3, fig. 6.6). The biconical pot from grave 64 dates to 610-670, although it might also date to 585-610, depending on its basic form which could not be established unambiguously. It is alternatively dated, on the basis of its decoration alone, to 510/20-640/50. It is for now considered to be a pot which dates to the seventh century and not earlier in view of its rather elongated appearance; the grave is therefore dated to phase O-OM IID. This sub phase shows some overlap with phase III, which starts after 640/50; grave 64 might actually date early in this phase III.

On the whole, the burial ground was more intensively used in the first half of the seventh century than it was thereafter, and evidence for burial activities after 650 is scarce.

Burial phase O-OM II: 565-670/80

One grave (40A) could not be dated more precisely as to phase II (table 5.3, fig. 6.6). Grave 40 is a grave with two superimposed burials. The upper burial (40A) contained a biconical pot which dates it to 510/25-670, but, since the lower burial 40B dates to 565-640/50, the upper burial is dated to phase II and not earlier. A number of variable dates are however assigned to the biconical pot, which indicates that this grave in all probability dates before 640/50, but that a later date cannot be rejected.

Burial phase O-OM I+II: 510/20-670/80

Grave 38 cannot be dated more precisely as to phases I and II; it is dated on the basis of biconical pot fragments to 530-670 or alternatively to 510/25-640/50 or 580/90-710 (table 5.3, fig. 6.6). The chronological significance of this grave is thus low and does not provide clear cut evidence for burial activity after 640/50, which is overall scarce for this cemetery.

Burial phase O-OM III: 640/50-670/80

Two graves (39 and 44) are dated to phase III; they provide rather limited evidence for the actual presence of this last burial phase with object deposition (table 5.3, fig. 6.6).

Grave 39 contained a cremation vessel with some finds of which the belt fittings clearly date to 640-670, as does the single copper alloy rivet found inside it. An oil lamp was also recorded as a find, but it is no longer present. The cremation grave is clearly a late burial in the cemetery.

Grave 44 is dated only on the basis of the knife; it dates to 670-740 or alternatively to 640/50-710 on the basis of its presumed angled back. Only the vague contours of a possible angled back can be observed due to the preserved textile remains, but this might be an incorrect observation. The basis for dating this grave is thus rather feeble and it does not provide clear cut evidence for this last burial phase. Nor do the graves with a long date range (38, 40A and 64), ending in this last burial phase, provide abundant evidence for burial activity in the second half of the seventh century.

Not datable graves

A number of graves could not be dated; some of the finds of graves 27, 34 and 56 went missing and could not be classified or dated on the basis of the descriptions in the first published catalogue alone (table 5.3, fig. 6.6). A number of graves (graves 37A, 50, 51A and 58) had finds, but these could not be dated because of their condition or common appearance; they have no chronological significance. Context 33 was identified on the basis of four seaxes in the vicinity of the mill; the seaxes are evidence for multiple destroyed graves. The date ranges accorded to three of these seaxes are c.685-740, 585-655 and 585-655; one of the seaxes might thus indicate a later burial phase in this section of the cemetery which was destroyed by the construction of the mills. A seax was recorded as a find from grave 51A; since three seaxes are on the basis of their find numbers assigned to grave 51 (thus to both 51A and 51B) it cannot be established which one actually belonged to 51A, but on the basis of the provided descriptions it is dated as Sax3 to 650-750. The lance head from this grave dates either to 585-610 (570-625), or to 625-670; it is difficult to date the grave unambiguously, but it might be one of the later graves.

A number of graves (graves 2, 9, 13, 16, 25, 26, 41, 42, 54, 55 and 60) were without finds and could as a consequence not be dated. Nonetheless, the datable graves provided sufficient information for the reconstruction of the chronological development of the cemetery, as is discussed in detail in chapter 6.

The total date range of the cemetery and the number of graves per phase

The established Obbicht burial phases comprise a date range from 510/20 to 670/80 (or maybe some decades thereafter), thus a period of c. 170 years (see however below). The arrangement of the phases within this date range is slightly different from the arrangement of the Sittard phases (table 5.1). However, the majority of the Obbicht graves are dated to the second half of the sixth century and the first half of the seventh century as were the Sittard graves. It was difficult to create short bounded phases within the date range of the Obbicht cemetery. The period to which the majority of the graves are dated was therefore divided into four sub phases which show some overlap. Nonetheless a chronological pattern can be extracted from this arrangement of graves, as is discussed in more detail in chapter 6, in which the significance of the first burial phase is also considered.

Presuming that the 68 burials cover approximately 170 years indicates that on an average every two years a burial took place. In view of the chronological distribution of the graves it is more probable that in the second half of the sixth and first half of the seventh century a burial took place once per year, and that in the period before and thereafter burials occurred less frequently or maybe not at all (see chapter 6).

The burial activities seem to have started somewhat earlier and also ended earlier than was the case for the cemetery of Sittard-Kemperkoul; this cemetery remained in use for some decades after the cemetery of Obbicht seemed to have been abandoned. However, as is described in chapter 2, parts of the cemetery are assumed to be lost and graves of all the phases, from the first to the last, may have disappeared.

The first burial phase in Obbicht, however, is only represented by a small number of graves. It remains to be questioned whether the finds were not deposited late in this early phase and whether graves were actually once present as early as the first few decades of this first burial phase. The significance of the first burial phases will be further discussed in chapter 6. Grave 65 was found at some distance from the cemetery and is clearly earlier than the graves of the cemetery; whether it represents an early phase of the cemetery of which other graves were not discovered remains uncertain.

The evidence for the last phases is again very scarce and feeble, as it is for the Sittard cemetery. It was difficult to create obvious bounded phases on the basis of the graves which were accorded relatively late date ranges. The last burial activities are in phases IID to III. Phase III, with only two graves, covers the period after 640/50. For the graves assigned to phase IID, IIB+IID and I+II, it is difficult to distinguish the graves dating after or before 640/50. Some of them may be earlier than others, but obvious evidence for burial activity in the second half of the seventh century is not provided with these phases. Altogether, the burial evidence for the use of the burial ground after 650 is scarce, and it is virtually absent for the period after 670.

The Stein-Groote Bongerd burial phases

The cemetery of Stein consists of 75 recorded graves, of which three are referred to as graves lost due to disturbances prior to the excavation (grave 73, 74 and 75) and one is a double grave (grave 56A + 56B). And although graves 73, 74 and 75 are depicted on the first published cemetery plan, nothing is known about them; they are therefore not included in the current analysis. A considerable number of the other graves were also destroyed or disturbed but were nonetheless also depicted on the first published cemetery plan; some of these graves were identified as such on the basis of clusters of finds or soil discolorations alone. These graves are in the following discussion and in this publication treated as possible inhumation graves. Grave 56 appeared to be a double grave consisting of two distinct superimposed burials. Of the total number of 73 burials analysed in this publication twenty were without finds and fifty-three contained grave goods of which forty-four could be dated on the basis of these finds. The eight other graves contained finds which could not be classified or dated.

The Stein burial phases cover the period 510/20-670/80, and their date ranges and arrangement are similar to the Obbicht phases (table 5.1). The available data on the basis of which the graves could be dated is nonetheless more meagre than the data available for the construction of the Sittard and Obbicht burial phases. A considerable part of the metal finds are only available in very fragmented and corroded condition. X-ray photographs were made, which revealed some interesting inlaid belt fittings. It is questionable whether the restoration of this material can add significant new insights to the available data set. Moreover, a considerable part of the finds described in the catalogue of Beckers and Beckers is now missing from the collection. If possible, these were classified and dated on the basis of the provided descriptions. The remaining finds are on the majority pottery vessels. The Stein burial phases are thus mainly established on the basis of the dated pottery vessels. For each burial phase, the following discusses how many graves they consist of, which and why graves are assigned to them, and which objects are the obvious indicators.

Burial phase S-GB I: 510/20-585

The first burial phase in Stein consists of seven graves (28, 36, 50, 52, 56B, 59 and 63), which contained, apart from one grave, only pottery vessels (table 5.4, fig. 6.10 and 6.11). Grave 28 is dated on the basis of a biconical pot alone which dates to 530-555 or alternatively to 510/25-580/90. The biconical pot from grave 36 is dated to 530-555 or alternatively to 510/25-580/90. Other finds are not known from this grave. Grave 50 is dated on the basis of a biconical pot alone; the pot is dated to 555-570 or alternatively to 510/20-580/90. Grave 52 is dated on the basis of the biconical pot, which dates to 555-570 or alternatively to 510/20-580/90. Other finds are iron and wood fragments which cannot be dated. Grave 59 is dated on the basis of the biconical pot, which dates

to 530-555 or 530-570, or alternatively to 510/25-580/90. Grave 56B is the lower burial of two superimposed burials. The only find associated with this lower burial is a biconical pot which is dated to 530-570, or alternatively to 510-580/90 and sporadically till 610/20. Grave 63 is dated on the basis of the biconical pot which dates to 530-570 or alternatively to 510/25-580/90.

Depending on the typo-chronology used, the pots date either to 530-555/570 or 510/20-580/90. It was decided to create this first burial phase in line with the first burial phase identified in Obbicht, although it ends somewhat later around 585; the seven graves represent this first burial phase in Stein. The actual significance of this phase is however, since it is only established on the basis of pottery vessels, discussed in chapter 6.

Burial phase S-GB II

The majority of the Stein graves are dated to a relatively short date range, namely to 565-640/50 (table 5.4). Since it was difficult to create short bounded phases within this date range it is divided into four sub phases which show some overlap. Nonetheless a chronological pattern can be extracted from this arrangement of graves (see also chapter 6).

Burial phase S-GB IIa: 565-610/20

Eleven of the thirty-four graves of broad phase II can be dated to the earliest sub phase IIa. These are graves 12, 22, 24, 29, 30, 34, 51, 53, 57, 58 and 60 (table 5.4, fig. 6.10 and 6.11). A peculiar and rare belt set dates grave 12 to this first sub phase; it is dated as a variant of Siegmund type Gür4.1/4.2 to 585-610. The lance head and sword, no longer present in the collection, are difficult to date on the basis of the provided descriptions alone, and could not support the proposed date range for the unique belt set.

Grave 22 is dated on the basis of a biconical pot, which dates to 585-610 or alternatively to 510/25-640/50. The beads from this grave fall within the date range 485-705; one of the decorated beads dates to a more restricted date range, namely 590/600-620/30, which matches with the date range accorded to the biconical pot. Dating the grave to phase IIa seems a decent compromise with regard to the two date ranges assigned to the biconical pot. Moreover, the graves of phase I contained only pottery vessels whereas grave 22 also contained other finds.

The biconical pot from grave 24 is the only find from this grave which dates to 565-610/20, and thus to phase IIa.

The lance head from grave 29 is available in corroded condition, but the X-ray photo shows a mid rib, on the basis of which it could be dated to 585-626. Other finds are not known from this grave.

Grave 30 contained two biconical pots, a palm cup and a string of beads. The first biconical pot is dated to 510/25-580/90 and the second to 565-610/20. The palm cup is dated to 585-610 or alternatively to the more extended date range 560/70-630/40. The beads fall within the date range 485-705, but one of the decorated beads is dated to a more restricted date range, namely 565-590/600. On the basis of the available date ranges, it is decided to date the grave

Table 5.4

The number of graves per Stein-Groote Bongerd burial phase.

Stein burial phases	Number of graves
S-GB I: 510/20-585	7
S-GB IIa: 565-610/20	11
S-GB I+IIa: 510/20-610/20	3
S-GB IIb: 565-640/50	9
S-GB IIc: 610/20-640/50	5
(S-GB I+IIa-c: 565-640/50)	1
S-GB II d: 610/20-670/80	5
S-GB IIb-d: 565-670/80	1
S-GB III: 640/50-670/80	5
S-GB II d/III: 610/20 or 640/50-670/80	2
Graves with unspecified finds now missing	3
Graves without datable finds	1
Graves without finds	20 (3)
Total	73 (76)

to phase S-GB IIa which stops around 610/20; the grave, however, might date somewhere, although not far, after 610/20.

The spouted pot from grave 34 is the only find from this grave and dates it to 565-610/20.

Grave 51 contained a spouted pot which dates to 565-610/20. The simple iron ring from this grave dates to 520/30-630/40. The beads fall within the date range 485-705 and do not contribute to the dating of this grave. It is placed in phase IIa on the basis of the spouted pot since iron rings are feeble chronological indicators. The knife recorded as a find from this grave is no longer present in the collection.

Grave 53 only contained a biconical pot which is dated to 565-610/20, as is the grave.

The spouted pot from grave 57 dates to 580/90-610/20. Other finds from this grave are a pair of tweezers (missing), dated to 520/30-600/10, and a plano-convex disc bead or spindle whorl, which is dated to 440/50-520/30 but for which a sporadic appearance until 620 is also recorded; it is thus not necessarily an old item within the grave. The simple ring from this grave is dated to 520/30-630/40, but is in general considered to be a rather feeble chronological indicator. Dating this grave to phase IIa on the basis of the spouted pot seems a plausible option which is not in conflict with the date ranges assigned to the other finds.

The biconical pot from grave 58 is dated to 570-585/610. The ring rod from this grave is dated to 520/30-710, but is not considered to be a reliable indicator. The simple ring is dated to 520/30-630/40, but the grave is dated on the basis of the biconical pot to phase IIa.

The biconical pot from grave 60 is dated to 565-640/50 or 600-625. The axe is dated to 570-610. The other finds, a knife and indeterminate fragments, could not be dated. It is decided to date the grave to phase IIa on the basis of the more restricted date range accorded to the biconical pot and the matching date range accorded to the axe.

Phases S-GB I+IIa: 510/20-610/20

Three graves (18, 25 and 40) could not be dated to a single phase but date in all probability before 610/20; they are accorded a relatively long date range but can nonetheless contribute to the discussion on the chronological development of the cemetery (table 5.4, fig. 6.10 and 6.11). Grave 18 is dated on the basis of a biconical pot alone; it dates to 530-570 or alternatively to 510/20-610/20. The other finds are missing or present in fragmented condition, but some could nonetheless be dated. Some belt fittings are dated to 625-670 (although the evidence for their identification as belt fittings is rather feeble), and an iron ring to 520/30-630/40. Since the other finds are not that strong chronological indicators it is decided to date the grave on the basis of the biconical pot alone. It is not assigned to burial phase I (following the date range assigned to the pot) since it also contained other finds which are not present in the graves dated to the first burial phase.

The single find from grave 25 is a biconical pot which could not be dated unambiguously. It is either a Siegmund type 2.12, which dates to Rhineland phase 4 (530-555), or a Siegmund type 3.12, which dates to Rhineland phases 6-7 (570-610). It is for now chosen to assign this grave to a relatively long date range.

The recorded finds from grave 40 are all missing from the collection. The grave could only be dated on the basis of the descriptions of the seax. The two pottery vessels were not sufficiently described for classification and dating. The seax is dated to 510/25-580/90 but can also appear sporadically till 640/50. The alternative date for this seax is 530-610. It is therefore decided to date this grave to a considerable long date range.

Burial phase S-GB IIb: 565-640/50

Nine graves (1, 26, 45, 46, 54, 55, 61, 62 and 66) could be dated to burial phases IIb (table 5.4, fig. 6.10). It is established as one bounded but relatively long phase, which nonetheless contributes to the reconstruction of the chronological development of the cemetery as discussed in detail in chapter 6.

Grave 1 is dated on the basis of two biconical pots. The first is dated to 600-625/585-640 (Siegmund) or alternatively to 565-640/50 (FAG). The second is dated to 610-625 (Siegmund) or alternatively to 610/20-670/80 (FAG). Since the other pottery fragments from this grave could not be dated, it is decided to date the grave to the relatively long date range 565/640/50 on the basis of the first biconical pot, since the FAG type assigned to the second pot, which provides the longest date range, is not as certain as the other classifications.

The biconical pot from grave 26 is the only find from this grave and dates it to 600-625 or alternatively to 565-640/50.

Only biconical pot fragments were found in grave 45; some were on the basis of the identified late roulette stamp group dated to 585-640, and on the basis of the early roulette stamp group to 570-610 or 565-640/50.

The pottery dish from grave 46 dates either to 585-640 or to 610-670, of which the first is the most probable option. The oth-

er finds (fragments of a seax, a nail and other indeterminate fragments) are no longer present in the collection and could not be dated. It is for now decided to date the grave on the basis of the most probable date range assigned to the pottery dish.

Grave 54 could only be dated on the basis of a seax, which is dated to 580/90-640/50 or alternatively to 585-655. The other finds, a second seax or knife and belt fittings, are fragmented and could not be dated. Dating the grave to phase IIb on the basis of the seax seems a plausible option.

The spouted pot from grave 55 is dated to 565-630/40 or alternatively to 600-630. The lance head, which is present in corroded and fragmented condition, is dated to 625-670 or 625-705. The grave is dated to 565-640/50 on the basis of the spouted pot, which is not in conflict with the date ranges assigned to the lance head.

The single biconical pot from grave 61 is dated to 600-630 or alternatively to 565-640/50. The grave is dated in accordance with the longer date range assigned to the biconical pot since other finds are absent and other insights cannot be provided.

The biconical pot fragments from grave 62 could not be dated unambiguously; if they are of the early roulette stamp group they date to 570-610 or alternatively to 565-640/50, and if they are of the late roulette stamp group they date to 585-640 or alternatively to 565-670/80. Other finds are not known from this grave and it is thus dated on the basis of these fragments alone to phase IIb.

The belt fitting from grave 66 is dated to 610-640 and the biconical pot to 565-610. Since the belt fitting is not an obvious broad belt fitting, of which it is known they date to the restricted range 610-640, the grave might also date earlier and more in accordance with the date range assigned to the biconical pot.

Burial phase S-GB IIc: 610/20-640/50

Five graves (7, 8, 41, 49, and 72) are dated to phases IIc (table 5.4, fig. 6.10). Grave 7 is dated on the basis of a copper alloy bracelet and an iron belt fitting. The bracelet dates to 580/90-640 or alternatively to 610-640, but can sporadically occur thereafter. The belt fitting from this grave dates to 610-640; the grave is dated accordingly.

Grave 8 is the richest grave of the cemetery in terms of quantity and quality of grave goods. The waist belt fittings are rather indicative for its dating; they date to 610-640. The other fittings are related to the sword and are difficult to date, except for the copper alloy buckle with a hinged construction which is dated as a variant of Siegmund Gür3.3/3.4 to 610-640, and two strap ends which are dated to 470/80-630/40. The seax from this grave dates to 580-710, although predominantly to 640-670/80. The shield boss is dated to 610-640 and the lance head to 600-625. It seems plausible to date this grave to a phase which ends around 640/50.

A red biconical jug is the single find from grave 41 and dates it to 610-640.

Grave 49 can be dated on the basis of a seax, which is present in a severe corroded condition; as a consequence, it cannot be classified unambiguously and dated more precisely as to 580/90-

640/50, 640-670/80 or 640-705. The X-ray photo of a number of iron fragments revealed belt fittings of type Bülach, which date to 610-640; the grave is dated accordingly.

Grave 72 is dated on the basis of an iron plate buckle, but only on the basis of its description since the actual object is missing from the collection. The described features, however, enables its identification as a broad iron plate buckle with a triangular plate, which are generally dated to 610-640. The biconical pot from this grave is also missing but the seax is available; it is dated to 580/90-640/50, or alternatively to 585-655. The grave is dated to the more restricted date range provided by the belt fitting; the relatively long date range of the seax starts earlier but ends around 640/50.

(Burial phases S-GB I+IIc: 510/20-640/50)

Grave 15 could not be dated precisely (table 5.4, fig. 6.10). The grave was at first dated on the basis of the description in Beckers and Beckers of a seax, which is dated to 510/25-580/90 (640/50) or alternatively to 530-610. The other finds from this grave could not be dated. However, the seax appeared to be a lance head, which was difficult to date. For now the grave is not dated to a specific phase.

Burial phase S-GB IIId: 610/20-670/80

Five graves (11, 14, 17, 43 and 67) are dated to phase IIId (table 5.4, fig. 6.10). Grave 11 is dated on the basis of a biconical pot, which dates to 610-670 or alternatively to 580/90-710. The other finds from this grave are two beads, of which one is missing and the other difficult to date, and a Roman brooch which is an old element in the grave.

The globular pot from grave 14 dates it to the seventh century, and in all probability to phase IIId; the same applies to grave 17. Other finds to support the assigned date were not present in these graves.

Grave 43 is dated on the basis of an egg-shaped pot, which dates to the seventh century or maybe to 670-705/740, but this is not certain. It is thus a later grave in the cemetery, but since other graves are not identified in the phase after 670/80 to around 700, it will probably date to phase IIId.

The biconical pot from grave 67 is the only find from this grave and dated to 600-625 or alternatively to 610/20-670/80. The grave is dated in accordance with the longer date range since other finds were not present to corroborate a shorter date range.

Phase IIId ends around 640/50 in the cemetery of Sittard-Kemperkoul. None of the Stein graves could be dated to date ranges which unambiguously end around 640/50; the graves could only be assigned date ranges ending around 670/80, and thus partly in phase III as identified for the other cemeteries.

Burial phases S-GB IIb-IIId: 565-670/80

One grave cannot be dated more precisely as to the date range 585-670/80; this is grave 69 (table 5.4, fig. 6.10). The biconical pot fragments from this grave are dated to 585-640 or 610/20-670/80 on

the basis of their decorations, which are identified as roulette stamp impressions of the late group. The grave is dated accordingly.

Burial phase S-GB III: 640/50-670/80

There is only scarce evidence for this last burial phase with object deposition (table 5.4, fig. 6.10).

The biconical pot from grave 23 dates to 565-610/20. The beads from this grave fall within the date range 555-705 and are not chronologically indicative apart from the observation that they do not date before 555. The X-ray photograph of an iron fragment revealed an inlaid iron belt fitting, which dates to 640-670. This date range indicates that the pottery vessels might not date as early in Stein as the typo-chronology schemes of Siegmund and the Franken AG suggest. The grave is dated on the basis of the belt fitting to phase III.

The pottery dish from grave 37 dates to 555-640/50, but an X-ray photograph revealed an iron inlaid strap end which dates to 650-700; the grave is therefore dated to phase III. The pottery dish dates somewhat earlier (although this is only established on the basis of the typologies of Siegmund and the Franken AG).

The finds associated with the upper burial (56A) of double grave 56 are a copper alloy buckle, a simple ring, two biconical pots, and fragments which appeared to be iron inlaid belt fittings on the X-ray photo. The copper alloy buckle is dated as a variant of Siegmund's type Gür3.3/3.4 to 610-640. The first biconical pot is dated to 565-610/20 or 570-610. The second biconical pot is dated to 530-570 or 510-580/90 (610/20). The simple ring is dated to 520/30-630/40. The knife could not be dated, but the belt fittings date to 640-670, on the basis of which the grave is dated to phase III. In view of the date ranges of the biconical pots, the grave might date early within this phase.

The biconical pot from grave 64 is dated to 585-610 or alternatively to 510/20-640/50. The iron belt fittings from this grave are missing, but on the basis of their description it was possible to identify them as broad iron belt fittings which can, without further specifications, be dated to 600-670. The copper alloy slotted plates which were found in association with the belt set are therefore dated to the same date range. One object, present in corroded condition, appeared to be a belt fitting with inlays as the X-ray photo shows; it is dated to 640-670, thus later than the missing belt fittings. Of the three arrow heads, one can be dated to 540-640 and one to 470/80-630/40. It is decided to date the grave on the basis of the belt fitting with inlays to phase III, but it can also date to phase IIc since it is not completely certain whether this belt fitting belonged to grave 64.

The biconical pot fragments from grave 65 are dated to 565-670/80 or 585-640 on the basis of their decorations, which are identified as roulette stamp impressions of the late group. The strap end from this grave dates to 640-670 (although it is not completely certain if it belonged to this grave) on the basis of which the grave is dated to phase III.

Burial phase S-GB IIId/III: 610/20-670/80 or 640/50-670/80

Four graves which cannot be dated more precisely as to the seventh century, and maybe some decades thereafter, contained globular pots which are difficult to date (table 5.4, fig. 6.10). It is clear that they date after the beginning of the seventh century, but it is not clear where exactly they should be placed. The pot from grave 42 is somewhat different from the other pots. It is rather smooth and might be classified as a Siegmund type 4.12 which dates to 670-705. It also resembles the globular pots from graves 14 and 17 (IIId) which, considering other cemeteries with globular pots, seem to date to the seventh century. Since evidence for the last burial phase with grave goods is very scarce it is suggested that the three graves date before the end of the seventh century.

The entire string of beads from grave 32 is dated to 570-705. However, it contains the opaque flat almond beads which are characteristic of the seventh century or more precisely the date range 610-705; grave 32 might thus also be one of the latest graves of the cemetery but will not date after the seventh century.

Not datable graves

Twenty graves were without finds; these are graves 2, 3, 6, 9, 10, 13, 16, 20, 21, 27, 31, 33, 35, 39, 44, 47, 48, 68, 70 and 71 (table 5.4, fig. 6.10). These graves are distributed all over the cemetery; some can be found in the proximity of graves of the first phases and some also in the proximity of graves of later phases. This distribution pattern is thus not comparable to that of the empty graves of the Sittard-Kemperkoul cemetery, which can be found in a clearly distinct cemetery section representing the last burial activities. Moreover, a number of the Stein graves were recorded as graves without finds but were disturbed. For these graves it is not certain whether they were originally without finds.

One of the Stein graves was with finds but could not be dated: grave 38 contained only one transparent blue bead which could not be dated precisely. Nothing specific is recorded about the condition of the grave at the time of excavation; it is not certain whether this was originally the only object deposited in this grave.

Graves 4, 5 and 19 contained finds which are now missing. Some missing finds from other graves could be classified and dated on the basis of the available descriptions in the original catalogue, but this was not the case for the finds from these three graves. Grave 4 contained only a terra sigillata shard and grave 19 beads and a biconical pot fragment, which were not further specified. Some finds from grave 5 are missing and some were available but indeterminate; the available descriptions did not provide sufficient information.

Altogether, the collection of finds from the Stein graves is in a relatively bad condition and a considerable part went missing. This state of the collection hampers an analysis of the cemetery as detailed as the analyses of the cemetery of Sittard and also Obbicht.

The total date range of the cemetery and the number of graves per phase

A considerable number of graves of the Stein cemetery could not be dated; twenty graves were without finds, one was without datable finds and three were with finds now missing and which could not be dated on the basis of the available descriptions. These twenty-four graves form approximately one third of the cemetery; on the basis of the remaining graves the chronological development of the cemetery is reconstructed. This reconstruction provides an overview which is less accurate than those created for the cemeteries of Sittard and Obbicht. The majority of the metal finds were, if not missing, available only in corroded or fragmented condition. The pottery vessels were the main find category on the basis of which the graves are dated, and it remains questionable whether the date ranges assigned to the Stein pots on the basis of pottery typologies from ‘culturally’ different regions are that accurate. Moreover, the date ranges accorded to the Stein graves were for a considerable number longer and thus less indicative than those accorded to the Sittard and Obbicht graves. A high number of graves could as a consequence only be assigned to combined burial phases (I+IIA, I+IIa-c, IIB-d, IID-III) and as such provide less accurate chronological information, especially for the period after 610/20 (table 5.4). The twenty graves without finds are not comparable to the section of narrow graves without finds in the Sittard-Kemperkoul cemetery, which represent the last burial phase in this cemetery, since the empty Stein graves are dispersed all over the cemetery and might for the majority very well be empty as a result of post-depositional disturbances.

The established Stein burial phases comprise a date range from 510/20 to 670/80 (and maybe some decades thereafter), thus a period of c. 170 years (assuming that the burial activities did not start precisely around 510 but somewhat later, and that the last activities can be placed around 700). Table 5.4 shows that the distribution of graves over the established phases is not even; the majority of the graves with datable finds are dated to the second half of the sixth century and the first half of the seventh century, and thus to a period of approximately 100 years.

Presuming that the 73 (76) burials cover a period of approximately 170 years indicates that on average every two years a burial took place. However, in the second half of the sixth and first half of the seventh century, every year this frequency would have been considerably higher.

Compared to Sittard, the burial activity in Stein starts somewhat earlier and also ends earlier. It began to be used approximately around the same period as the Obbicht cemetery came into use. The two cemeteries were abandoned around approximately the same period (just before 700), whereas the Sittard cemetery remained in use for some decades thereafter. The first Stein burial phase is represented by a slightly higher number of graves compared to Obbicht, but the Obbicht phase stops somewhat earlier than the first Stein phase. It remains questionable whether the finds dated to this phase were deposited late in the early phase or

maybe even in phase IIa (which shows some overlap with this following phase). All the early graves are dated on the basis of biconical pots alone, which are, as was already mentioned, a category of objects difficult to date precisely. The significance of this first burial phase is discussed in more detail in chapter 6. The evidence for the last phases is again very scarce and feeble, as it was for the cemetery of Obbicht. The actual chronological development of the cemetery of Stein is discussed in detail and in relation to the possible history of the communities associated with the cemeteries of Sittard, Obbicht and Stein in chapter 6.

6 The topography and chronological development of the cemeteries and the possible history of the burial communities

This chapter deals first with the chronological development of each cemetery, reconstructed on the basis of the individually dated graves discussed in Chapter 5. Secondly, the organisational principles of the cemeteries are discussed on the basis of the general layouts of the three cemeteries defined by their boundaries, relative locations and orientations of graves, empty spaces and the distribution of the graves of men, women and children which are discussed in relation to this chronological development. On the basis of these conclusions, suggestions are made with regard to the organisational principles of the three burial grounds. The chapter concludes with the possible history of the communities associated with the burial grounds.

The cemetery of Sittard-Kemperkoul

The boundaries of the cemetery and the estimated number of graves

The plan of excavation trenches and the locations of the excavated graves show that all the limits of the Sittard-Kemperkoul cemetery were identified (see also Chapter 2), but that a number of graves within the boundaries of the cemetery were affected by recent disturbances brought about by the sewer and pipeline trenches (fig. 6.1).

Graves 61, 58, 60, 59, 57, 53 and 51 in trench 4 are the northernmost excavated graves. No other graves were recorded to the north of them in excavation trenches 2 and 4; it is thus safe to assume that they form the northern limit of the cemetery (fig. 6.1). The empty space in between graves 57 and 53 seems to have been intentional. The remaining depth of grave 53 is 47.0 cm and that of grave 57 is 22.0 cm. The excavators would have noticed other graves in between graves 53 and 57 unless they were dug in considerably less deep which is unlikely.

Graves 51, 84, 83, 31, 30, 1, 6 and 86 form the eastern limit of

the cemetery. The ensemble of finds identified as context 29 (no grave outline) is the most eastern feature of the cemetery; the objects may have originally belonged to a grave (although it is mentioned in the thesis of Zoetbrood that the excavators analysed the soil around context 29 meticulously), or were intentionally deposited as such at the fringe of the cemetery. Trenches 1, 4 and 6 expand more to the east than the mentioned line of graves; thus, it can be assumed that the graves in these trenches form the eastern limit in this section of the cemetery, but in trench 5 the eastern limit is not that obvious. Graves 83 and 84 are located close to the limits of the trench. Graves might have been present further to the east, but probably only a few since the eastern cemetery border was clearly discovered in trenches 4, 1 and 6 and is more or less in line with the locations of graves 83 and 84.

The southern limit of the cemetery is not as 'neat' as the northern one. It is formed by graves 28, 88, 87, 78, 77, 76 and 86. Since no other graves were discovered to the south of this line of graves in excavation trenches 6 and 3, it is safe to consider these graves, despite their disorderly arrangement, as the most southern ones of the cemetery.

Graves 61, 63, 65, 48, 42, 41, 25, 24 and 28 mark the western limit of the cemetery since no other graves were found to the west of this line of graves in excavation trenches 2, 1, 5 and 6. The cemetery limit in the destroyed parts of the cemetery, in between trenches 4 and 5 and 5 and 1, are reconstructed on the basis of this line of graves.

The west-east orientated sewer and gas pipe trenches destroyed sections of the cemetery to the north and south of trench 5. The destroyed sections are not very large and the borders of the cemetery are known, so it is safe to suggest that only a limited number of graves were destroyed here. Grave outlines are plotted on the destroyed parts of the cemetery in line with the distribution pattern of the excavated graves (fig. 6.1). An additional number of approximately 10-20 graves can be added to the number of graves

Fig. 6.1
The layout of the Sittard-Kemperkoul cemetery (scale 1:250).

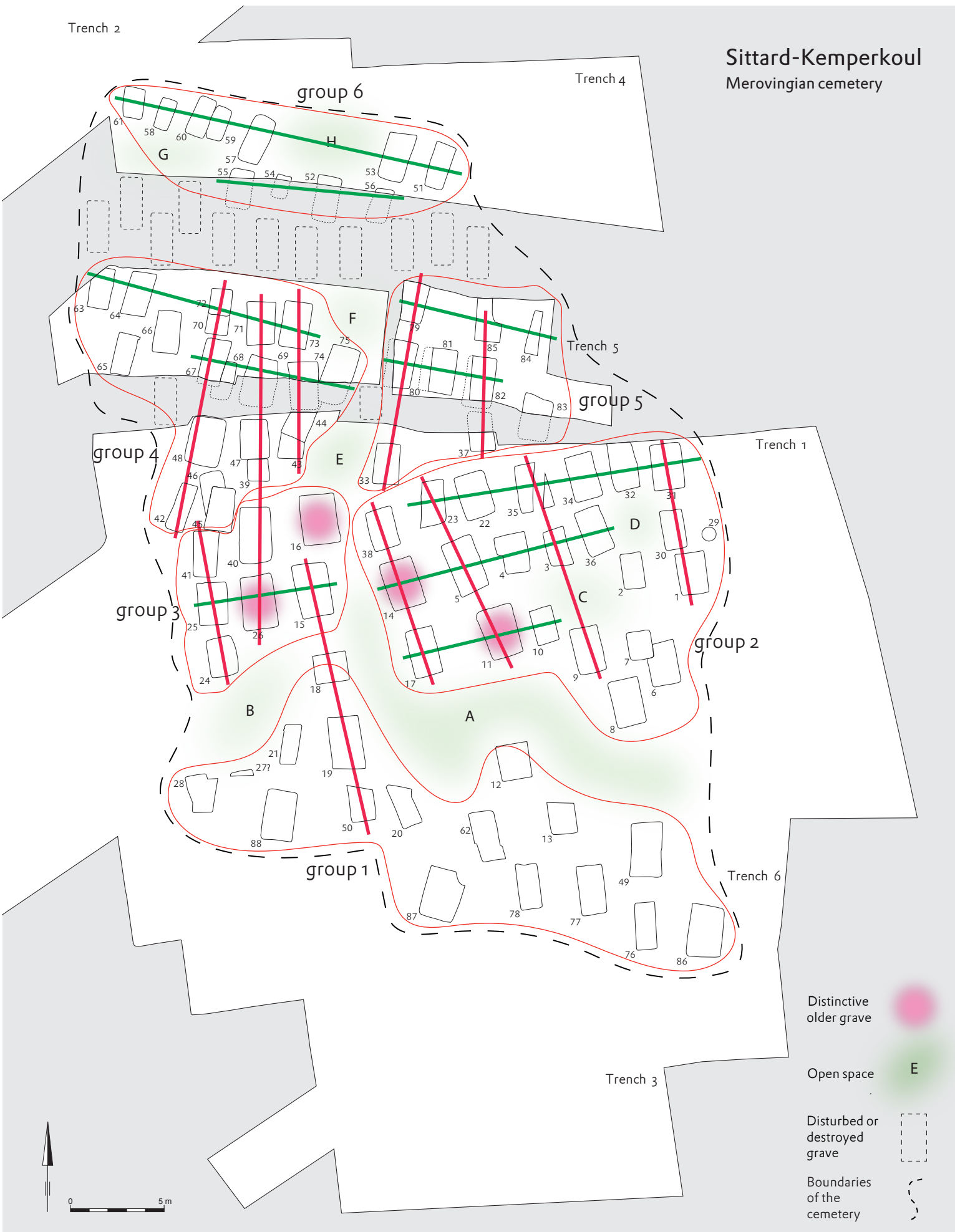


Fig. 6.2
The distribution of graves assigned to the Sittard-Kemperkoul burial phases (scale 1:250).



known to us. It is suggested that the original cemetery consisted of approximately 100 graves. The observed open spaces were left unoccupied intentionally (see below); no additional graves are expected here.

The chronological development of the cemetery: From possible founder's grave(s) to abandonment

The first burial phase: Its significance

The first burial phase in Sittard-Kemperkoul (S-K I: 510/20-565) is identified only on the basis of a number of graves that could not be dated more precisely as to burials phase S-K I+II (table 5.2). These graves probably do not date as early as S-K I since graves that provide unambiguous evidence for this phase are absent. It is assumed that the location was taken into use as a burial ground in the course of the second half of the sixth century. The distribution of the graves from phases S-K I+II and S-K IIa show that the cemetery developed from the middle section of the cemetery (fig. 6.2 and 6.3, A). The majority of the Sittard burials belong to phase S-K II (565-640/50); during this phase the associated community or communities used the burial ground intensively. The suggested sub-phases in this long burial phase of approximately 100 years might reveal some significant patterns with regard to the chronological development of the cemetery.

Burial phase II in detail: The distinctive older graves and the expansion of the cemetery

As mentioned, the graves of burial phase S-K IIa (565-610/20) are mainly distributed over the middle section of the cemetery, from the east to the west (fig. 6.2 and 6.3, A). Burial phase IIa consists of 12 graves (graves 5, 6, 13, 15, 16, 24, 26, 28, 37, 46, 50 and 78). Only graves 13, 28, 50 and 78 are located to the south of this middle section. Open space A clearly separates them from the majority of the other graves of this phase. Grave 4, which could not be dated more precisely as to phases I and entire phase II, is also located in this middle section, which might indicate that it dates as early as phase IIa. Graves 80 and 82, which could not be dated more precisely as to S-K I+II, are located to the north of this middle section; they might date after phase IIa.

With the identification of the first burial activities, the question about which grave(s) may be the possible founder's grave(s)¹ comes into scope, since these are in other cemeteries observed to be 'special' graves in terms of grave goods repertoires, structure, size and location.² However, it is difficult to identify the founder's grave(s) unambiguously; they can have different forms of which some might in fact not be that obvious for us, but there are also a number of options available for Sittard-Kemperkoul, as they are for Obbicht and Stein, in view of the described appearances

(1) More than one founder's grave can be present since they may be associated with contemporary family groups who used the burial ground (see for example Meerveldhoven (Verwers, 1978)). It is also possible that founder's graves are present in younger cemetery plots; these are the distinctive oldest graves for these new plots, and thus, not the oldest graves of the cemetery.

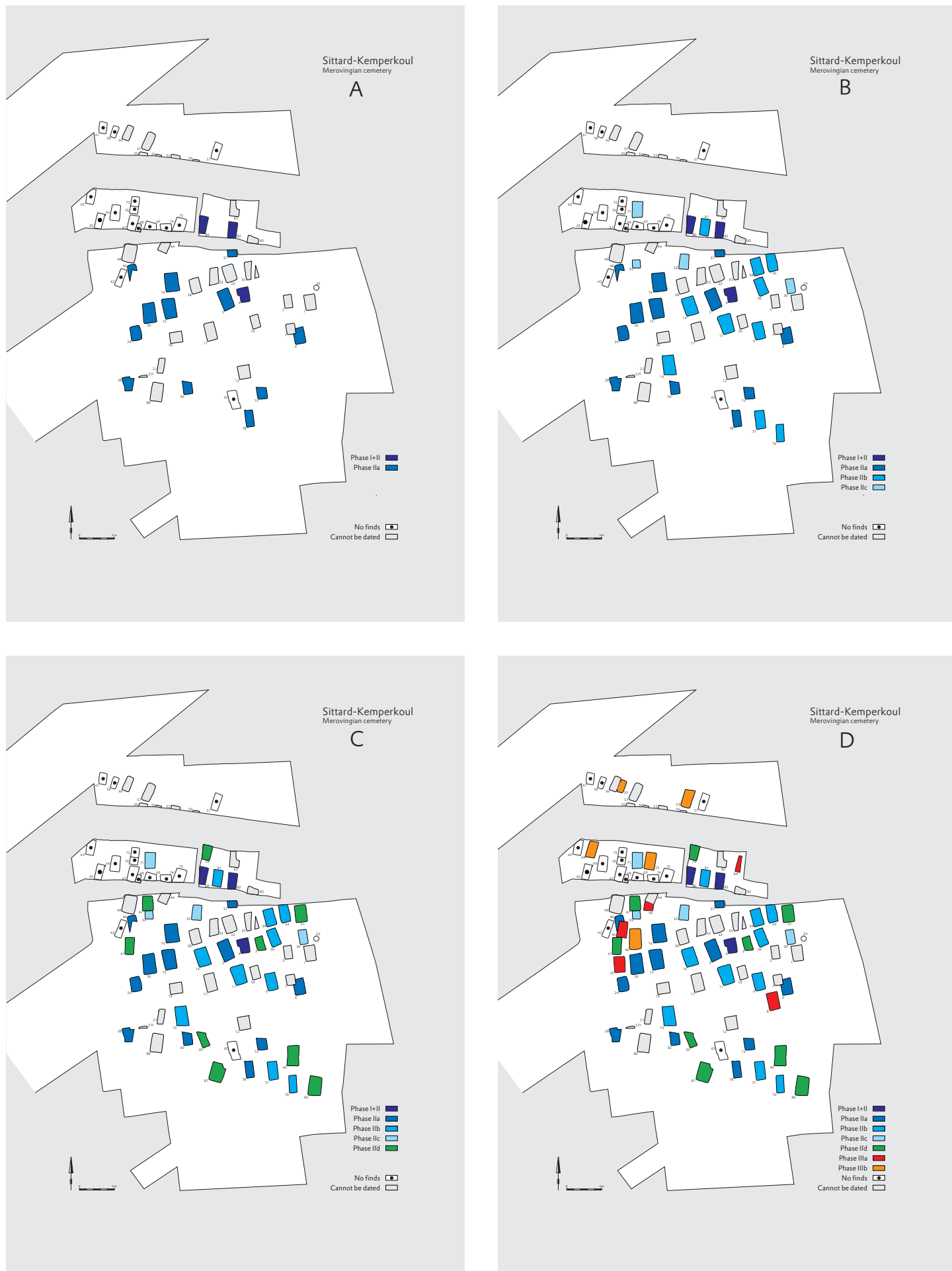
of founder's graves in other cemeteries. Moreover, the absence of distinct or refined chronological phases for the three cemeteries obscures the identification of the earliest graves; these first graves might be present in the other sub-phases which overlap with the first sub-phases. Therefore, only the 'distinctive oldest graves' will be discussed in the following sections; the concept of founder's graves and whether or not these distinctive older graves can be identified as possible founder's graves are discussed in the conclusion to this chapter, which concerns the local communities associated with the burial grounds.

The cluster of graves 15, 16 and 26 is rather prominent. They have wide grave pits and some space was left unoccupied around them in the course of time, especially around grave 16. Grave 16 is a chamber grave of a woman with a modest set of grave goods, although the string of beads is of high quantity, quality and diversity of beads. Grave 26 is a chamber grave of a man with an extended set of grave goods among which a sword, seax and lance head. In grave 15 (without wooden containers, but these might have been present in view of the observed beams), only a glass palm cup was found, comparable to one found in grave 26. Grave 26 might be a distinctive older grave in the Sittard cemetery although the prominent location of grave 16 in the cemetery makes this grave also a good candidate. Their identification as possible founder's graves, referring to both masculine and feminine values, is discussed in the final section of this chapter.

Only one other grave of this phase was furnished with feminine grave goods; grave 46 contained some beads but of less quality than those from grave 16. The grave was partly disturbed by another grave, and more beads may have originally been present. Five other graves were furnished with masculine grave goods, but with less extended weapon sets compared to the set from grave 26; the masculine objects from grave 5 are an axe, lance head, fire steel and flint, in grave 24 only a lance head was found as it was in graves 28 and 78, and the masculine objects from grave 37 are an axe and a fire steel. Three graves (6, 13 and 50) contained only neutral grave goods. Thus, graves 16 and 26 are the more 'richly' furnished graves of this first sub-phase. The graves of this first sub-phase do not show an obvious concentration, but are rather widely distributed over the centre of the burial ground; this may indicate that more than one (family) group used different plots in the cemetery at its onset simultaneously.

The ten graves (9, 11, 14, 19, 32, 34, 36, 76, 77 and 81) of phase S-K IIb (565-640/50) are clearly concentrated in the eastern middle section of the cemetery, but some can also be found to the north and south of this section (fig. 6.2 and 6.3, B). Four are the graves of men, three are of women and three had only gender neutral objects. Two graves can also be considered as distinctive older graves. Grave 11 is the richly furnished wooden container grave of

Fig. 6.3
The distribution of graves assigned to the Sittard-Kemperkoul burial phases



a woman; it contained a high number of beads among which some were exceptional polychrome beads, as well as a set of Roman ‘amulets’, a biconical pot and a glass bell beaker. Space is also left unoccupied around this grave, and large open space A (fig. 6.1), which enables gatherings in its close proximity, is located to its south. Grave 14 is the chamber grave of a man with a weapon set consisting of a lance head and seax. It contained also the single copper alloy bowl from the cemetery and a biconical pot and belt fittings. It did not contain a sword, as did grave 26, the distinctive older grave (a possible founder’s grave) of phase IIa. Grave 14 also shows unoccupied space around it. Sub-phase IIb is relatively long and starts as IIa around 565 but ends later; thus, grave 11 and 14 may be contemporary with the distinctive older graves of phase IIa; therefore, graves 16 and 26 and graves 11 and 14 may indicate that two at least two distinct groups started using the cemetery but occupied different plots within it. And although the phases IIa and IIb show some overlap, it seems that the cemetery expanded to the east after the first burial activities. This might be underlined by the distribution patterns of graves of the next phases.

The four graves (30, 33, 39 and 71) of sub-phase S-K IIc (580/90-640/50) are located at a considerable distance from one another, but a pattern can nonetheless be identified: they form the limits of the earliest middle section of the cemetery (fig. 6.2 and 6.3, C). Grave 71 was the most northern grave at that time, and grave 30 the most eastern. These graves might indicate the first expansion of the cemetery. The empty spaces between the first phases and these newly defined borders were eventually occupied by graves of later dates. Grave 33 contained only neutral objects, grave 71 feminine objects (beads, finger ring, bracelet), grave 30 masculine objects (lance head and seax) and grave 39, that of a child, contained beads.

The ten graves and context 29 of sub-phase IIId (610/20-640/50) are dispersed throughout the cemetery; they seem to concentrate around the older centre, but this pattern is not very clear. Four (graves 20, 49, 86 and 87) are located in the very south of the area with graves of the foregoing phases. Graves 86 and 87 in fact form the southern limit of the cemetery; grave 86 is a chamber grave with coffin of a man and grave 87 held a woman. Four graves (3, 41, 31 and 47) are located in the middle section of the cemetery but around the earliest graves of the cemetery except for grave 3, which is located inside the limits of the eldest core. It takes in a (reserved?) space left open between older graves. Grave 79 and 84 are the northernmost graves of this phase, but the cemetery expands more to the north in the following phases. The cemetery expands from the oldest core of the cemetery to the north and south during phase IIc and IIId, and the most eastern and western limits of the cemetery are also marked during these sub-phases.

- *The last burial phases: Final expansion and the abandonment of the cemetery*

The northern expansion of the cemetery becomes more obvious in the phases after general burial phase II (fig. 6.2 and 6.3, D). Graves 25, 43 and 45 of phase IIIa (640/50-670/80) cluster to the west of the eldest inner core; they are clearly located at the core’s limits in the same area as the graves of phase IIId. Grave 45 cuts the older grave 46. This seems to indicate that there was a limit to the expansion in the western direction. Grave 8 of this phase is located at some distance from the eldest core, to its southeast. This phase underlines that the cemetery developed in all directions after the first burial phases, but also that graves were simultaneously created close to this earliest section of the burial ground; this again shows that the cemetery developed from a number of centres and that these remained in use.

The graves of burial phase IIIb (640/50-750) were in all probability contemporary with the graves of phase IIIa (640/50-670/80), or are just somewhat younger; it was difficult to date them to this more restricted phase IIIa. Grave 53 and 59 are located in the group of youngest graves located in the northern section of the cemetery (fig. 6.2). Graves 64 and 73 are located a little more to the south, but are also associated with this group of youngest graves. Graves 53, 59, 64 and 73 of phase IIIb obviously underline the expansion of the cemetery to the northwest. Only grave 40 is located in the western section of the cemetery, close to the eldest graves of the cemetery. It takes in a (reserved?) space in between older graves.

The north-western expansion of the cemetery seems also to be characterised by a cluster of narrow but also broader graves without grave goods (fig. 6.2). The majority of these graves are different from the older graves with their narrower outline, closer relative distances and absence of finds, and they might also be somewhat younger than the graves dated to the last identified burial phases on the basis of grave inventories. Fourteen somewhat narrower graves without grave goods of this last phase are identified, but the recent disturbance of this part of the cemetery certainly destroyed an additional number of approximately seven such graves. They are identified as the youngest burial phases since they are associated with the youngest graves with grave goods. Such groups of graves with similar characteristics were observed elsewhere.

In the cemetery of Posterholt-Achterste Voorst, a cluster of narrow graves without grave goods is also present, but here in the south-eastern section of the cemetery, they are identified as graves of the late seventh and early eighth centuries.³ In Bergeijk, a cluster of narrow graves were found in the southern section of the cemetery; these graves are also identified as the last burial phase of the cemetery and dated to the late seventh and early eighth centuries.⁴ The evidence that these graves belong to the last phase of burial at the Sittard cemetery is also illustrated by grave 42. No

(2) Theuws 1999; Theuws 2009; Brather 2004; Krohn 2007. (3) De Haas/Theuws 2013, 162-171. (4) Theuws/Van Haperen 2012, 163-164.

grave goods were found in this grave. Moreover, it had an orientation that is different from the older graves, but lies parallel to grave 45 of phase IIIa which cuts in its turn an older grave of phase IIa. Grave 42 thus illustrates the last outward expansion of the cemetery in western direction.

It is obvious that the burial ritual had already changed dramatically before it was decided to abandon the cemetery completely. If we assume that the graves without grave goods were partly contemporary with the last graves with objects (which presumably date to the late seventh century) but predominantly date thereafter, and that approximately one to two burials took place every year, it can be proposed that the cemetery was abandoned around 700 AD or just thereafter.

After having presented the development of the cemetery on the basis of the date ranges of individual graves and their assignment to various phases, it can be concluded that the cemetery developed from a central core (consisting probably of a number of distinct plots) in all directions. Sections of the cemetery were used more intensively during specific phases, but all the other sections were also used before the last phases. During the last burial phase the cemetery expanded in only one direction (to the north-west); the other sections of the cemetery were not used anymore by then. The variety of grave location choices implicates that burial ground's organisation was a rather complicated matter, which is a subject of discussion in the following analysis of the cemetery layout.

The layout of the cemetery

The eventual cemetery layout is a result of a variety of decisions made by the burying communities. What exactly inspired the choices for specific grave locations in relation to already existing graves or maybe other features, such as paths or boundaries invisible to us, is difficult to grasp. Certain topographical features such as groups and rows of graves, intentionally left open spaces, obviously connected graves, the orientations of graves and the distribution of gendered and children's graves throughout the cemetery, all in relation to the chronological distribution of graves, can provide insights in the organisation of the burial ground over time.

- Gender and age

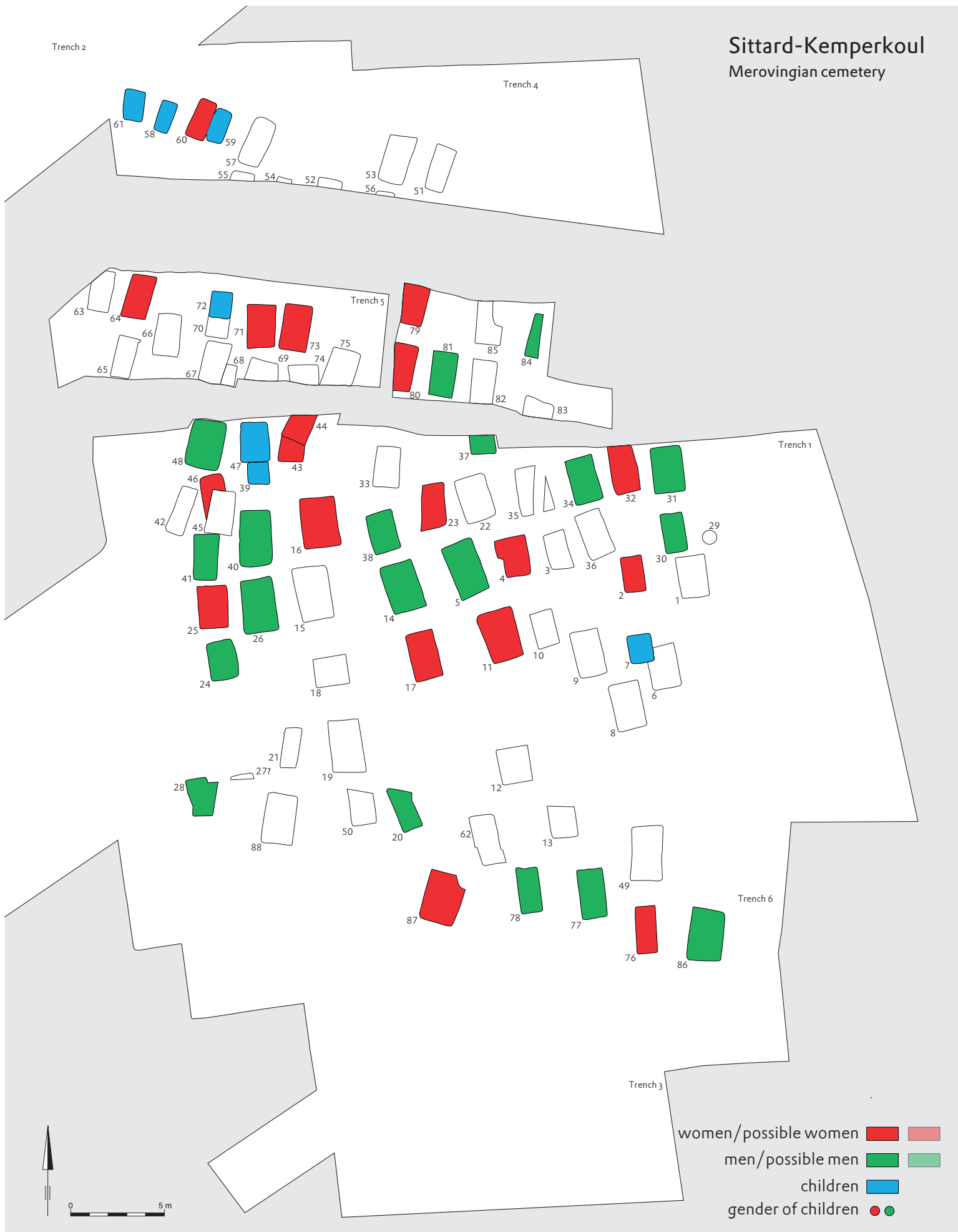
Since skeletal remains were poorly preserved in the Sittard cemetery, and the few remains still present could not be analysed, the biological sex and age at death of the interred could not be established. The positive correlation between gender specific objects and the burials of women and men in Merovingian cemeteries

is, however, frequently confirmed, although the scarce examples of reversed correlations deserve further reflection than just explaining them as errors in the data record. Recent investigations showed that the age at death can also be expressed with certain categories of objects.⁵ Exclusively feminine objects are beads and other items of jewellery; exclusive masculine objects are weaponry, axes and utensils, such as fire steels. For children, this gender specific correlation is more difficult to establish: the biological sex is as a rule difficult to establish for children under the age of c. 12 years on the basis of skeletal remains. Children are often buried with beads, but it must be kept in mind that not only girls, but boys also, could have been buried with beads since they are suitable objects for expressing the connection between mother and child. These observations on gender and age specific objects, however, do not automatically imply that burial objects were similar to the ones used during the deceased's lifetime. They merely imply that gender was expressed during the burial rite with specific categories of objects.

It can be assumed that most of the Sittard graves with gender specific objects reflect the biological sex of the buried. And although it is sufficiently investigated that age at death also knows a specific repertoire of grave goods, the variability per region or cemetery is too large to identify the age-groups of the Sittard interments on the basis of the associated finds alone.⁶

Nineteen graves of women (76, 87, 2, 4, 11, 17, 16, 23, 25, 43, 44, 46, 32, 60, 64, 71, 73, 79, and 80) and nineteen graves of men (20, 28, 77, 78, 86, 5, 14, 24, 26, 30, 31, 34, 38, 40, 41, 37, 48, 81 and 84) were identified on the basis of finds, and seven children's graves (7, 39, 47, 72, 58, 59 and 61) were identified on the basis of the coffin or burial pit length (fig. 6.4). At first sight, the graves of women and men are distributed evenly throughout the cemetery. Only in the youngest section of the cemetery, the north-western section, the graves with gender specific finds were all those of women, and the coffin/burials pit sizes show a relatively high number of child burials. In this section, a considerable number of graves are without finds; some of these might be burials of men. This younger section, dating at least not earlier than to the late seventh century, may represent changing attitudes towards burying rules. As observed previously in the region, the number of children's graves increases throughout the course of the seventh century.⁷ Perhaps attitudes also changed with respect to the roles of women and men which found an expression in burial rites.⁸ Maybe women were by then still buried with gender specific objects, while men were already buried without (gender specific) objects. This might indicate that graves without grave goods are gender specific (for men) in the final burial phases of the cemetery.

Fig. 6.4
The distribution of the gendered and children's graves of Sittard-Kemperkoul (scale 1:250).



(5) Significant correlations between gendered age groups and assemblages of grave goods were, for example, also found in the burial evidence from Anglo-Saxon England, see Stoodly (2000); Härke (1989, 1992b, 1997); Lucy (1997), and was also investigated by Brather for Southern Germany, especially on the basis of the evidence from the cemetery of *Pleidelshheim* (2008), and by Stauch (2008). (6) Halsall 1995; Halsall 1996; Stoodly 2000; Stauch 2008. (7) Theuvs/Van Haperen 2012, 157. (8) Halsall already described the change in the way men and women were buried with gender specific objects around the end of the sixth century (Halsall 1995; 1996). A change might again have occurred towards the end of the seventh century.

The patterns with regard to the foregoing phases do not show obvious differences between gender specific graves. Of the twelve graves of burial phase IIa, six are of men and two of women. In the burial phase thereafter, IIb, four are of men and three of women. Of burial phase IIc, one is of a man and one of a woman. Of phase IIId, two are of women and four of men and one of a child. Of phase IIIa, two are of a woman and one of a man. In phase IIb, one man, three women and one child are identified. It seems as if in the earliest phase, the men were more often buried with gender specific objects than women and that this changed towards the end of the burial rite of the Merovingian period.

It is also observed that the gender of women was almost exclusively expressed with beads in Sittard. Only two graves contained other feminine finds: a bracelet and finger ring in grave 71, a finger ring in grave 76, an earring in grave 57, and a bracelet in grave 87. Garnet disc brooches, common for the sixth century and frequent in the graves of women, are completely absent in this cemetery. This might be due to the possibility that these graves date to the end of the sixth century and to the seventh century. However, the absence of a wider variety of female specific grave goods is remarkable in view of the variety of exclusively masculine objects in the graves of men in the Sittard cemetery. This variety consists of lance heads, seaxes, swords, arrowheads, axes, shield bosses, fire steels and flints and is in line with objects regularly found in the graves of men in Merovingian cemeteries. The expression of male gender is thus more variable than that of female. This pattern, as the other ones in relation to the distribution of the gendered graves, will be compared to Obbicht and Stein later on in this chapter.

- Grave orientations

The variety of grave orientations and their distribution is described in detail in Chapter 3. The general orientation was S-N, which is rather remarkable (fig. 3.9 and 6.1). The main question is what the underlying reason was for the construction of the cemetery with predominantly S-N orientated graves. The most probable explanation is that the first grave, or graves, were orientated in line with an old structure (Iron Age remnants, a Roman building or the Roman road which was present to the east of the cemetery) in the proximity, which might also have been the incentive for the location choice of the cemetery. Numerous examples are known of Merovingian cemeteries and their location near various older remnants in the landscape.⁹ Unfortunately, such remnants were not discovered in the proximity of the cemetery, except for the Roman road passing the cemetery. This road, running from the south to the north, may have also conditioned the orientation of the first grave, which in turn directed the orientations of the graves in the century thereafter.¹⁰ In general, it can be observed

that the graves in the northern (younger) part of the cemetery and the graves that form the southern limit of the cemetery have another orientation than those in the central part. This change of orientation is probably related to a series of changes in the burial rites of the later seventh century.

- Obviously connected graves

Only a few graves of the Sittard cemetery are cut by another one. Whether these graves were intentionally or accidentally connected is a question of interest. Some clues, such as comparable orientations, related finds and generational or gender related differences or similarities, may lead to answers.

Grave 6 was cut by grave 7 (fig. 6.2). Unfortunately grave 6 was also partly destroyed when trench 1 was constructed; only the bottom of the grave was left (remaining depth: 6.0 cm) and could be analysed. A biconical pot was the single find from this grave, although it is not recorded on the field drawing. The pot dates to 565-610/20 and the grave is dated accordingly to phase S-K IIa; it is one of the earliest graves of the cemetery. Finds were not discovered in grave 7 and since skeletal remains were not preserved, it is difficult to draw conclusions as to the nature of the connection between the two graves. However, both graves have nearly identical orientations. Their upper layers were destroyed, but grave 7, the more recent grave, was dug deeper than grave 6. The outlines of the two graves seem to represent their original dimensions, which indicates that grave 7 (burial pit length: 151 cm) was the burial of an older child, maybe a child of the adult buried in grave 6. Since grave 7 cuts grave 6 it may have been the burial of a child who died not long after one of its parents (or maybe another relative) and was intentionally buried in association with him or her. This means that the location of grave 6 was remembered by the surviving family members, either by memory or by markers placed on top of the grave.

Grave 39 and grave 47 touch one another. Grave 39, with its length of 119 cm, was in all probability a child's grave, whereas grave 47 was an adult's grave (fig. 6.2). The two graves have nearly similar orientations. Grave 39 contained a ceramic bottle and a knife, grave 47 a biconical pot. Grave 39 is dated to S-K IIc (580/90-640/50) and grave 47 to S-KII d (610/20-640/50). The burials might be of a parent and child, but other relations are of course also possible. It cannot be said with certainty who of the two was buried first, but the last grave was probably intentionally placed in close relation with the already existing grave since their outlines (nearly) touch without the second grave disturbing the first one. The relation of the two deceased was thus expressed in the burial ground.

Grave 44 cuts grave 43 (fig. 6.2). Grave 43 is the burial of a woman and contained beads, a belt fitting and glass and metal frag-

ments. Its orientation is slightly different from that of grave 44, but the two graves have nearly similar widths and remaining depths. The original length of grave 43 cannot be established, but it seems to have been the grave of an adult. Grave 44 contained beads and a sand stone fragment; thus, it was also a grave of a woman. Grave 43 is dated to phase S-K IIIa (640/50-670/80); grave 44 cannot be dated precisely on the basis of its finds but dates on the basis of its stratigraphic relation with grave 43 to the same phase or thereafter. The connection between the buried was in all probability emphasized in the burial ground since the majority of the Sittard graves are not cut by another grave. Hence, it can be assumed that one was aware of the location of graves. Disturbing another grave with the construction of a new grave can therefore be interpreted as an intentional expression of relations between deceased. The nature of the relation between the women in graves 43 and 44 in life can, however, be manifold.

Grave 45 cuts grave 46 (fig. 6.2). The finds from grave 45 are a single amber bed (no longer present), an iron plate buckle and counter plate (dating to 640-670) with copper alloy inlays. It cannot be determined which gender was expressed with these finds. Grave 46 contained four beads (a bracelet) and a jug, and can be identified as the burial of a woman. Grave 45 is dated to S-K IIIa (640/50-670/80), and grave 46 to phase S-K IIa (565- 610/20). A period of time might have passed before the second burial was created (determined only on the basis of the date ranges of the grave finds without considering the possibility of prolonged circulation). The presence of grave 46 might have been forgotten and thus, might have been disturbed by accident; although this seems unlikely since the rate of disturbances is low in the cemetery. However, the orientations of the two graves are different. The orientations of the Sittard graves changed over the course of time (see Chapter 3), which suggests that the construction of grave 45 followed the rules of practice of the later phases and not the orientation of grave 46 with which it was (intentionally) connected. The relation between the two graves, if intentionally expressed, can be manifold but cannot be determined on the basis of the available evidence. Grave 41 is located in the close proximity of grave 45 (it nearly touches the outline of this grave); it is dated to phase S-KIIId (610/20-640/50) on the basis of finds generally associated with burials of men. The three graves (45, 44 and 41) form a unit which might have been intentionally constructed to express certain (familial) relations. The exact nature of the relations, however, cannot be determined. Grave 42 (a narrow grave without finds) can be found to the west of this cluster of three graves: it is located in their close proximity but at some distance from the cluster of narrow empty graves of the youngest phase in the north-western segment of the cemetery to which it apparently belongs. This might indicate that connections between the dead were expressed over longer periods of time and thus, that cemetery sections were used by groups over time, for example family groups.

Grave 59 and grave 60 are located next to one another (fig. 6.2). The coffin in grave pit 59 has a length of 144 cm, and was thus, in

all probability, the burial of an older child. The coffin in grave 60 is, with its length of 194 cm, longer and in all probability, the burial of an adult. Both graves contained beads and grave 59 also an earring and a copper alloy simple ring. Their close proximity and similar orientations seem to indicate that they were created in the same period; at least in a period during which the exact location and appearance of the first grave was still visible. Grave 59 is dated to phase S-KIIb (640/50-c.750). Grave 60 could not be dated to a particular phase on the basis of the finds alone. The graves might have been the burials of a mother and child.

Grave 67 cuts grave 68 (fig. 6.2). Finds were not discovered in these two graves. The graves have nearly similar orientations, which can be an indication for their contemporaneity and an intentionally expressed connection. The same applies to graves 72 and 70 (fig. 6.2). Grave 72 cuts grave 70 and both graves are without finds but share a similar orientation. This might indicate that the latter burial was focussed on the former one and as such, a certain kind of relation between the two deceased was expressed in the burial ground. These last two groups of graves belong to the section of the cemetery with narrower and empty graves. These graves are identified as the youngest phase of the cemetery. The intentionally connected graves indicate that the expression of relations between the dead with consciously chosen locations was practiced throughout the entire period during which the burial ground was in use. With regard to the obviously connected graves with grave finds, it appears that especially the relations between feminine adults and children are obvious.¹¹

- Open spaces

Seven open spaces of various dimensions are identified on the cemetery plan (fig. 6.1). Open space A is the largest and separates the southern section of the cemetery from the rest. Since graves 12 and 18, bordering the open space to the south and to the west, were only identified on the basis of beams (and thus the bottom of the burial pits), it should be questioned whether the open space as it is now depicted on the cemetery plan is not partly a result of destroyed or unnoticed remains of graves. The depths of the beams of grave 12 are +56.16 and those of grave 18 are +56.10. The depths of the surrounding burial pits are: grave 17 (+56.08), 11 (+55.83), 10 (+56.10), 9 (+56.06), 8 (+55.96), 13 (+56.65), 20 (+56.50) and 19 (+55.98). Some of the maximum depths of the graves are lower than those of graves 12 and 18, while some are higher. The difference, however, is negligible and it seems therefore unlikely that additional graves in the now identified open space A were all missed by the excavators, since they will have had comparable depths.

Open space A sets the mid-eastern cluster of graves apart from the other graves. This cluster is also separated from the cluster to the north on the basis of its predominant SE-NW grave orientations, which are different from the predominant SW-NE grave orientations in the more northern part of the cemetery. Leaving space A open was probably intentional. Various reasons for this

(9) De Haas; De haas/Theuws 2013. (10) See Williams in which the act of copying the characteristics of previous graves is discussed as a burial strategy. (11) For example in Borgharen: DNA analysis showed that at least one of the two children (age at death circa 4 and 6 years) was related to the female adult (age at death of 44-53 years) with which they were interred in a single grave; for the second child this relation could not be established with certainty (Lauwerier *et al* 2011, 83-87).

choice can be thought of; it could have been used to distinguish between groups of graves, to reserve space for later interments (which eventually did not take place), or it was used as a path leading the survivors through the burial ground which made it possible to visit or gather around the distinctive older graves 16, 14 or 11.

Two smaller open spaces, C and D, are observed in this eastern separated cluster of graves. Since these are much smaller, their identification as spare locations for future burials, maybe for specific family members (which were in the end never used), may be an option. A similar space seems to have been left open between graves 4 and 36 which was later taken in by the younger grave 3 (fig. 6.2). Grave 40 might have taken in a reserved space as well.

Open space B separates the southern section of the cemetery, together with open space A, from the rest. The only connection of this southern section with the rest of the cemetery is grave 18, of which, as mentioned earlier, only the beams were discovered. The southern section of the cemetery is clearly different from the rest with regard to the density of burials and grave orientations; they are for the majority more or less S-N orientated, whereas the other graves of the cemetery are either SE-NW or SW-NE orientated. Again, the internal cohesion with regard to burial phases is absent in this cluster: graves of nearly all the burial phases are present. The burials of women and men are also evenly distributed throughout this cluster. The significance of this section is discussed in more detail below.

Open spaces E, F and H are also relatively small (compared to open space A), and might have been spared for future burials. Open space E, however, can be found just to the north of grave 16. This grave is one of the few graves which does not fit into the identified rows of graves (see below); it stands somewhat apart from these rows. It is also larger, it is dated as one of the earliest graves (S-K IIa: 565-610/20) of the cemetery and it is a distinctive older grave (possibly a founder's grave?). The open space might have marked its special position in the cemetery, which is underlined by the fact that open space A also reaches grave 16.

Open space G could have been used to separate the youngest phase of the cemetery from the former phases. This option cannot be substantiated since a considerable part of the cemetery is destroyed just to the south of this open space.

Altogether, obvious open spaces can be observed on the cemetery plan. It is argued that these were intentionally left open to reserve locations for later interments, to separate certain cemetery sections from others, or to enable visits to the dead. The significance of the cemetery sections is discussed in the following section.

- *Obvious groups and rows of graves*

Since it is difficult to understand the significance of single rows

of graves it is prudent to identify obvious groups of graves first and discuss the rows of connected graves present inside them, followed with the organisational principles resulting in the cemetery layout at hand thereafter (Fig. 6.1). Rows of graves are identified by drawing horizontal and vertical lines through approximately the middle of the graves; these lines connect the graves which are considered to be placed in line with each other intentionally. East-west or north-south orientated rows are identified when these lines connect more than two graves.¹² The groups are identified on the basis of their separation from other groups of graves by open spaces and their internal coherence based on grave orientations, grave sizes and the relative distances between the graves; their significance with regard to organisational principles is discussed at the end of this section.

Group 1 consists of the southern graves and is separated from the rest of the cemetery by open space A. This section is also less densely occupied compared to the rest of the cemetery and the graves have variable orientations. Obvious horizontal or vertical rows of graves cannot be identified, apart maybe from graves 19 and 50 which are located in an N-S orientated line with grave 15, from another group of the cemetery located close to possible founder's grave 16. Of the fifteen graves in this group, five are of men, two of women and one is without finds. Graves dated to 565-640/50 are present in this group; graves of the last phases are not identified here.

Group 2 consists of twenty-two graves and one context with loose, but associated finds (context 29). Open space A separates it from the southern and western sections of the cemetery and the similar grave orientations are an obvious connecting feature. The group consists of six graves of men, six graves of women and one child's grave. Graves of mainly phases IIa and IIb are present here, but graves of all the phases thereafter can also be found in this group, except for graves of phase IIIb and the obvious empty graves of the last burial phase. Three horizontal and three vertical rows of graves are identified in this group. The northernmost east-west orientated row consists of six graves: 23, 22, 35, 34 (SK IIb), 32 (SK IIb) and 31 (SK IIb). Grave 23 is not completely excavated; its orientation can be slightly different from the other graves in this row, but this is not certain. Grave 23 is the grave of a woman, the gender of burials 22 and 35 could not be identified, graves 34 and 31 are the graves of men, and grave 32 is, again, the grave of a woman. It is difficult to draw conclusions regarding conscious choices or organisational principles which resulted in this row. Graves 34 and 32 are the graves of a man and a woman and date to the same burial phase, which may point to a connection expressed intentionally in the burial ground. The graves of the later phases might have been dug here because of the already existing graves; whether this choice was instigated by familial or other connections or simply that the available open spaces were

used, remains open for debate, but some suggestion are made in the conclusion to this chapter. This row of six graves is also connected with north-south orientated rows; the relations are multi-interpretable as are the connections between the graves of the east-west orientated row.

The middle east-west orientated row consists of five graves: 14 (S-K IIb), 5 (S-K IIa), 4 (S-K I+II), 3 (S-K IIb) and 36 (S-K IIb). Grave 5 (grave of a man), and maybe 4 (grave of a woman), were the first graves of this row; the others might have been intentionally placed in their proximity. Grave 14 is the grave of a man; the gender of the other burials (3 and 36) could not be identified. The row has an obvious empty space to its east; this might have been a place retained for a burial which was meant to be connected to the other burials of this row.

The first (western) S-N orientated row in this group consists of three graves: 38 (chronological indifferent), 14 (SK IIb) and 17 (indifferent). The second S-N orientated row consists of three graves: 23 (indifferent), 5 (SK IIa) and 11 (SK IIb), and the third row of three graves: 35 (not datable), 3 (SK IIb) and 9 (SK IIb), in which an open space can be observed between graves 3 and 9. The last row, which is also the eastern limit of the cemetery, consists of three graves: 31 (SK IIb), 30 (SK IIc) and 1 (not datable).

Group 3 is defined on the basis of the empty space to its east and graves with similar orientations. It is separated from Group 4 because this group consists of graves placed relatively close to one another and cutting graves are also present; there is more space between the graves of Group 3. The three graves (16, 15 and 26) which seem to form the core of the cemetery are present in this group; distinctive older graves are grave 26 and 16 (whether or not they can be considered as possible founder's graves is discussed in the last section of this chapter). Of the seven graves of Group 3, four are of men and three of women. Four graves date to phase IIa, the other three to later phases. The single east-west orientated row consists of graves 25 (S-K IIIa), 26 (S-K IIa) and 15 (S-K IIa). The different phases to which these graves are dated indicate that the organisation of the burial ground in rows superseded time. One S-N orientated row consists of graves 41 (S-K IIb), 25 (S-K IIIa) and 24 (S-K IIa); it consists also of differently dated graves. One of the graves (grave 15: IIa) might be connected to an S-N orientated row with graves 18, 19 (S-K IIb) and 50 (S-K IIa) of group 1; they are more or less dated to the same period. The gender of the persons buried in these graves could not be identified.

Grave 16 (SK IIa) is not obviously connected with one of the identified rows. It stands somewhat apart in the cemetery. This grave of a woman is also one of the oldest graves of the cemetery. It might be the starting point of the cemetery or maybe the founder's grave, together with grave 26. Grave 16 forms in fact the central point of the cemetery and connects its different sections. A pit containing charcoal and a late egg-shaped pot (670-740) was dug into the grave. It might be a result of later (ritual?) activities on the site. It can be suggested that this action symbolically connected the younger burial activities with the older burials of the cemetery.

The twenty-one graves of Group 4 show differences but are identified as one group on the basis of their orientations and the dense burial pattern in which some obviously connected graves are also present, namely four groups of two cutting graves of which only one other example is known in another group of graves in this cemetery (grave 2 and 6). Ten graves included in Group 4 are without finds, of which one (grave 42) is located at some distance from the cluster of graves without grave goods. These graves are identified as the youngest burial phase (see above). Of the graves with finds, one is of a man, three are of children and six of women. In this group femininity is emphasised, as in the most northern group. In all the other groups both masculinity and femininity are emphasised. The graves belong to phases IIc-IIIb (the later phases), apart from grave 46, which is a grave of phase IIa and cut by grave 45. This action might have deliberately included grave 46 in the more recent cluster of graves.

The first (northernmost) west-east orientated row in this group consists of six graves: 64, 63, 70, 72, 71 and 73, of which 70 and 72 are obviously connected. Grave 72 is the grave of a child (identified on the basis of its dimensions) which cuts grave 70 of an adult. Grave 71, 73 and 64 are the graves of women, but the gender of the persons buried in graves 70 and 72 (only one bead) could not be identified. The significance of this row can, however, be questioned: the connection with and between these graves and the other graves in their surroundings can be as meaningful as the connection between the six graves within the identified 'row'. A second west-west orientated row consists of only empty graves: 65, 67, 68, 69, 74 and maybe also grave 75. It shows that graves were still organised in rows towards the end of the burial rites practised at this cemetery, although graves 65 and 66, without finds, are clearly not integrated in rows of graves.

The most northern north-south orientated rows consist of the SW-NE orientated graves. The rows in the southern half of the cemetery consist of graves with a SE-NW orientation. The first (western) north-south orientated row consists of the graves 72 (no finds), 70 (no finds), 67 (no finds), 48 (unidentifiable finds) and 42 (no finds). Graves 72 cuts grave 70, both are close to grave 67. These graves are part of the youngest cluster of the cemetery. And although grave 48 is obviously located in line with these graves, it is different from these graves. It is much broader and it is identified as the grave of a man but could not be dated on the basis of its finds. Grave 42 is again a narrow grave without finds, obviously part of the youngest cluster of graves in the cemetery, but at some distance from it. If these graves were intentionally placed in a row, they incorporated the presumably older grave 48 within it.

The second row consists of the graves 71 (S-K IIc), 69, 47 (S-K IIb), 39 (S-K IIc), 40 (S-K IIIb) and 26 (S-K IIa), and the third row consists of the graves 73 (S-K IIIb), 74 (no finds), 44 (unidentifiable finds) and 43 (S-K IIIa). Grave 44 cuts grave 43, thus, these two were intentionally connected. The graves in this segment of the cemetery are predominantly graves without grave goods (therefore, probably of the youngest cemetery phase), or of the last

(12) Theuws/Van Haperen 2012, 152-153. They consider two graves placed in line as a row. Here only three or more graves are considered to form a row because it can also be accidental that two graves are located in line.

phase with burial objects. This entire cluster might have expressed certain connections between the dead, including those placed in a 'row'.

Group 5 is identified on the basis of nine graves with similar orientations, with some space between them and empty spaces E and F to the west. This group is separated from the graves of Group 2 on the basis of the different grave orientations, apart from grave 37; this is also the earliest grave of the group but is located at some distance from the graves of Group 1 with similar orientations and early graves. Group 5 consists of three graves of men and two of women. Graves of all phases, except IIb, are present in this cluster of only nine graves; this strongly suggests that generations were connected in the burial ground rather than the burial ground developed organically from old to young.

The first rows with SW-NE orientated graves consists of graves 79 (S-K IId), 85 and 84 (S-K IId). Grave 79 is the burial of a woman, grave 84 the burial of a man, and the gender of the person buried in grave 85 could not be identified. The second east-west row consists of graves 80 (S-K I+II), 81 (S-K IIb) and 82 (S-K I+II). This row seems to be somewhat earlier. Grave 80 is the burial of a woman, grave 81 of a man and grave 82 could not be identified. The north-south orientated row of graves 79, 80 and 33 consists of the burials of two women (79: IId and 80: I+II) and one grave (33: IIc) of which the gender could not be identified; for the other north-south rows in this segment of the cemetery, the connection in terms of gender could not be identified. The row to the east of this row consists of the graves 85 (no finds), 82 (SK I + SK II) and 37 (SK IIa). Two burials of women close to one another might express various forms of connections. The question is whether the organisation in either east-west or north-south rows was the prevalent organisational form and the most meaningful, or whether both connections are significant. The two last east-west rows each contained at least the burial of a man and a woman (the third grave in both rows could not be identified), which might indicate a relationship between husband and wife, but various other relations can also be imagined.

Group 6 consists of the most northern graves. The north-western section seems to be separated from the more southern graves by open space G; for the north-eastern graves this cannot be established since the graves possibly present to their south were destroyed by the sewer pipe trench. This group consists of three children's graves and one woman's grave. The only two datable graves date to phase IIb.

The most northern east-west orientated row consists of seven graves (61, 58, 60, 59, 57, 53 and 51). They also form the most northern border of the cemetery. Within this row, graves 60 and 59 are obviously connected since they were located next to one another and no space was left between them. These are the burials of a female adult and a child. Graves 61 and 58 are also burials of women, but the gender of the other graves in this row could not be

identified. The graves belong to the youngest phase of the cemetery (phase S-IIb and the phase of empty graves). Within this row, an obvious empty space can be observed in between graves 57 and 53. It is presumed that it was left open intentionally since a considerable height of graves 53 and 57 was preserved which indicates that the ground in between them was probably not disturbed and would have shown traces if graves were originally present there. The open space could have been reserved for two to three family members or otherwise connected individuals, but was never used.

The row of graves to the south of this most northern row, consists of the partly excavated graves 55, 54, 52 and 56 (they were for the largest part destroyed by a recent trench). It cannot be concluded whether these graves originally held finds; the nature of their connection, other than that they were organised in a row, cannot be established.

North-south orientated rows are absent in the most northern segment of the cemetery. The recent disturbance of a considerable segment of the cemetery to the south of the open spaces G and H can disguise the former presence of other north-south orientated rows but, in view of the locations and orientations of the other graves to the south, this seems unlikely.

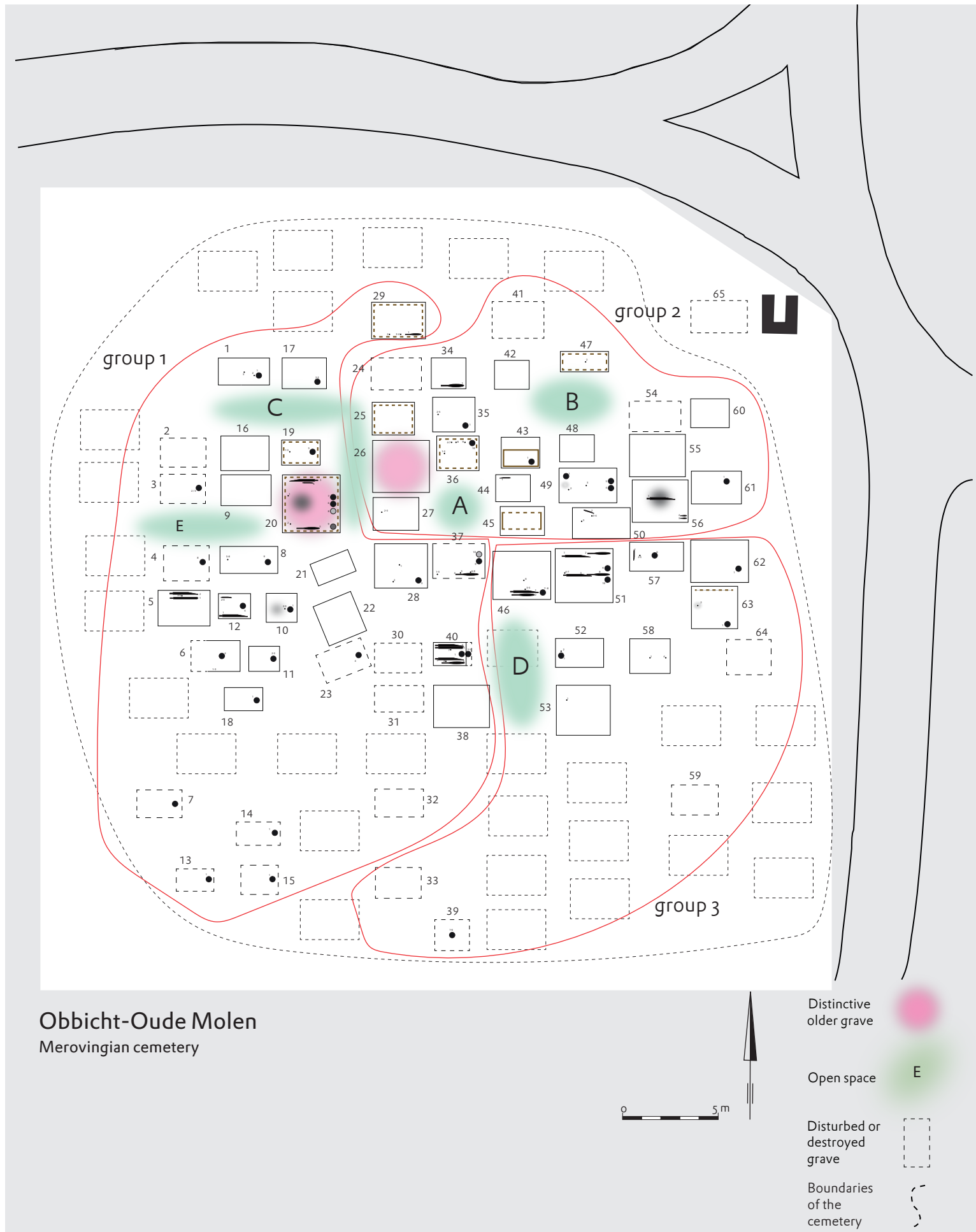
The majority of the graves are part of either north-south or east-west orientated rows. For all the rows, the internal connections are not obviously more significant than their connection to the other graves around them. Not all the graves in the western and southern sections of the cemetery were neatly placed in rows. Altogether, it can be concluded that various organisational principles were at work simultaneously. The rows are part of larger clusters which seem to be separated by open spaces. The cemetery did not develop organically from an old to young section; younger graves can be found close to the older graves. This implies that the rows were not formed as a result of a gradual expansion of the cemetery either, but that they grew as intentionally created units over the course of time. The total range of organisation principles will be elaborated on in the conclusion to this chapter regarding the possible history of the burial community.

The cemetery of Obbicht

The boundaries of the cemetery and the estimated number of graves

Beckers and Beckers already observed that the cemetery was originally (considerably) larger than the 65 recorded graves (see also Chapter 2).¹³ Graves 13, 14, 15, 30, 31, 32, 33 and 59, all located in the southern section of the cemetery, were referred to in the first publication as graves destroyed by the building and demolition of two successive mills. Nonetheless, they were indicated as intact graves on the first published cemetery plan. Their indicated locations and orientations are thus not accurate; they are de-

Fig. 6.5
The layout of the Obbicht-Oude Molen cemetery (scale 1:250).



(13) Beckers/Beckers 1940, 339-349.

Fig. 6.6
The distribution of graves assigned to the Obbicht-Oude Molen burial phases (scale 1:250).



picted with interrupted lines on the reconstructed cemetery plan indicating that their exact location, dimensions and orientations are not known. Despite the considerable disturbance of the southern section of the cemetery, it is suggested that its southern limit is marked by cremation grave 39, since it is one of the two graves dating to the last burial phase (O-OM III) and its deviant burial form in the cemetery may have marked its fringes.¹⁴ The distribution pattern of the graves discovered in the southern section of the cemetery is less dense than in the other parts of the cemetery. Assuming that it was as intensively used as the rest of the cemetery, an additional number of circa twenty graves might have been originally present here (fig. 6.5).

The original catalogue mentions that labourers disturbed graves 2, 3, 4, 6 and 7 in the western section of the cemetery. These were depicted as intact graves on the first published cemetery plan, but are indicated with interrupted lines on the new plan. It is not clear what sort of activities caused these disturbances and when they took place. The gravel extraction to the west (the exact location was not indicated) is assumed to be the cause of these disturbances. The western section is the oldest of the cemetery (see below) and the number of recorded graves of the first burial phase is comparable to those identified in Sittard and Stein (although the option that a number of destroyed graves, of the oldest phase, were originally present more to the west must be kept in mind).

Graves 37 and 40, in the middle section of the cemetery, were mentioned to have been partly destroyed by construction work; it was not specified what sort of construction work this was. These graves were also depicted as intact graves on the original cemetery plan. It can be assumed that maybe one or two graves in their vicinity were destroyed by the same construction work but went unnoticed.

It was not mentioned whether traces of affected graves were found to the east of the cemetery. Since an empty space is present between the most eastern graves and the road indicated on the original cemetery plan, it can be assumed that graves 60, 61, 62, 63 and 64 represent the eastern border of the cemetery; this is also the youngest section of the excavated cemetery (fig. 6.5). Grave 64 was depicted as an intact grave on the first published cemetery plan but its dimensions were not recorded in the original catalogue, for unspecified reasons. It is therefore depicted with interrupted lines on the new plan.

Traces of graves were also observed underneath the road to the north of the cemetery. It is not clear whether these were included in the catalogue. Northernmost graves 1, 17 and 29 were in the initial catalogue described as intact graves, but the features of grave 41 (also in this northern section) could not be further specified due to terrain difficulties. It can be assumed that not much was left of the graves observed underneath the road, and that the indistinct traces were not recorded in the initial catalogue. A number of additional graves are assumed to have been present to the north of

graves 1, 17, 29 and 41. In view of the location of the road on older maps (which was more to the south than on the original cemetery plan), it is suggested that five to ten graves might have been originally present to the north of the most northern line of recorded graves (fig. 6.5).

The cemetery was in all probability somewhat larger than the 64 excavated graves, but not much larger than the cemetery of Sittard-Kemperkoul, originally consisting of approximately 100 graves. On the basis of the suggested loss of twenty graves from the southern section of the cemetery, of five to ten graves to the north, and of maybe five to the west, it is estimated that the original cemetery consisted of circa 90 to 100 graves.

The chronological development of the cemetery: from founder's grave(s) to abandonment

On the basis of the dated graves and their distribution over the cemetery, the chronological development of the cemetery is sketched (fig. 6.6), which is related to the possible history of the associated burying community or communities at the end of this chapter.

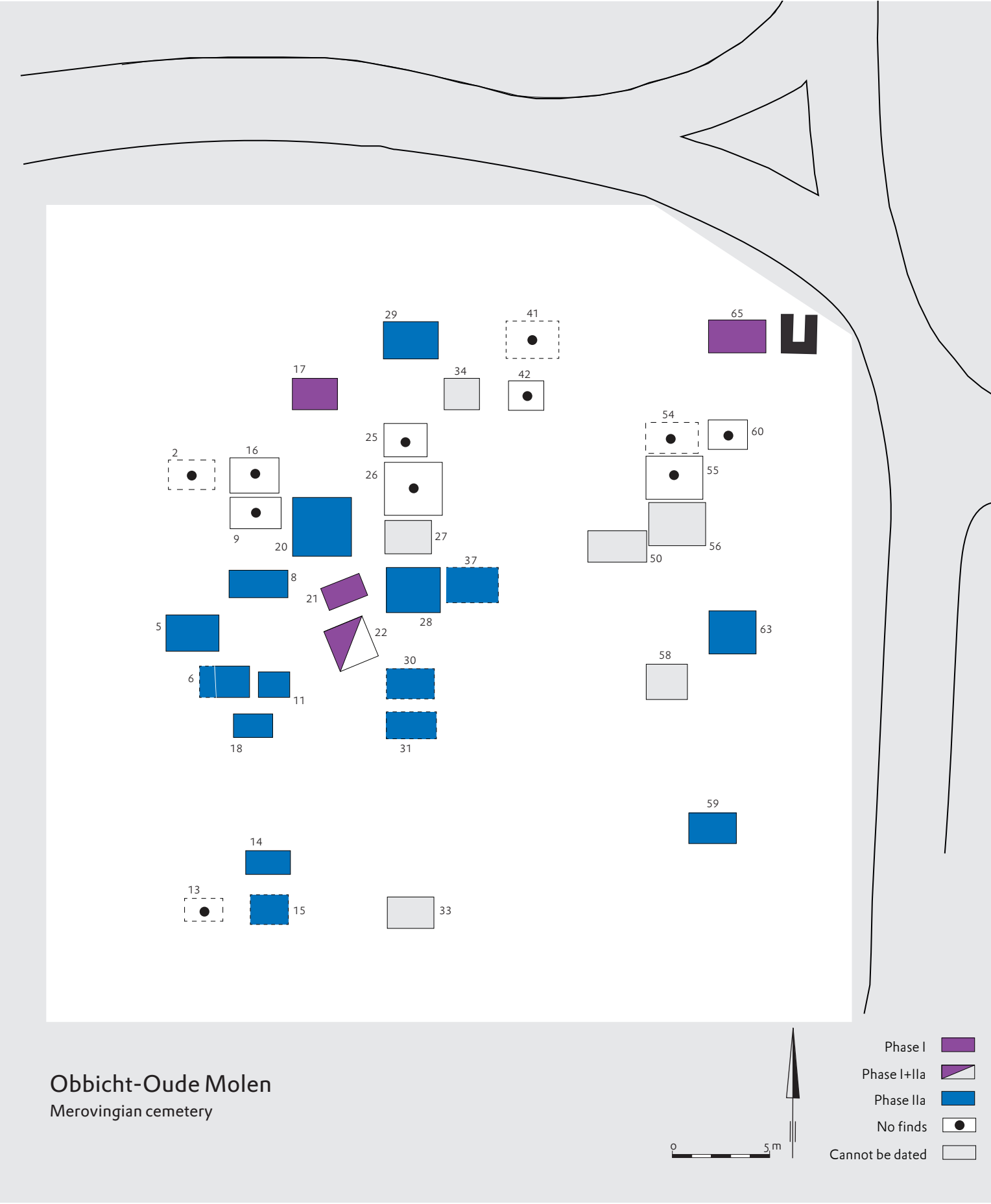
- The first burial phase: Its significance

Graves 17 and 21 represent the oldest burial phase (510/20-565) (fig. 6.7). Grave 65 is also dated to this early date range, and might even date somewhat earlier, but it is not certain where exactly this grave was discovered and how it relates to the cemetery since it was found at some distance from the cemetery and its precise location was not given. It might represent an early phase of the cemetery outside of the indicated site of the cemetery. Graves 17 and 21 are located in the western half of the cemetery, and grave 21 has an orientation deviant from the general W-E orientation of the other graves. They are dated on the basis of pottery vessels alone, which is a rather feeble basis for their identification as first graves of the cemetery.

Six graves could not be dated more precisely as to phases I+IIa, I+IIc or I+II; these can date as early as the first identified burial phase, but this seems rather unlikely. Grave 22 dates to I+IIa and has a similar orientation as grave 21, which is located in its close proximity. This might indicate that they were contemporary graves. Grave 22 is the grave of a man, identified on the basis of a seax pommel alone. Graves 7, 45, 48 and 53 are dated to phases I+IIc and grave 38 to I+II. Grave 7 is located in the south-western section of the cemetery. Graves 38 and 53 form the southern border of the dense cluster of graves in the middle of the cemetery; graves to the south of them were in all probability present but destroyed by the mills. Grave 38 was dated on the basis of bi-conical pot fragments alone; the other finds from this grave are nails and predominantly indeterminate fragments. Grave 53 was dated on the basis of a shield boss. Other finds were not discovered in this grave, which is remarkable since shield bosses are of-

(14) This situation is comparable to the one in Meerveldhoven where cremation graves seem to belong to the latest phase of burials (Verwers 1978).

Fig. 6.7
The distribution of graves assigned to the oldest Obbicht-Oude Molen burial phases (scale 1:250).



ten part of extended weapon sets. The shield boss is in poor condition and cannot be dated more precisely as to phase I+IIc. Grave 45 is a wooden container grave in the middle section of the cemetery. It contained some belt fittings, a spindle whorl and some indistinct objects and could not be dated more precisely. Grave 48 is located in the north-eastern section and is predominantly associated with the younger graves of the cemetery; it seems unlikely that this grave dates to the first burial phase. Grave 7, in the south-western section of the cemetery, is located in the vicinity of some older graves; this grave might also be an older grave.

On a whole, the first phase is represented only by a small number of graves. They indicate that the first burial activities took place in the western half of the cemetery. The presumed disturbance of the westernmost section of the cemetery might have caused a loss of some of the earliest graves. Distinct oldest graves are not present in this earliest burial phase; they might have been destroyed, but it might also be one of the graves of the next burial phase since the two graves assigned to the first burial phase on the basis of pottery vessels alone might date somewhat later and could in fact be part of burial phase IIa.

- *Burial phase II in detail: The distinctive older grave(s) and the expansion of the cemetery*

The majority of the Obbicht burials date to broad burial phase II (565-640/50) in which four overlapping sub-phases are identified. The date ranges of the four sub-phases show some overlap but provide some insights with regard to the chronological development of the cemetery during burial phase II. The two first sub-phases (starting before 610) consist of the majority of the burials (fig. 6.6). In the phases thereafter (starting after 610), the number of burials diminishes.

The first sub-phase (IIa: 565-610/20) consists of fifteen graves (fig. 6.7). The majority are located in the western half of the cemetery, where the graves of phase I are also located. Two graves (59 and 63) are located in the eastern half of the cemetery; they might be the first graves of a distinct burying group, maybe a family group who used this plot of the cemetery from then on. It is remarkable that ten of the fifteen graves of this phase contained masculine grave goods. Five graves are 'neutral' and grave 8 is the single grave with feminine grave goods. The neutral graves in this phase were probably the graves of women (3, 15, 18, 47 and 62). The empty graves in the western section might also belong to this burial phase which might as a result consist of more than only the fifteen dated graves.

Grave 20 stands out by its dimensions and extended grave inventory which consists of an axe, seax, shield, lance head and a vessel set consisting of a copper alloy bowl, a red biconical pot and a glass claw beaker. This grave contained one of the 'richest' grave goods ensembles of the cemetery and could possibly, on the basis of its size and special location, be identified as a distinctive older grave (possible founder's grave?) in the Obbicht cemetery. Thus, the two graves of burial phase I, which were dated on the basis of

biconical pots alone and located in the vicinity of this grave, perhaps a founder's grave, might in fact be contemporary with it.

A number of graves could not be dated more precisely as to phases I+IIa, I+IIa/b/c and I+II; some might actually date as early as phase IIa, assumingly those in the western section and south-eastern-middle section of the cemetery.

The second sub-phase (IIb: 565-640/50) consists of eighteen graves. This phase starts as early as sub-phase IIa but ends somewhat later; the distribution of the eighteen graves throughout the cemetery can provide some clues with regard to the chronological development of the cemetery since they might be somewhat later than the graves of sub-phase IIa. The distribution of the graves shows that they can be found in the western half of the cemetery, in association with the earliest graves, but also in the eastern half and especially in the north-eastern section of the cemetery. The cemetery may thus have developed from two centres, one in the west and one in the east (of which graves 59 and 63 are the first ones). Of the eighteen graves of sub-phase IIb, six contained feminine grave goods, eight were neutral, and four had masculine grave goods. Assuming that these graves are somewhat later than those of sub-phase IIa, it seems as if not long after the cemetery was taken into use the women were accorded gender specific finds more often than in the beginning, when especially men were accorded gender specific grave goods. Grave 19 of a woman was located close to grave 20, a distinct oldest grave (or maybe a possible founder's grave).

Burial sub-phase IIc (610/20-640/50) consists of three graves. This phase ends as sub-phase IIb, but it starts somewhat later and therefore, might provide some insights in the chronological development of the cemetery. The three graves are located in each other's proximity, forming a cluster in the middle of the eastern half of the cemetery (grave 46, 51B and 57). Grave 57 is the grave of a woman, graves 46 and 51B are those of men. Grave 51 is a grave of two superimposed burials of men, of which the lower burial (51B) is dated to IIc.

Four graves (7, 53, 45 and 48) could not be dated more precisely as to burial phases I+IIc (510/20-640/50). Grave 45 is the grave of a woman, grave 53 of a man, and the other two were accorded neutral objects. Their locations and those of the three graves of phase IIc indicate that after the cemetery expanded to the east, it expanded somewhat to the south.

Burial phase IId was defined on the basis of only one grave. Grave 64, with only neutral grave goods, is located in the southern half of the cemetery, which underlines the suggestion that after the western and north-eastern sections of the cemetery were taken into use it expanded to the south. Grave 40A (the upper burial of the two superimposed burials in grave 40) could not be dated more precisely as to entire phase II. It is located to the south of the middle section of the cemetery. Grave 38 was located in its proximity, but could not be dated more precisely as to phases I and II.

Altogether, the cemetery was most intensively used during the period 565-640/50. Probably a number of circa 60 graves (in-

cluding a presumed number of destroyed graves and not datable graves) were created during this period of 70 to 100 years (depending on how early the burial ground was taken into use).

- *The last burial phases: The abandonment of the cemetery*

The last burial phase (III: 640/50-670/80) is represented only by graves 39 and 44. It was already suggested that the cemetery expanded to the south during the last phases of the cemetery. Grave 44 is located in the proximity of the graves of sub-phase IIc and grave 39 (the single cremation grave) is the most southern grave discovered in the cemetery. This cremation grave may have been located at the fringe of the cemetery on purpose.¹⁵ Since this southern half was considerably affected by the building and demolition of two subsequent mills, it can be presumed that more graves of the later burial phases were present in this section of the cemetery. A cluster of empty graves, identified as the final burial phases in the cemeteries of Sittard-Kemperkoul, Bergeijk, Posterholt and probably also Stein, might have been present in this southern half of the cemetery. In that case, the number of graves could have been comparable to Obbicht burial phase II. The burial ground will have been abandoned somewhere after 670/80. For this cemetery it cannot be established whether this was shortly after 670/80 or a considerable time thereafter. This chapter concludes with an overall discussion of the settlement history of the burial community in relation to the chronology of the cemetery and those of the cemeteries of Sittard and Stein, but not before several features of its layout are discussed.

The layout of the cemetery

Certain topographical features, such as obvious groups or rows of graves, the distribution of gendered and children's graves throughout the cemetery, the presence of (consciously) left open spaces, the orientation of graves and obviously connected graves, can provide some insights into the choices resulting in the cemetery layout at hand (fig. 6.5). Since the Obbicht cemetery is far from complete and the exact locations and orientations of the graves are fairly uncertain, the suggestions made with regard to the layout of the cemetery will remain rather speculative. Beckers and Beckers observed that all of the Obbicht graves had a W-E orientation, and that only graves 21, 22 and 23 had slightly different orientations. The three graves are depicted on the cemetery plan with SW-NE orientations.¹⁶ Since the orientations of the few graves from Stein for which the exact orientations in degrees were given were not accordingly depicted on the cemetery plan, it remains questionable whether the actual orientations were recorded with precision on the initial cemetery plan. It is assumed that this was not done and that the plan provides only an indication; the graves (except for the three mentioned) were all roughly W-E orientated, but slight variations from this rough indication will

have been present.¹⁷ Since the cemetery plan provided by Beckers and Beckers is estimated to be a combination of interpretation and exact representation, it cannot be the unambiguous basis necessary for a detailed analysis of the cemetery layout and its underlying organisational principles. Therefore, only the obvious clusters of graves and open spaces and not the, at first sight evident, rows in detail as was done for the Sittard cemetery, will be described. The group of graves are identified on the basis of the burial phases, the distribution of gendered and empty graves and the unoccupied spaces within the cemetery limits.

- *Gender and age*

Graves of children could not be identified in the cemetery of Obbicht on the basis of the burial pit lengths, but they might have been present in the large burial pits. On the basis of the discovered skeletal remains, it can be established that a person of circa 14 years was interred in cremation grave 39. The skull fragments from grave 63 were, at the time of excavation, identified as non-adult; the recent analysis of the remains, however, showed that it was an individual with an age at death of more than 18 years. Grave 39 and 63 contained only gender neutral objects, but it is remarkable that they are both located at the fringes of the cemetery. It is highly likely that more children were buried in the cemetery since they are present in higher, although only slightly, numbers in the cemeteries of Sittard and Stein (see below) as they are in many other cemeteries. Of the grave with finds, eleven contained female specific finds, twenty had male specific objects and twenty-one had only neutral objects (Fig. 6.8).

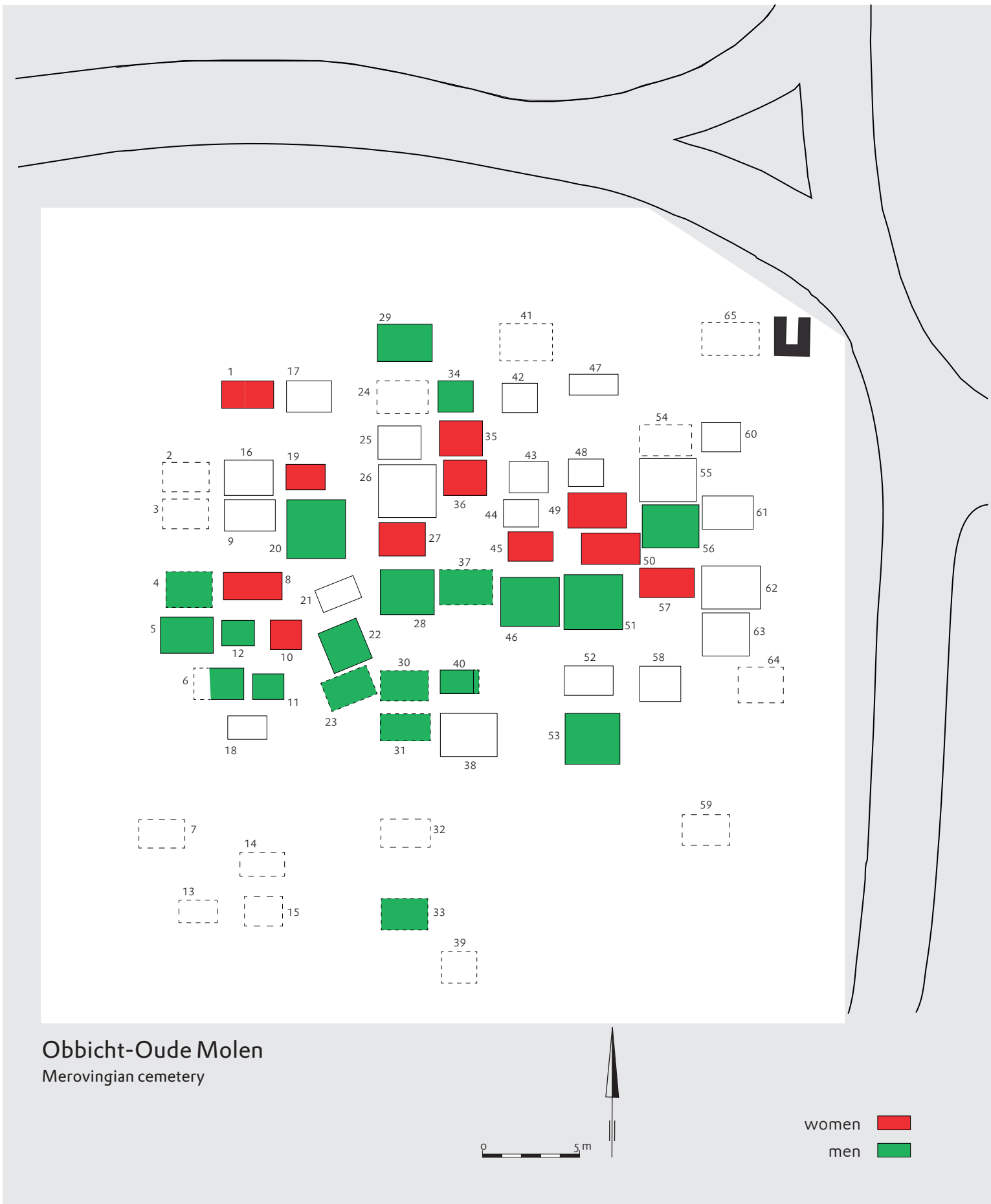
The 'first' burial phase in Obbicht consists of two graves (three including grave 65 located at some distance from the cemetery) which contained only pottery vessels, thus, gender neutral objects. Since pottery vessel typologies show some differences at a local level, these might also be associated with burial phase IIa or IIb.

Graves of burial phase IIa are predominantly present in the western half of the cemetery. Of the fifteen graves of this phase, nine are of men, one is of a woman, one of a child and the rest had finds which were gender unspecific; either intentionally or as a result of post-depositional circumstances. It can be stated that this phase is dominated by graves with male specific objects. Grave 22, of a man located in the western half of the cemetery and which could not be dated more precisely as to phase I+IIa, underlines this pattern.

Burial phase IIb starts around 565 as burial phase IIa but ends around 640/50. And although the chronological significance of this phase is not that strong, the apparent pattern might have some meaning. Of the eighteen graves assigned to this phase, six are of woman, four are of man and eight are not gender specific. It can be suggested that graves with female specific grave goods became more common after the first burials.

Burial phase IIc is relatively short and consists of only three

Fig. 6.8
The distribution of the gendered graves of Obbicht-Oude Molen (scale 1:250).



(15) See note 16. (16) Beckers/Beckers 1940, 359. (17) This is also observed in cemeteries of in which the vast majority of the graves have W-E orientations, for example in the Vrijthof cemetery in Maastricht (Theuws/Kars, in prep.)

graves of which two are of men and one is of a woman. These are located in the eastern half of the cemetery, whereas the single male grave of the burial phases thereafter, IId, is also located in the eastern section. The grave of a man which could not be dated more precisely as to phases I+II, is again located in the western and, on a whole, older half of the cemetery.

The two graves of last burial phase III are both non-gender specific; grave 43 is located in the middle of the cemetery and cremation grave 39 marks the southern border of the cemetery. This is the grave of an older child.

The chronological distribution pattern shows that the graves of women become especially visible in burial phase IIb, thereafter they seem to become invisible, whereas the graves of men are visible throughout the entire period during which the burial ground was in use.

Another pattern with regard to the gendered graves is that the graves of men are predominantly found in the southern half of the cemetery and the graves of women in the northern half, in which also the majority of graves without finds can be found. On closer inspection it also appears that the graves of men are located at the limits of the cemetery, of which especially graves 4, 5, 6, 29 and 33 are good examples; they form the north-western, western, and south-western limits. Apart from grave 1, the graves of women are all located in the core of the cemetery. To the east, the neutral graves indicate the limits of the cemetery, as they do to the north-east, but these sections were in all probability disturbed and some additional graves might have been present more to the north and east of the cemetery.

An explanation for this pattern is that during the earliest phases, when the first settlers took the burial ground into use, it was felt necessary to put emphasis on the burials of men with weaponry. This might be an indication that protective ancestors and claims on land were symbolically created. After the claim on the newly occupied land was consolidated, other matters, such as the continuity of the community, gained importance and might have been symbolically expressed with the accentuation of female burials. The symbolic expression of male protection was continued during the expansion of the cemetery with the location of graves of men around the core with predominantly graves of women.

It can be assumed that in the southern section, the 'neutral' graves were those of predominantly women and that in the northern section the neutral graves were those of men. As was observed in the Sittard cemetery, the expression of female gender is almost exclusively limited to beads, whereas for the men various options were available (see Chapter 7 for a discussion of the weapon graves in the three cemeteries).

- Grave orientations

The variety of grave orientations and distribution is described in detail in Chapter 3. The general orientation was W-E, as it is common in Merovingian cemeteries in the region (fig. 6.5). Three of the excavated graves had SW-NE orientations; they belong to the

first phases of the cemetery. It is not known whether old structures in the landscape influenced the decision to create W-E orientated graves during the first burial phase, but it is obvious that the graves of the phases thereafter were created in line with the first orientations. As in Sittard, a stable pattern of grave orientations was employed during the time the burial ground was in use.

- Connected graves

Graves 37, 40 and 51 were identified as 'double graves' (fig. 6.5 and 6.6). Grave 37 was partly destroyed, but finds were nonetheless discovered and recorded at different depths; it is identified as a grave with two superimposed burials. Based on the discovery of a lance head and arrowhead, the lower burial was identified as that of a man and the finds of the upper burial identify it as that of a woman. The lower burial was dated to 510/20-610/20. Since the finds from the upper burial could not be dated precisely, it is difficult to establish the time interval between the two burials. The relation between the two burials might have been expressed intentionally, since it seems as if the top burial was placed exactly above the lower one.

Grave 40 is also a double grave consisting of two superimposed burials. The lower burial is that of a man, identified as such on the basis of weapons and is dated to 565-640/50. From the upper burial only a biconical pot is known, which was dated to 585-610 or 610-670, or alternatively to 610/25-640/50. Since few superimposed graves were discovered, it is assumed that their relation was expressed intentionally. Although, what this relation expressed remains open for debate.

The upper burial in double grave 51 was associated with a lance head and a seax, found at a depth of 90 cm. The burial is difficult to date. A seax, lance head, utensils, belt fittings and pottery were found at a lower level. This lower burial is dated to phase IIc (610/20-640/50); the upper burial can date to the same phase or later. Both burials are of a man, but the nature of the relation expressed in this grave cannot be established.

- Open spaces and distinctive older graves

Large unoccupied spaces as in the cemetery of Sittard-Kemperkoul cannot be identified in Obbicht. Some open spaces indicated on the cemetery plan are near destroyed graves; the original existence of these spaces is therefore ambiguous, but some suggestions are made (fig. 6.5).

The empty space in the southern part of the cemetery was caused by the destruction of graves as a consequence of the building and demolition of two subsequent mills. In the remainder of the cemetery some intentionally left open spaces seem to be present. Graves 26, 27, 28 36, 44, 45 and 37 encircle a small open space (A); it might have been reserved for someone who was never actually buried at this spot. On the original plan, grave 27 is located more to the north than on the new reconstructed plan. It leaves an open space (E), which made it possible to reach distinctive older grave 20 (possible founder's grave?). The same might apply to open space

C, somewhat to the north and east of grave 20. Space B between graves 42, 47, 43 and 48 is small and might have been left open for future burials. Space D between the graves 38, 40, 46, 51, 52 and 53 might have been intentional and left open for the same reason.

- Groups and rows of graves

Beckers and Beckers observed that the Obbicht graves were arranged neatly in rows and that all the graves, except three, had a west-east orientation. For a number of reasons it is concluded that the first published cemetery plan is, above all, a combination of observation and interpretation (see also Chapter 2). The reconstructed cemetery plan shows the dimensions of the graves as recorded in the initial catalogue, which are different from the dimensions depicted on the original plan. The exact locations of the graves are therefore not known, as are the exact relative grave locations and, as a consequence, the exact arrangement of rows. Therefore, it was decided to define groups of graves (and not rows of graves) on the basis of the reconstructed grave locations (although these are not completely accurate), the rough grave orientations, the gendered graves, the empty spaces and the burial phases as discussed previously (fig. 6.5). The discussion of the groups can provide some clues with regard to the organisational principles that resulted in the cemetery layout at hand.

One obvious cluster is identified on the basis of the three graves with an orientation deviant from the general W-E orientation; they are graves 21, 22 and 23 with a SW-NE orientation. Grave 21 is the oldest grave (phase I: 565-610/20) and contained only 'neutral' grave goods. The two other graves are those of men. Grave 22 could not be dated more precisely as to phase I-IIa, and grave 23 dates to IIb. They are located in the vicinity of grave 20, which is identified as a distinct oldest grave (the possible founder's grave?), and belong to the first phases of the cemetery.

Other obvious groups were difficult to identify; however, the cemetery might be divided into an eastern half (group 1) and a western half which can then be divided into a southern group of graves (group 3) and a northern group of graves (group 2). Such a division is based on the general arrangement of the graves, but more predominantly on the basis of the distribution of the gendered and empty graves and also the burial phases.

Group 1 is separated from the other groups on the basis of graves from only the first phase, the three differently orientated graves, the predominant masculine graves and the narrow space which might be present between distinct oldest grave 20 and the graves of group 2 to the east. The apparent W-E orientated rows show a combination of graves of women and men, and the graves in each row consist of graves of both phases IIa and IIb. Thus, the graves from a single row in this group might be more or less contemporary, but it is also possible that a row consists of younger and somewhat later graves; this cannot be established with precision.

Group 2 is separated from group 3 on the basis of the three graves dating to phase IIc, which form the northern 'limit' of

group 3. Group 3 contains predominantly graves of men, whereas in group 2 the graves of women and empty graves are predominant. The youngest graves are present in group 3 and only one of the youngest graves is present in group 2. The rows in both groups show an internal differentiation; they consist of graves of different sub-phases, of empty graves and graves with objects, and graves of men, women and gender neutral graves. It is difficult to identify any form of cohesion or obvious organisational rules, but the identified groups represent at least a chronological development from group 1 to group 3 in which also a pattern of gender specific graves can be identified. Graves of all the phases are, however, present in group 2 and 3, but not in group 1. As far as it is possible to conclude, it seems as if the location of the first group was not used anymore after 640/50. The use of this section was restricted to the first generations. Within group 1, of course, some organisational principles other than time will have determined the grave location choices, but it is difficult to grasp them on the basis of the available evidence. Some general suggestions are made with regard to these organisational principles in the conclusion to this chapter on the history of the burial community.

The cemetery of Stein

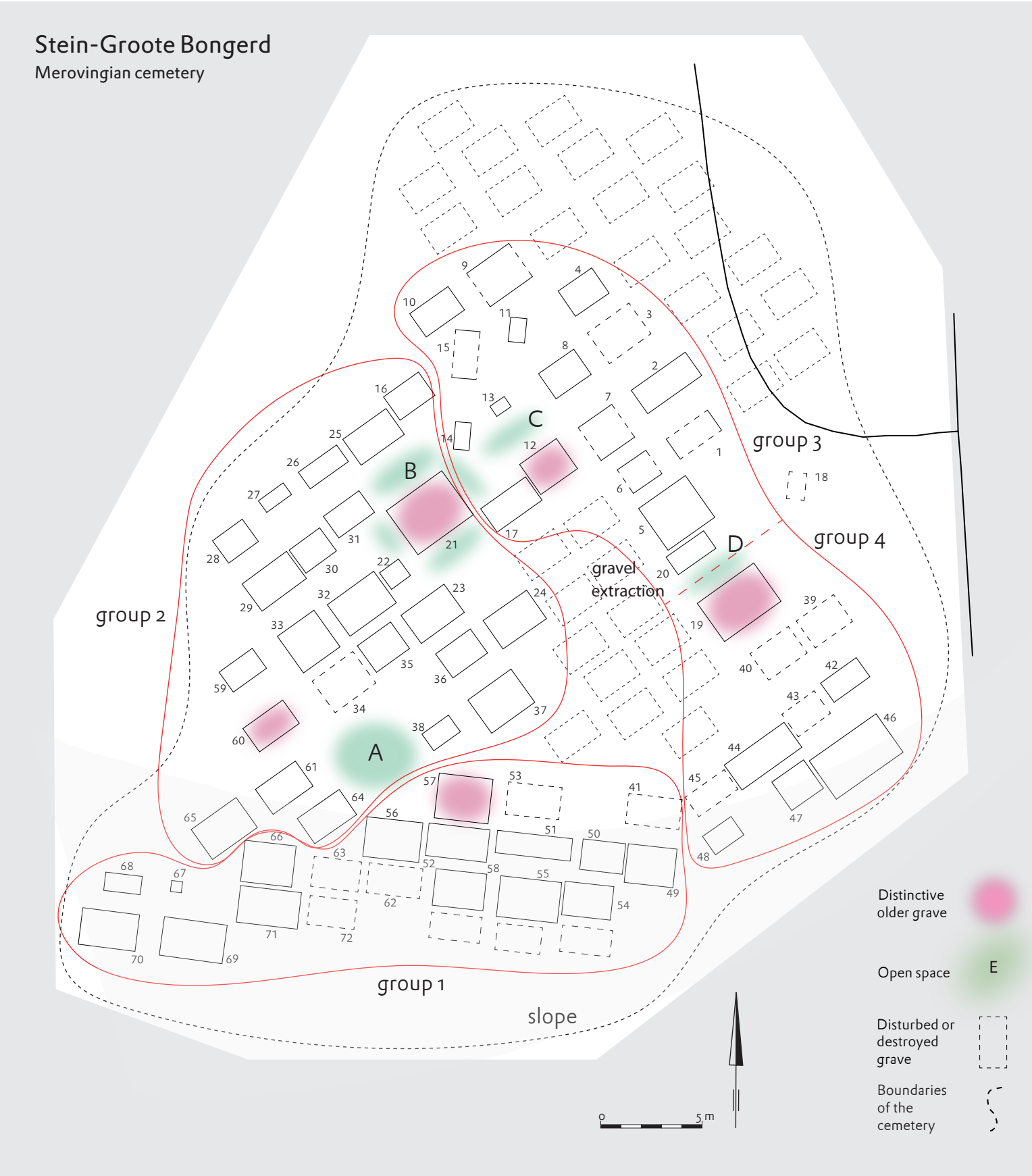
The boundaries of the cemetery and the estimated number of graves

Beckers and Beckers observed that the cemetery of Stein was originally larger than the 72 discovered graves.¹⁸ Gravel extraction, erosion, the construction of roads and buildings and the old oaks present on the terrain named 'De Groote Bongerd' (the Large Orchard) caused several disturbances.

Gravel was extracted from the section between the northernmost graves and the road to the north of the cemetery. A considerable number of graves could have been present here, but it is difficult to estimate how many since it remains uncertain where exactly the northern limit of the cemetery was located; the number of destroyed graves can be high or low depending on this exact location (fig. 6.9). Beckers and Beckers suggested that the cemetery probably reached as far as the first houses of Stein to the north and north-east of the cemetery, which are located just to the north and north-east of the roads surrounding the cemetery. A number of c. 10 to 20 destroyed graves in the northern part of the cemetery is suggested.

Beckers and Beckers mentioned that the road to the east of the cemetery was broadened and destroyed a number of graves.¹⁹ Graves 1 to 4 were discovered close to this downslope north-south orientated road leading to the castle to the south of the site. This observation might indicate that the eastern limit of the cemetery was located more to the east than the most eastern line of graves 1-4, 5, 20, 19, 39, 42 and 46. It is difficult to estimate the number of destroyed graves, but again, it could have been a considerable number (fig. 6.9).

Fig. 6.9
The layout of the Stein-Groote Bongerd cemetery (scale 1:250).



The initial cemetery plan shows that graves 67, 68, 69, 70, 71 and 72 were discovered in the slope to the south. They were recorded as intact graves, except for grave 72 of which only a number of finds were recorded but of which the contours were nearly completely gone. Two biconical pots were also found in the slope, some time before the excavation, which indicates that more graves were originally present here. Beckers and Beckers depicted three possible graves in the upper section of the slope on the basis of the find of two biconical pots and the construction of a house which was known to have destroyed a grave. They assumed that a least these three additional graves were originally present in the slope since it was also affected by erosion and old oaks over the course of time. It is for now assumed that ten additional graves (including the three already mentioned) were originally present in the upper section of the slope, which formed the southern limit of the cemetery. Since the space between graves 48, 47 and 46 and the slope is considerable, it is assumed that they form the south-eastern limit of the cemetery (fig. 6.9).

Nothing was mentioned about disturbing activities or events that took place to the west of the current western limit of the cemetery. This parcel expands more to the west than the most western line of graves; it is assumed that graves 28, 29, 69 and 65 represent the original western limit of the cemetery (fig. 6.9).

Gravel was also extracted in the middle section of the cemetery, leaving a large ‘open’ space on the plan published by Beckers and Beckers in which the former presence of c. fifteen additional graves is presumed. The plot and the slope to the south were covered with centuries-old oaks, of which some were removed and replaced by new trees some time before the excavation took place. Test excavation trenches in the slope to the south of the burial terrain revealed that the frequent removal and planting of trees disturbed the soil considerably, and that the soil condition of the slope was so bad that it could not be investigated.²⁰ How many graves were destroyed by the trees is difficult to estimate.

Altogether, it can be concluded that the original limits of the cemetery of Stein are difficult to establish; the depicted limits on the new plan are a careful estimation. It is assumed that the cemetery size is comparable to Sittard-Kemperkoul and Obbicht and that approximately 30-40 graves of all burial phases were destroyed; therefore, the cemetery would have consisted of 100 to 110 graves.

The chronological development of the cemetery: from founder’s grave(s) to abandonment
The chronological development of the cemetery is sketched on the basis of the distribution of the individually dated graves throughout the cemetery (fig. 6.10).²¹

(18) Beckers/Beckers 1940, 339. (19) Beckers/Beckers 1940, 339. (20) Beckers and Beckers dug the test exaction trenches in the slope because it was known that this plot was in all probability very interesting in archaeological terms. In the slope numerous pottery fragments from the Stone-, - Bronze-, and Iron Age were found, as were a copper alloy Roman coin and also some pottery fragments from this period. Gravel extraction revealed the first Merovingian graves, after which the terrain was excavated. (21) See chapter 5.

- The first burial phase: Its significance
Seven graves (28, 36, 50, 52, 56B, 59 and 63), containing only bi-conical pots, represent burial phase S-OB I (510/20-585). These graves can be found in the south-western and western section of the cemetery and they are either W-E or SW-NE orientated (fig. 6.10). This phase lasted 45 to 50 years but the burials date in all probability to the end of this phase or may even be contemporary with the graves of phase IIa. The feeble basis, consisting of graves dated with pottery vessels alone for the identification of the first burial phase and the absence of a distinct older (founder’s) grave are the main arguments for this suggestion. Grave 56B might be identified as a distinct oldest grave, but only on the basis of its location and size compared to the other graves of this phase and not on the basis of its contents. It is relatively large and has a ‘special’ place in the cemetery since some space was left unoccupied to its north. Another burial was placed on top of it (56A), which might indicate that a connection between the two burials was brought about intentionally. It is also possible that the distinct oldest grave(s) were one of the richer graves of phase IIa and that the seven graves with early biconical pots are contemporary with the graves assigned to phase IIa; this suggestion makes grave 57 less distinct.

- Burial phase II in detail: The (distinct) oldest grave(s) and the expansion of the cemetery
Burial phase II (565-670/80) is divided into sub-phases which show some overlap, but nonetheless, provide some insights into the chronological development of the cemetery (Fig. 6.10).

The first sub-phase (IIa: 565-610/20) consists of eleven graves which are all located in the proximity of the graves of the first phase and thus, in the south-western section and western section of the cemetery (fig. 6.11). This is evidently the oldest part of the cemetery; only grave 12 was located at some distance in the middle to north-eastern section of the cemetery, as were graves 40 and 18 (but found in another parcel; its location on the cemetery plan is not correct), which could not be dated more precisely as to phase I and IIa (fig. 6.11).

Extended grave goods assemblages were deposited in graves of this sub-phase, but graves with only pottery vessels (24, 34 and 53) are also present. Two graves of women with beads are identified as graves of this phase (30 and 51), as are two children’s graves (22 and 57). Grave 22 contained beads and grave 57 masculine goods (tweezers) and maybe feminine objects (large disc bead and a brooch fragment (missing). Of the four graves of men, grave 12 seems to be a special one since it contained striking and rare belt fittings, a sword (missing) and a lance head (missing). The space around grave 12 was left unoccupied during phase IIa and IIb, which might have underlined its special position in the cemetery.

Fig. 6.10
The distribution of graves assigned to the Stein-Groote Bongerd burial phases
(scale 1:250).

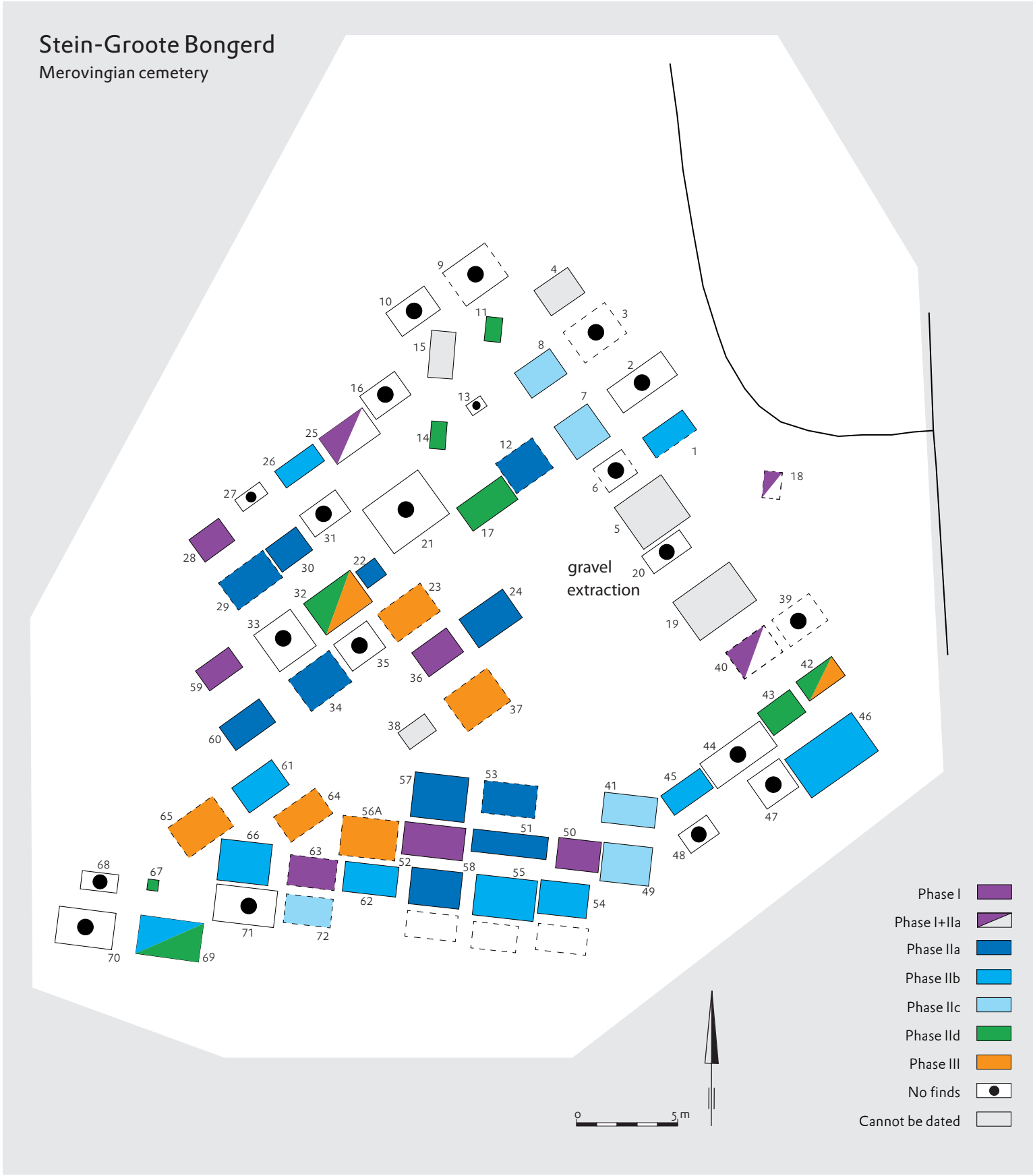
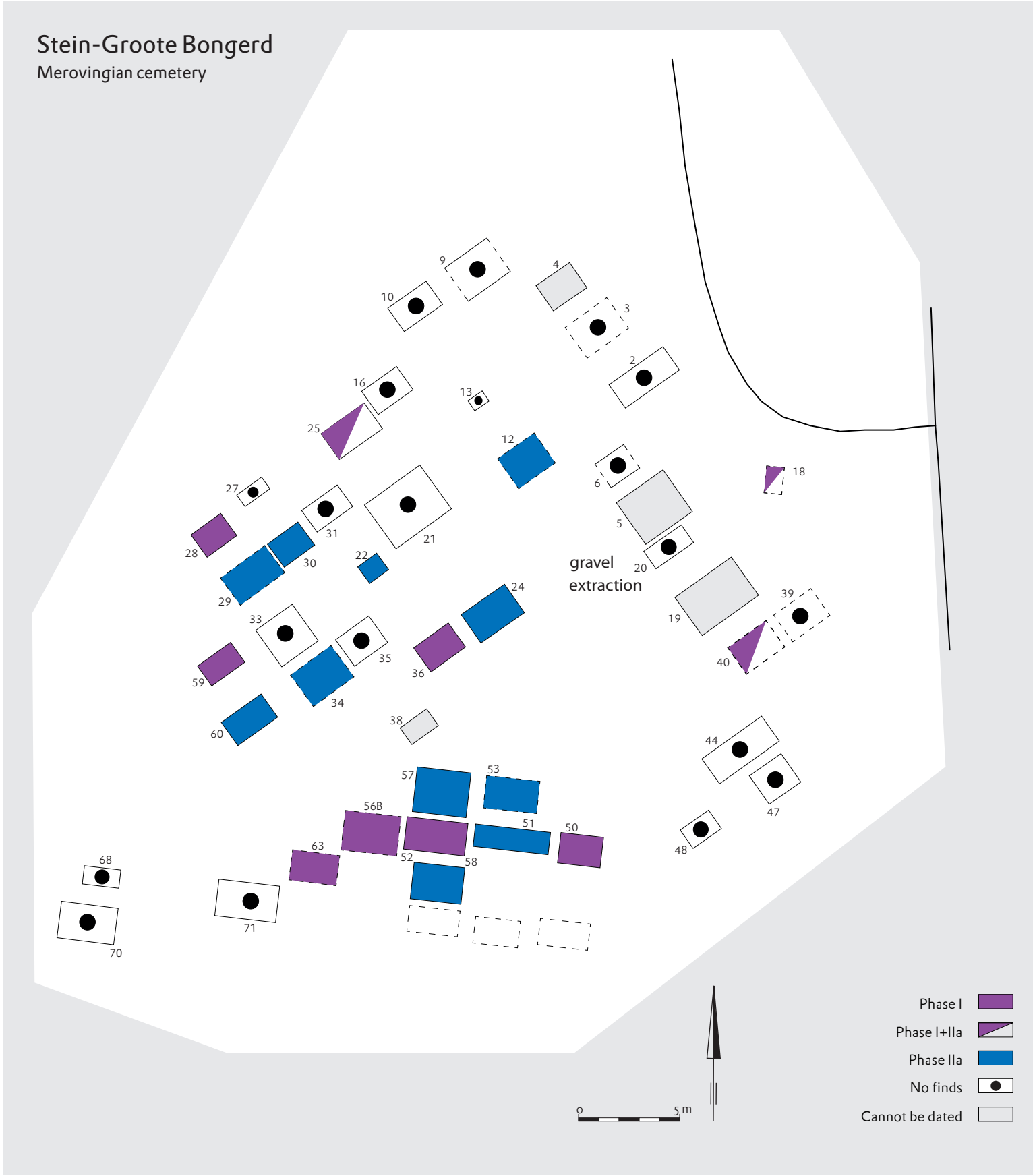


Fig. 6.11
The distribution of graves assigned to the oldest Stein-Groote Bongerd burial
phases (scale 1:250).



Only in phase IIc and IId graves were created in close proximity. Large wooden container grave 21, without finds but with two interments, is also surrounded by an unoccupied space which might have marked its special position. Since it is without finds, it cannot be dated to a specific phase. It's possible function as a founder's grave is discussed in the last section of this chapter. Wooden container grave 29 with coffin contained only a lance head, and grave 58 contained remnants of a shield boss. Wooden container grave 60 contained an axe, a fire steel, the possible knob of a seax and fragments of probably a shield boss and a lance head; the other finds from this grave were neutral. Grave 60 also has a special location in the cemetery in view of the space left unoccupied around it. This grave is not as large as graves 21 and 12 but it might also have been a distinct oldest grave in the cemetery. It contained an axe, which might refer to values such as clearing land.²² Grave 57, of an older child, with masculine and possibly feminine objects can also be identified as a special grave on the basis of its size and location; all these options are discussed later on.

Three graves (18, 25 and 40) could not be dated more precisely as to burial phases I-IIa. Grave 18 was located at some distance from the cemetery in another parcel, it is not known where exactly, and grave 25 is located in the proximity of graves dated to either phase I, IIa or IIb. Grave 25 is a 'neutral grave', with only a biconical pot. Grave 40 is located in the south-eastern part of the cemetery. Since it has a rather long date range, established on the basis of the description of a missing seax alone (the two biconical pots from this grave are also no longer present), it is not at all certain whether it actually belongs to the earliest phases. The cemetery developed in all probability from not one centre, but from two or maybe three; grave 40 can thus belong to an early development of one burial group using the cemetery. In view of the distribution of the oldest graves, it can be suggested that the cemetery started with two or maybe three or four distinct groups of graves (one in the south-west, one in the west, one in the south-east and maybe one in the east (around grave 12)), which may indicate that two or maybe three or four different burial groups were connected to the cemetery, but used distinct plots from which the cemetery eventually developed.²³

Nine graves are dated to burial phase IIb (565-640/50), which starts around the same period as phase IIa, but ends later. They are, for the majority, located in the southern section of the cemetery, apart from grave 26 in the north, grave 1 in the north-east and graves 45 and 46 in the south-east. These graves might mark the first expansion of the cemetery. Six of the eight graves of phase IIb contained only gender-neutral objects (1, 26, 45, 46, 61, 62 and 66); especially pottery vessels but also some additional 'neutral' objects such as belt fittings. Two graves contained masculine objects. Grave 54 contained a seax and also other, gender neutral, objects. The single masculine object from grave 55 is a lance head.

Extended weapon sets are not present in this phase and neither are graves with feminine objects (but the available collection is far from complete).

Phase IIc (610/20-640/50) ends as IIb, but starts later than sub-phases IIa and IIb; the five graves from this phase indicate a later development of the cemetery. Three graves (41, 49 and 72) can be found in the southern section of the cemetery and two graves (7 and 8) in the north-eastern section of the cemetery. The three southern graves may date early in the phase since they are located in the close proximity of the oldest identified graves of the cemetery. Grave 41 could be dated on the basis of a biconical pot alone, grave 49 of a man is dated on the basis of a seax and belt fittings of type Bülach, and grave 72 was dated to this restricted date range on the basis of belt fittings (although no longer present in the collection) but a seax and biconical pot were also present in this grave of a man. Grave 7 is identified as the grave of a woman on the basis of a bracelet and also dated on the basis of a broad iron belt fitting. Grave 8 of a man is one of the 'richest' graves of the cemetery; it contained an extended set of weapons including among others a sword with sword belt fittings, along with other belt fittings, utensils, a palm cup and a biconical pot. Since it dates after 610, it cannot be identified as a possible founder's grave of one of the oldest groups in the cemetery. Its grave goods repertoire and also its special location in the burial ground (some space was left unoccupied around it) might indicate that the grave was created as a new point of reference for the later phases.²⁴

Women's graves are absent in these phases; it can carefully be suggested that the graves of women were made visible with grave goods in the earlier phases, but that this practice diminished thereafter. The gender of burial 7 was expressed only with a bracelet. In the phases prior, the graves of women were emphasized with beads.

Only grave 15 could not be dated more precisely as to phases I-IIc. It is the grave of a man based on a seax and fire steel; it is thus not a grave with an extended set of weapons, though located in the proximity of richly furnished grave 8 of phase IIc. It remains difficult to draw unambiguous conclusions; grave 15 might date later in the proposed date range in view of its location in the north-eastern section of the cemetery and also because it has a S-N orientation which is deviant from the general grave orientations in the Stein cemetery. It is suggested, also on the basis of this grave, that the cemetery expanded to the north-east over the course of time.

Phase IId (610/20-670/80) started as early as phase IIc but ended some 30 years later. The five graves (11, 14, 17, 43 and 67) from this phase may thus reveal some clues regarding the chronological development of the cemetery. Graves 11, 14 and 17 can be found in the north-eastern section of the cemetery, thus close to graves 7, 8 (the richly furnished grave of a man) and 15 of the phase before indicating the first north-eastern expansion. Grave 43 is located in

the south-eastern section of the cemetery, a section where both earlier and later graves can be found, and grave 67 (a very small grave with a biconical pot) in the south-western and eldest section of the cemetery. Only one grave (69) could not be dated more precisely as to phases IIb-d. It is located in the south-western section of the cemetery where the majority of the oldest graves are located but also grave 67, which dates to IId. It is gender neutral and dated on the basis of a biconical pot; the other fragments/objects from this grave could not be dated.

- *The last burial phase: Abandonment of the cemetery*

The evidence for this last burial phase with objects is provided by five graves (23, 37, 56A, 64 and 65) with inlaid belt fittings, which date after 640/50 (fig. 6-10). Some graves have date ranges assigned to them which end in phase III (the graves of phase IId: 11, 14, 17, 43 and 67); these might also belong to the last burial phase with objects. The graves of phase III are located in the south-western and middle section of the cemetery, which is peculiar since the graves of the foregoing phases seem to indicate that the cemetery expanded from west to the north-east.

Gravel extraction destroyed a considerable part of the middle section of the cemetery, and other graves of phase III were possibly present here. The empty graves in the south-eastern section of the cemetery (44, 48, and 47) might be examples of a later burial phase without graves goods, as discovered in the cemetery of Sittard-Kemperkoul. Thus, it can be assumed that the destroyed middle section of the cemetery was the location of the majority of the graves with objects dating to phase III and maybe thereafter. This may be another indication that the first distinct groups of graves (as discussed above) were, for a considerable time, kept separated from one another. A number of not datable graves can be found around this middle section; these might also belong to the later phases of the cemetery.

Of the two graves which could not be dated more precisely as to phases IId-III (32 and 42), grave 42 is also located in the south-eastern section of the cemetery, which might indicate that it indeed dates to the last burial phase with objects. Grave 32 is located in the middle section; the beads from this grave indicate that it dates after 640/50.

It is not obvious when exactly the burial ground was abandoned. Some additional graves of the phases after 640/50 were in all probability present, but it is not certain whether these numbers were comparable to the burials of the phases prior. This subject is part of the discussion on the possible history of the burial communities at the end of this chapter.

- *The layout of the cemetery*

The layout of the Stein cemetery as known from the cemetery plan in the publication by Beckers and Beckers, is not an exact copy of the actual cemetery layout as it was discovered by the excavators. A number of graves were observed to be destroyed but were nonetheless depicted as intact graves on the plan, and the dimensions of

the intact and disturbed graves as recorded in the catalogue were not exactly reproduced on the plan. The exact relative positions of the graves and possible open spaces can thus not be established unambiguously on the basis of the available plan. Exact orientations were established for a number of graves (11, 14, 15 and 18 had an exact S-N orientation, grave 8 had an orientation of 43 degrees to the east of the exact N-S axis, graves 13 one of 52 degrees, grave 17 and 20 one of 60 degrees, and graves 19 and 26 had an orientation of 65 degrees to the east of this axis). These exact orientations were neither precisely indicated on the cemetery plan.

The inaccuracy of the available cemetery plan hinders a clear-cut discussion on all the aspects related to the cemetery organisation. Nonetheless, some remarks can be made regarding some apparent groups of graves, obviously connected graves, open spaces, the orientations of the graves and the distribution of gendered and children's graves throughout the cemetery. The groups of graves could not be identified on the basis of the arrangement of the graves on the cemetery plan alone, as it was done for Sittard-Kemperkoul. The groups are defined also on the basis of burial phase distribution, the graves of women, men and children, the possible unoccupied spaces, the empty graves and the rough grave orientations.

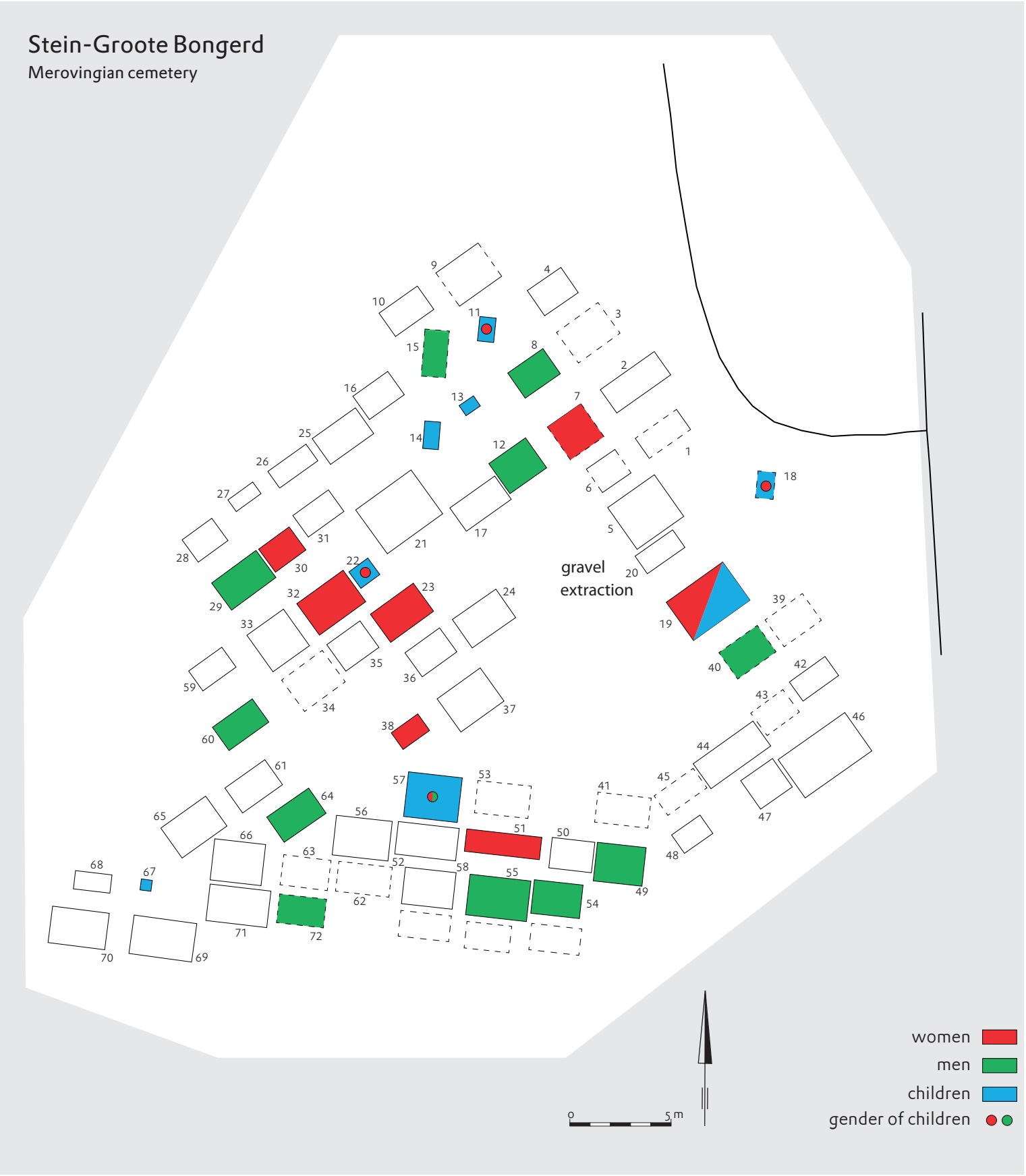
- *Gender and age*

Seven burials with female specific finds, eleven graves with male specific finds, eight burials of children and twenty-five graves with only gender neutral finds were identified (fig. 6.12). Since finds are missing or present in poor condition and sections of the cemetery are gone or disturbed, the distribution of gendered and children's graves throughout the cemetery is only a fragmented representation of the original distribution. Nonetheless, some suggestions with regard to apparent patterns are put forward in the following section.

The children's graves are identified on the basis of burial pits or wooden containers with lengths less than 150 cm. Burial pit 67 is rather peculiar with its length and width of 54 cm; it might have held a very young child, but maybe also cremation remains or dismembered body parts of an adult. The single find from this grave is a biconical pot. Burial pit 11 had a length of 120 cm and might have been the grave of an older child. It contained beads, a roman brooch and a pottery vessel, but was observed to be a possible reopened grave. The grave has a deviant orientation (S-N). Grave 13 had a length of 85 cm; it was thus the burial of a young child. It was without finds. Grave 14 had a length of 135 cm and was the burial of probably an older child. It contained a biconical pot and a buckle and some indeterminate fragments. It has an orientation (S-N) similar to the children's graves 11 and 18. Grave 18 has a length of 132 cm and is thus also the burial of a somewhat older child with a relatively extended set of grave goods (belt fittings, various mounts and a biconical pot). This grave was found at some distance from the cemetery, but its location was not recorded precisely and therefore, its location on the map is inaccurate. Grave 22

(22) Theuws 2009. (23) This was also the case in Meerveldhoven (Verwers 1978). (24) In Bergeijk a second and later founder's graves (of a woman) was identified in the burial ground. It was a point of reference for the last burial phase (Theuws/Van Haperen 2012, 163-164).

Fig. 6.12
The distribution of the gendered and children's graves of Stein-Groote Bongerd
(scale 1:250).



had a length of 115 cm and was thus the possible burial of an older child. The grave contained a biconical pot and a number of beads. Grave 19 has a length of 340 cm but contained a body silhouette with a length of 95 cm. This child was buried in association with an adult in a single grave. The grave contained a bowl and beads but it cannot be established with which body the finds were originally associated. Grave 57 has a length 265 cm but held a coffin with a length of 150 cm in which a body silhouette with a length of 117 cm was observed; it contained the body of an older child. The grave contained a decorated spindle whorl/disc bead of glass, a number of mounts and belt fittings, a fragment of a bow brooch (missing), a simple ring, tweezers and a biconical pot. It is thus a rather extended grave goods ensemble which is rather uncommon for children's burials. Another peculiar feature is that the grave was accorded both masculine (tweezers), feminine (disc bead) and neutral objects, whereas most children's graves were accorded beads which are specific feminine objects.

It can be observed that three (11, 14 and 18) of the children's graves had an S-N orientation, which is deviant from the general orientation. Only one other grave (grave 15, masculine grave goods) has a 'normal' orientation. These graves are all located in the north-eastern section of the cemetery, in which also grave 13 of a child is located; in fact children's graves 11, 13 and 14 are located in each other's proximity in this section of the cemetery. They seem to have been buried in an open area in the cemetery. Graves of phases IIc and thereafter are predominant in this section. Graves 13 and 14 were without finds, and could not be dated; they might thus also belong to the phases after 610, as grave 11 and some other graves in their proximity. Grave 22 was located to the south-west of this cluster, close to double grave 21. Graves 11, 13 and 14 are located to the north-east of this burial and somewhat closer to grave 12, a possible founder's grave, and grave 8, a rich grave of a man dated to phase IId.

Grave 18 was located to the east of the cemetery, at some distance from the other graves in an adjacent plot. It could not be dated more precisely as to phase I+IIa, and thus it is uncertain how it relates to the other graves. The child identified in grave 19 was buried in association with an adult (double grave) in the eastern part of the cemetery, in which no other graves of children were found. Grave 67 was located in the south-western section, the oldest section of the cemetery. It might also be a cremation grave or a grave with dismembered body parts of an adult in view of the dimensions of the burial pit. If it was a child's grave, it is the only one in this oldest part of the cemetery apart from the older child buried in grave 57.

The eleven graves of men with clearly gender specific grave goods are mainly distributed throughout the southern and western sections of the cemetery which are associated with the earlier burial phases. The graves of women with clearly gender specific grave goods are present mainly in the middle and eastern section of the cemetery which are predominantly associated with the later burial phases. The neutral graves can be found all over the cemetery.

The first burial phase of the cemetery is identified on the basis of graves with pottery vessels alone, which are gender neutral. It was already suggested that these pottery vessels are not that chronologically distinctive and that the graves may not date as early as the date ranges assigned to the vessels, but date rather to burial phase IIa.

Of the eleven graves with masculine objects, three are dated to phase IIa, one to I-IIa, two to IIb, three to IIc, one to I-IIc and one to III. It can be suggested that graves of men were more prominent in the early phases and less common in the later phases, but this vague pattern is only based on the low number of graves with preserved grave goods.

Of the seven graves with feminine objects, two date to phase IIa (30 and 51), one to IIc (97), one to III (23) and two are not datable (19 and 38; grave 38 might also be of an older child). It is thus difficult to establish a pattern; feminine graves were present in the earliest phase and in the last burial phase with objects, but seem to be less prominent in phases IIb and IIc. The number of graves is however, too small to decide whether or not there was a clear difference between the number of feminine and masculine graves per phase; expressing the gender of women and men might have been equally important throughout the phases during which the cemetery was in use. A vague pattern might indicate that the graves of women became more visible towards the end of the burial rite with objects and that the accentuation of men's burials diminished.

However, it is obvious that the graves with clearly masculine objects are located at the fringes of the cemetery and that the majority of the graves of women are located in the middle section. This pattern might have symbolised different gender roles; men as defenders of the community and women as the core or heart of the community.

As was observed in Sittard and Obbicht, the expression of female gender is almost exclusively limited to beads, whereas for the men variable options were available (see Chapter 7 for the nature of the weapon graves of the three cemeteries and their distribution patterns).

- Grave orientations

The variety of grave orientations and distribution is described in detail in Chapter 3. The general orientation was SW-NE, but some graves along the slope to the south had a W-E orientation and four graves had a clearly deviant S-N orientation (fig. 6.9). Of these four graves, three were of children (11, 14 and 18), and one of a man (grave 19); two (graves 11 and 14) belong to the later phases. It is not known whether older structures in the landscape influenced the decision to create SW-NE and W-E orientated graves during the first burial phase, but it is obvious that the graves of the phases thereafter were created in line with the W-E and SW-NE orientations of the earliest phases, except for graves 11, 14, and 19 (grave 18 was found at some distance from the cemetery, it is not known where exactly). The slope to the south may have influenced

the orientations of the graves here since a clear chronological pattern with regard to the W-E and SW-NE orientated graves cannot be found. Compared to Sittard and Obbicht, there is more variation in grave orientations in Stein, but a clear correlation with burial phases cannot be established.

- *Possible open spaces and the distinctive older graves*

Three open spaces can be observed on the cemetery plan (fig. 6.9); whether these were intentionally left open remains questionable in view of the inaccuracy of the available cemetery plan. The open space in the south-eastern section of the cemetery is however, clearly a result of gravel extraction which destroyed the (possibly later) graves originally present here.

Open space A in the south-western section of the cemetery is surrounded by graves 38, 57, 56, 64, 61, 60, 34 and 35. Since no remarks are made about possible disturbances in this part of the cemetery, this space might have been left open intentionally. This space is, for the majority, surrounded by graves of the oldest burial phases; the space might have been used to signify the distinct oldest grave 60 or the other older graves 57 and 56B, and made it possible to visit these graves and gather in their vicinity. Moreover space A is at the junction of the groups of graves with W-E and SW-NE orientations.

Some space was left unoccupied (B) around grave 21. Grave 21 is a double grave which held two adult individuals and in which some traces of a wooden container were found. The grave was without finds. Since it is a rather large grave, it might have held some special significance, accentuated by the unoccupied space around it. It is striking that three large graves to its west (graves 23, 30 and 32) were all graves of women, and one smaller grave (29) to the west, was the burial of a child containing feminine objects (beads). The majority of the graves to the west of grave 21 are the earliest graves of the cemetery and the grave seems to mark the eastern limit of the oldest section. Only grave 32 of a woman dates later, to phase IId-III (610/20-750). The other graves of the later burial phases to the east and north-east of grave 21 were also located at some distance from this grave, apart from grave 17, which dates to IId (610/20-670/80). This grave seems to have been squeezed into a space between older graves. In view of its special location and the dimensions of grave 21, which held two bodies, it may have been a distinct oldest grave, and thus respected during the later burial phases. Since grave 21 was without finds, it cannot be dated and other evidence to support this conclusion is not available.

The same applies to grave 12, which dates to phase IIa. Some space was left unoccupied to the north of this grave (C), and maybe also to its south; this is not certain since gravel extraction disturbed the cemetery section to the south of grave 12. It was the grave of a man with a sword and seax (both no longer present), and the rare and peculiar copper alloy and gilded belt fittings with garnets. The space around this grave was left unoccupied for some time before graves 8 and 7 (IIc) and grave 17, dating to phase IId, were created in its close proximity. In between graves 19 and 20,

some open space may be identified (D). Grave 20 and 19 could not be dated, but grave 19 was a grave with two body silhouettes in a wooden container, and thus seems undisturbed.

Altogether, the state of the recorded cemetery does not allow for strong conclusions with regard to intentionally left open spaces and the significance of specific grave locations within the cemetery. It was however, already suggested that the cemetery developed from a number of distinct cores (see below), which may have been marked by the open spaces.

- *Connected graves*

Three of the Stein graves contained two bodies and one grave appeared to have held two superimposed burials (fig. 6.12). The graves with two bodies were either identified on the basis of the body imprints or the presence of two coffins. A rectangular band shaped imprint with a length of 180 cm and a width of 110 cm was observed at a depth of 120 cm in grave 37, and appeared to be divided by a similar soil discoloration. These are identified as the remnants of two wooden coffins with similar widths of which one was observed to be 15 cm longer than the other. It is not certain whether this means that one was 15 cm longer than the observed length of 180 cm, or 15 cm shorter. It was not recorded where exactly in the burial pit the coffin remains were discovered. For now they are positioned closer to the long northern wall of the burial pit since the majority of the coffins in Stein graves (for which it is known) are identified at this location. On the basis of the observed length, it is concluded that the two coffins held the burials of adults. A pottery bowl and some iron fragments, which were identified as possibly belt fittings, were found in the burial pit. One appeared to be an iron strap end with silver inlays on the X-ray photograph. On the basis of the descriptions in the original catalogue, the north-eastern corner in the burial pit was reconstructed as the possible location of the bowl, also because vessels were generally deposited outside the coffin. The fragments, including among others the strap end, were found in the 'middle of the burial pit', and based on this they are now identified as the finds from the coffin in the middle of the grave. Since the gender and age of the deceased cannot be determined, it is difficult to draw conclusions regarding the possible nature of their connection, but they seem to have been buried simultaneously.

In grave 19 the silhouettes of two bodies were discovered. A black discoloration of the soil was observed at a depth of 120 cm, close to the eastern wall of the grave. A similar discoloration was found at a depth of 125 cm in the middle of the grave, after which the rest of the grave was deepened with a trowel. The discolorations became larger and at a depth of 130 cm, the silhouettes of the head, chest and legs of the largest soil discoloration became visible. The length of this discoloration was 210 cm and its largest width 92 cm. A smaller soil discoloration, found 23 cm from the long eastern wall, thus to the south of the first discoloration, had a length of 95 cm and a largest width of 38 cm. It was not possible to identify the contours of a body as clearly as for the other discol-

oration, but it can be identified as the traces of a child's burial. At a depth of 150 cm, all discolorations were gone. Additionally, dark grey band shaped traces of the walls of a wooden construction were also observed. The rectangle had a length of 265 cm and a width of 170 cm. The 'chamber' was not divided by a wall and traces of such a dividing feature were not found. It seems as if the two bodies were placed within one wooden structure together. Beads were found inside the chamber, but it was not recorded where in the chamber exactly and it cannot be established with which individual they were deposited. The biconical pot was found at the bottom of the wooden container alongside its short eastern wall. The grave contained an adult and a child; they may have been a parent with child, in all probability buried simultaneously.

The silhouettes of two bodies were observed in grave 21 as a black greasy and shiny soil discoloration first observed at a depth of 110 cm. From this depth the grave was deepened with a trowel. The discolorations became larger and eventually, at a depth of 140 cm, formed the contours of the heads and chests of two adjacent bodies. The legs became visible at a depth of 150 cm. The body contours both had a length of 200 cm, and the largest width (where the bodies touched) was 143 cm. The heads had a length of 37 cm; one had a width of 30 cm, the other a width of 23 cm. Band shaped soil discolorations were observed alongside one of the short burial pit walls at a depth of 155 cm and alongside one of the long walls at a depth of 160 cm: these vague traces might indicate the former presence of a wooden container. The grave contained two adults, but since objects were not discovered in this grave, nothing can be concluded about the nature of their connection. However, the presence of more or less intact body silhouettes, suggests that the grave was not disturbed or reopened later.

Grave 56 consists of two superimposed burials of which the connection is not obvious. All of the finds from this grave, apart from the biconical pot, were found at a higher level than the first traces of the decayed wooden container. These became visible at a depth of 140 cm as grey-brown band shaped soil discolorations forming a rectangle of 190 x 65 cm. The biconical pot was found at a depth of 160 cm and the other finds all at a depth of 90 cm; these are considered to be finds associated with a burial placed on top of the lower wooden container grave. In view of the recorded burial pit dimensions (275 x 195), which may be indicative for the upper burial, and the dimensions of the wooden container, it is concluded that they were both graves of adults. It cannot be established whether the upper burial was placed on top of the lower burial by intention. The upper burial contained belt fittings, a biconical pot and a knife on the basis of which it is dated to phase III (640/50-670/80). The lower burial is dated to phase I (510/20-565), on the basis of a biconical pot. Some time might have passed before the second burial was placed on top of the first burial. The two burials were not accorded gender specific grave goods; as a consequence, it is not possible to determine the nature of their possible connection.

- *Groups of graves*

Two distinctive groups of graves can be identified on the cemetery plan: the group with SW-NE orientated graves and the group with NW-SE orientated graves (fig. 6-10). The NW-SE orientated graves form a cluster in the south-western section of the cemetery (group 1), which consists of 21 graves (including double grave 56A and 56B) and an additional number of graves which were originally located in the upper section of the slope. This cluster consists of four of the seven eldest graves of the cemetery (phase S-GB I: graves 50, 52, 56B and 63). Of the second phase (IIa), four of the ten graves can be found here: graves 51, 53, 57 and 58. Of the phase thereafter, IIb, three graves are identified in this cluster: graves 54, 55 and 66. Three graves (41, 49 and 72) belong to phase IIc, and one grave (67) to IId, and one grave (69) could not be dated more precisely as to phases IIb-d. Grave 56A dates to phase III and is the youngest grave of the group. Three graves of group 1 were without finds: graves 68, 70 and 71.

The graves are, at first sight, organised in neat rows. The relative locations of the graves on both the original map and the reconstructed plan however, are not precise; it cannot be decided whether the depicted rows were originally as neatly organised as the plans show. It can nonetheless be concluded that this cluster consists mainly of graves of the first burial phase, and that they were organised in rows, although the precise locations of the graves in the rows cannot be reconstructed. This section was also used in the later phases. The cemetery did not develop organically from a single old to younger sections, but rather all the sections were in use during all the phases, although some during certain phases more intensively than others. An organisation in rows seems to indicate that the cemetery grew organically from old to young, but it appears that rows of graves consisted of graves of different phases. Thus, the rows did not expand over the course of time, but came into being through other organisational principles, as the structures of the other groups also underline.

The group of SW-NE orientated graves can be divided into two clusters (fig. 6-10): the cluster of graves in the western part of the cemetery (group 2) and the group in the eastern part of the cemetery (group 3).

The western group (2) with SW-NE orientated graves is separated from the eastern cluster since it seems to consist of a majority of graves dating to the older phases. Of the twenty-six graves, three graves (28, 36 and 59) date to phase I, six graves (22, 24, 29, 30, 34 and 60) date to phase IIa, and one (25) dates to phases I+IIa. Grave 26 and 61 date to phase IIb, and four graves (23, 37, 64 and 65) to phase III and one grave (32) to IId-III. Six graves (16, 21, 27, 31, 33 and 35) were without finds. The orientations of the graves from cluster 1 and cluster 2 are different, but the graves of the two groups cannot be distinguished on the basis of burial phases; a comparable number of graves dating to the earliest phase of the cemetery can be found in the two groups, which together form the earliest phases of the cemetery. The orientations of the graves of group 1 were probably adjusted in reference to the slope to the

south rather than related to a distinct burial practice. Nonetheless, it can be suggested that they were two separate groups from which the cemetery developed in view of the apparent groups formed by the oldest graves of the cemetery

The eastern part (3) is separated from the western part on the basis of its high number of empty graves. Moreover, a number of graves in this group with datable finds date to the later phases of the cemetery. Only grave 12 dates to IIa; this may indicate that this was the first grave of another graves group from which the cemetery developed. Grave 1 dates to IIb, graves 7 and 8 date to IIc, graves 11, 14, and 17 date to phase IIc, grave 15 to I-IIc and 42 to IIc-III. Grave 18, which probably does not belong to this group, dates to I-IIa. Seven graves are without finds; they are distributed at the fringes of this group. Moreover, the three graves (11, 14 and 15) with clearly distinct S-N orientations can be found in group 3. It can thus be concluded that W-E orientated graves in Stein are predominantly restricted to the earlier phases, but that the SW-NE orientated graves are associated with both early and later phases and S-N orientated graves especially with later phases (grave 15 is the exception). The majority of children's graves are present in group 3, including the distinctive older grave 12. It is an early grave (phase IIa) and was kept at some distance from the other graves of the first phase. The graves of later phases were created in its proximity, which may have been done either consciously or unconsciously, depending on whether it was known if a grave was present here. Since the grave remained undisturbed, it seems as if one was aware of its presence in the phases thereafter. It seems however, as if this section developed less intensively during the first burial phase of the entire cemetery.

It can also be suggested that a fourth group (group 4) was present in the south-eastern section of the cemetery; separated from the more northern graves by the empty space to the north of large grave 19, without finds but with two body silhouettes in a wooden container. Graves 40, 45 and 46 are the first graves of this possible group, which may be associated with a distinct burial community during the first phase of the cemetery, and maybe grave 19 is the distinctive older grave of this group. Grave 43 dates to phase IIc and grave 42 to IIc-III. Four graves are without finds; they are located at the limits of the group, and thus the cemetery.

In the following section, the observed features of the layouts of the three cemeteries and their chronological development are related to the possible history of the associated burial communities and to the concept of founder's graves; specifically, whether the distinctive older graves can be identified as possible founder's graves will be discussed.

The possible history of the burial communities

It is now commonly accepted that burial grounds do not provide a straightforward image of the associated local group's structure.²⁵ The burial rites were transformative in nature and rhetoric strategies, designed to produce and reproduce both groups and communities, shared ideologies and interpretations thereof in an on-going 'debate' on the central tenets of a society, during which an appropriate image of the dead was created.²⁶ We have to keep in mind that the complicated role of the burial rite in constituting groups and communities results in variation in a burial ground. Moreover, more than one group could have used one burial ground, and one group could have distributed their dead over several cemeteries. The cemetery is thus an important social space for the constitution of a variety of bonds as it is a social space where the central tenets of society are debated (as settlements also are). The people who buried persons in a specific cemetery, can be defined as a burial community. This burial community is thus not necessarily identical to a specific group or a specific community, but rather includes these otherwise defined groups and/or communities. It is for now assumed that the burial communities of Sittard, Obbicht and Stein were, in principle, associated with local groups.

It is a complex matter to reconstruct the history of early medieval local groups and communities and thus rural life in the sixth, seventh and early eighth centuries on the basis of the burial evidence alone. Unfortunately, other archaeological or historical evidence is generally scarce, and for Sittard-Kemperkoul, Obbicht and Stein, virtually non-existent. It is stated that new settlers occupied the area over the course of the sixth century, since evidence for earlier inhabitation is absent.²⁷ The people associated with the burial grounds of Sittard, Obbicht and Stein, assuming that they were in principal local groups, did not exist in isolation; they were not far apart and it seems highly likely that contacts between them existed in view of their limited size and the need to exchange marriage partners and material culture.²⁸ The local groups were also integrated in supra-regional networks of exchange, and likely remained in contact with the groups they left behind.²⁹ The possible histories of the burial communities are described in the following section, based solely on the available burial evidence. To keep the discussion clear, it is from now on assumed that the three burial communities of Sittard, Obbicht and Stein are foremost related to three local groups living in close proximity to the burial grounds.

The size of the burial communities

With regard to Sittard-Kemperkoul, it was already concluded that the cemetery had been in use for approximately 120-130 years and that the original cemetery consisted of approximately 100 graves (Table 5.3). A generation counts circa twenty-five years, which

means that the burial ground was used by circa five generations and that during each generation approximately twenty-five to twenty-seven burials took place. Assuming that the burial ground was used by a number of families (for now assuming that the burial ground was foremost connected with a local group of families) and that a family consisted of circa five persons, the burial community, during its existence of 120-130 years, was formed by an *average* of four contemporary families. The constitution of the burial community may have changed over the course of time, and the cemetery might also contain the burials of other groups living in the vicinity. The history of the burial community is discussed in more detail below.

It was concluded that some parts of the Obbicht cemetery were destroyed; its original size and the extent of the affected phases remains speculative. Three options for establishing the size of the burial community are therefore proposed (table 5.4).

The first option is based on the discovered graves only. A number of 68 burials were identified and these were assigned to a period of circa 160 years (510/20-670/80, or maybe some time thereafter). The burial ground was, on the basis of these numbers, in use for six generations and an average of eleven burials per generation took place, implying that on an *average* two contemporary families formed the community associated with the burial ground.

The second option is that the burial ground was in use for approximately 160 years but that a considerable number of graves were destroyed. Assuming that the original burial ground consisted of circa 100-125 burials and that six generations used the burial ground implicates that on an average twenty burials per generation took place and that on an *average* four contemporary families used the burial ground.

For the third option an original number of 100-125 graves is suggested to have been created during a somewhat shorter period, namely during circa 120 years (565 to 670/80 and maybe some time thereafter). It is assumed that the burial ground was not created as early as the date ranges assigned to the earliest pottery vessels allow. This implies that five generations used the cemetery and that on an average twenty-five burials per generation took place, and thus that an *average* of five contemporary families formed the associated community.

An average of these three options will come close to the actual situation, which implies that an average of four contemporary families (for now assuming that a local group of families is connected with the cemetery) settled in the proximity of the Obbicht burial ground and that it was used over a period of approximately 120-130 years. This is comparable to the burial ground of Sittard-Kemperkoul.

Some parts of the cemetery of Stein were also destroyed. It is difficult to estimate the original size of the burial ground and the

burial phases which were especially affected by the disturbances. Three options for the estimation of the burial community size are therefore proposed (Table 5.5).

The first estimation is based on the actual number of discovered graves and the established burial phases, namely 75 graves created over a period of circa 160 years (510/20-670/80). Six generations used the burial ground, which implies that on an average twelve burials per generation took place and thus, an *average* of two contemporary families constituted the burial community.

The second option is that the burial ground was in use for 160 years but that a higher number of graves were originally present. Assuming that the original burial ground consisted of circa 100-125 burials, and six generations used the burial ground, an average of twenty burials per generation took place. This implies that on an *average*, four contemporary families used the burial ground.

For the third option, an original number of 100-125 graves is suggested during the estimated date range 565-670/80. The burial ground was used by five generations, and each generation experienced circa twenty-five burials, which implies an average of five contemporary families.

As for Obbicht, an average of the three options seems plausible, which indicates that circa four contemporary families (for now assuming that a local group of families is connected with the burial ground) settled in the proximity of the Stein burial ground and that it was used over a period of approximately 120 years by an *average* of four families.

On a whole, it is concluded that the three burial grounds were not that different in terms of size and the period during which they were in use. Another burial ground discovered in their proximity is the cemetery of Buchten, dated to the seventh and maybe eighth centuries.³⁰ Buchten, Obbicht, Stein and Sittard are located in an area with a radius of circa 10 kilometres; thus, there were small burial communities (probably local groups of families) located in each other's proximity. They settled here throughout the course of the second half of the sixth century, used the cemeteries intensively during the first half of the seventh century, after which the number of burials declined until they were abandoned probably around the turn of the century, as is discussed in more detail in the following section.

The first burial phases: The first settlers?

The first identified burial phase in Sittard-Kemperkoul (S-K I: 510/20-565) is represented only by a small number of graves which could not be dated more precisely as to burial phases S-K I and II (table 5.3). These graves probably do not date as early as the first half of the sixth century, and therefore, it is assumed that the burial ground was taken into use during the second half of the sixth century. With regard to the earliest burial phases, it can be ques-

(25) We define *groups* as social entities that can be defined on a spatial basis (a household (not necessarily a single core family), a farmyard group, a co-resident group (settlement), a local group (inhabiting a specific part of the landscape)) and communities as social entities that are defined otherwise (a religious community dispersed over several groups, the young men, a kin group etc.) (Theuws 2012). It is in this discussion assumed that the three burial grounds are in principal connected to three

local groups living in the vicinity of the burial grounds. (26) The meaning of furnished burial in the Merovingian period is theorised on by for example Halsall 1995; 1996; Theuws 1999; 2009; 2012; Effros 2002; 2003; Williams 2003; 2004; 2006; Brather 2008. (27) Theuws/Hiddink 1996; Theuws 2008; Theuws/Van Haperen 20012, 163. (28) Theuws 1986; Theuws 1988, 299-318. (29) Theuws/Van Haperen 2012, 180-186. (30) Derks/De Fraiture 2015, 59-82, 179-180.

tioned whether founder(s) graves were created and if and how they were distinguished from other graves. More than one founder's grave can be present in cemeteries since they can develop from different locations in the burial ground which were used by different (family) groups or maybe communities. In the foregoing section, a number of distinctive older graves were discussed for each cemetery; in the following paragraph it will be discussed whether they can be seen as possible founder's graves.

Graves with special appearances can be identified as founder's graves. They can be special graves in view of their extensive grave goods inventories, especially extended weapon sets. It is argued that these graves are of symbolically created ancestors referring to their protective capacities and communal claims on newly occupied land.³¹ Founder's graves can also be special graves due to their size or location in the burial ground (large graves, graves with empty spaces around them, etc.). New groups using the burial ground after it was already used for some time by other groups may have also created founder's graves; these special graves are thus not only confined to the earliest phase of the cemetery, although it can be expected that especially in the earliest phases the founder's graves can be identified. The debate on founder's graves is complex, but in the following section, suggestions are made with regard to the identification of earlier mentioned distinctive older graves in the three cemeteries as possible founder's graves.

The oldest distinct graves from Sittard fall in the date ranges of burial phases IIa (565-610/20) and IIb (565-640/50). These are graves 15, 16 and 26 of phase IIa and graves 11 and 14 of phase IIb, identified as such based on their location and/or grave goods. Grave 26 might be a distinct oldest grave in the Sittard cemetery since it contained a seax, sword and lance head, but also a glass palm cup and belt fittings and it is located at a prominent location in the burial ground. The prominent location of grave 16 in the cemetery makes this grave also a good candidate; it had a variety of goods including a necklace of high quality beads. In grave 15 (without wooden containers), only a glass palm cup was found, comparable to one found in grave 26. The presence of two founder's graves (26 and 16) in a cemetery plot, referring to both masculine and feminine values important for the associated community, is possible. The weapon set in grave 26 might have symbolised protective capacities, and grave 16 of the woman might have referred to fertility and the aspired continuity of the settling community.³² Grave 11 of sub-phase IIb is the most richly furnished grave of a woman, and grave 14, also of sub-phase IIb is also special since it contained a lance head, a seax and the single copper alloy vessel of the cemetery. Their locations are to the east of the two other possible founder's graves, and have also a special place in the cemetery; they are marked by the empty spaces to the south and west. The two groups of distinct oldest graves, or possible founder's graves, may suggest that at least two different groups or communities used the burial ground simultaneously, and that they used both female and male burials to mark their burial section. In view of the distribution of the graves of phases IIa and IIb, it can be suggested

that another distinct group is also present in the south of the cemetery; this group is however, without a clearly distinctive older grave in view of the grave finds in these graves, their sizes and their location. The southern graves are nonetheless separated from the rest of the cemetery by large open space A.

It is assumed that the first graves of these earliest phases are associated with new occupants in the area, since evidence for earlier habitation is absent. A settlement was found to the north of present-day Sittard, but it dates to the second century AD.³³ Continuity of habitation from this period into the sixth century is not attested, and a relation between this settlement and the Sittard cemetery is non-existent. Two farm yards were found to the east of the burial ground. They date to the seventh century and are probably not related to the earliest burials.³⁴ Other farms are not yet discovered but must have been present. The discovery of the two farmyards might indicate that families were living at some distance from one another, forming small communities of maybe one or two families who used one communal burial ground. This is in line with the two groups with distinctive older graves (or possible founder's graves) mentioned above, and the third southern group of burials which is without a distinctive older grave.

It is difficult to estimate the size of the first community, since graves could not be dated to more restricted date ranges. Thirty-nine burials are dated to the entire period 565-640/50. It was stated that on average circa four or five families constituted the burial community. The first community was either small (two or three small groups) and grew considerably thereafter, or it was already four/five families large at its onset. These suggestions fit with the observed distinct burial plots during the earlier phases of the cemetery. The number of burials diminished slightly or stayed stable after 640/50, which indicates that the size of the entire burial community remained stable over the course of time.

The oldest burial phase in the Obbicht cemetery (510/20-565) is represented by two graves dated on the basis of pottery alone (table 5.4). It is suggested that these graves are more likely part of phase IIa (565-610/20). Grave 65 contained an early glass vessel and probably a beaker (missing). It was discovered at some distance from the cemetery and might be indicative of early burial activities. A number of graves could not be dated more precisely as to phases I+IIa, I+IIc or I+II. On a whole, only ambiguous evidence is available for burial activities in the first half of the sixth century. The first settlers are assumed to have arrived over the course of the second half of the sixth century, contemporary with the graves of phases IIa and IIb, and contemporary with the first settlers in Sittard. Phases IIa and IIb (565-640/50) contain the majority of the burials, and nineteen burials date with certainty to the period before 610/20. Thus, it seems as if the area was colonised by more than one family at once, and that the size of the community grew thereafter.

However, it seems as if only one distinctive older grave could be identified in the burial ground of Obbicht. Grave 20 is a large grave with an extended weapon set which includes a sword. It is located

at the centre of the cemetery, and some space was left unoccupied around it. Open space E made it possible to reach the grave, as did open space C, somewhat to the north and east of grave 20. Another possible option for a distinctive older grave is the large, but empty, grave 26. Horse grave 25 is located in close proximity. A similar example of an empty grave with close by horse burial is known from the cemetery of Rübénach; these are also considered to be the oldest interments from which the cemetery developed.³⁵ Empty grave 26 cannot be dated, but in view of the grave dates in its immediate surroundings, it seems likely that it dates accordingly, and thus to the earliest phases of the cemetery. These two distinct oldest graves (20 and possibly 26) might be associated with two distinct burial groups and might have fulfilled the function of 'special grave of reference' for them.

The evidence for burial activities in the first half of the sixth century is neither conclusive for Stein (table 5.5). The burial ground was in all probability taken into use over the course of the second half of the sixth century, as were the burial grounds of Sittard and Obbicht. Four distinctive older graves were identified in phase IIa and one grave without finds was also identified as a distinct grave on the basis of its location and size. The number of four special graves in these early phases of the cemetery might indicate that plots of the burial ground were taken into use by a number of groups more or less simultaneously, and these groups all created their first grave with special references around which the graves thereafter were organised. This pattern is also visible in Sittard-Kemperkoul and Obbicht (although in Obbicht this is less obvious).

Of the four graves of men of phase IIa, grave 12 seems to be a special one since it contained striking and rare belt fittings, a sword (missing) and a lance head (missing). The space around grave 12 was left unoccupied during phase IIa and IIb, which might have underlined its special position in the cemetery (it is related to group 3). Only in phase IIc and IId were graves created in its closer proximity. Wooden container grave 60 contained an axe, a fire steel, the possible knob of a seax, fragments of probably a shield boss and a lance head; the other finds from this grave were neutral. Grave 60 also has a special location in the cemetery (it is related to group 2) in view of the space left unoccupied around it. This grave is not as large as graves 21 (also of group 2) and 12, but it might also have been a distinctive oldest grave in the cemetery. It contained an axe, which might refer to values such as clearing land.³⁶ Large wooden container grave 21 (related to group 2), without finds but with two body silhouettes, is surrounded by an unoccupied space, especially to its north and east. Since it is without finds, it cannot be dated to a specific phase, but it might have belonged to the earlier phases in view of the dated graves in its proximity. In view of its 'special location' and dimensions, it may have been

a significant grave around which one (large) burial group buried their dead from then on. It seems in fact to form the border of the graves (of group 2) to its west. Since grave 21 was an undisturbed grave, it can be suggested that it was not reopened during the later burial phases. If group 2 was in fact associated with one burial group, the presence of two possible founder's graves seems unlikely; it remains to be questioned whether it was really a distinct plot or which grave was more likely to be a possible founder's grave. Another example of a large grave without finds which was the first grave of a cemetery is known from Rübénach (grave 47), but this grave was associated with a horse interment in its proximity.³⁷ This example might also apply to group 4, in which grave 19 is a large grave with two body silhouettes in a wooden container (thus probably undisturbed) and some unoccupied space around it; it may have been a point of reference for the burial group using this section of the cemetery. Grave 57, of an older child, with masculine and possibly feminine objects, can also be identified as a special grave on the basis of its content, size and location; it may have been a point of reference for the graves of group 1, and may be a founder's grave, referring to both the masculine and feminine values of the burial community of this plot.

It is now generally accepted that the first burial phase represents the burials of newcomers in this northern area of the Merovingian world³⁸ of which evidence is also provided by the cemeteries of, for example, Posterholt (starting somewhat earlier in the course of the first half of the sixth century),³⁹ Bergeijk (also starting around 570),⁴⁰ and Meerveldhoven (starting in the second half of the sixth century)⁴¹. Since the identified burial phases of Sittard, Obbicht and Stein are rather long, it cannot be concluded whether the first settlers colonised the area with only one or a few families or with a more extended group. The number of burials in all three cemeteries, also compared to the later phases, seems to point towards the latter option, although the burial community might also have grown quickly after a small group of new inhabitants settled.

The examples of Sittard, Obbicht and Stein, as discussed above, show that probably not one, but at least two and probably more distinct burial groups can be identified during the first burial phases. It is difficult to tell on the basis of the burial evidence alone if these groups represented the settlement organisation of that time. Do the contemporary burial plots represent local groups constituted of a number of families, or were the associated burial communities living apart? At least the layouts of the three cemeteries show that they did not develop organically from the oldest plots to the youngest plots, but that they developed from several plots within the limits of the cemeteries.

The backgrounds of the first colonisers of this area in the sixth century and the social organisation of the new groups and communities are interesting subjects of debate about which numerous

(31) Theuws 1999; Theuws 2009; Brather 2004; Krohn 2007. (32) Theuws/Van Haperen 2012, 163-164. (33) Krist/Silkens 2005. (34) Stoecker 1991, 258-263; Stoecker 1991, 77-80; Stoecker 1992, 379-386; Stoecker 1993, 39-48. (35) Neuffer-Müller/Ament 1973. (36) Theuws 2009. (37) Neuffer-Müller/Ament 1973. (38) Theuws/Hiddink 1996; Theuws 2008; Theuws/Van Haperen 20012, 163. (39) De Haas/Theuws 2013. (40) Theuws/Van Haperen 2012. (41) Verwers 1978.

questions can be asked, but which cannot yet be answered here in detail.⁴² For now, it will be discussed to what extent the burial communities remained stable after the first settling phases and whether changes can be identified.

The expansion and consolidation of communities and the first changes

It is suggested that the communities were rather stable during the first 100 years after the cemeteries were taken into use, from around 565 to 640/50. During this period, the communities consisted of an average of four to five or maybe six families. Since graves are not a direct reflection of the communities' social and economic differentiation, the burial grounds are not analysed as such here. It can be assumed that economic differentiation within a community of four to six contemporary families will not have been a prominent feature. The relative 'wealth' of objects and their distribution throughout the cemetery can hold specific references with regard to this differentiation⁴³, but these conclusions are rather ambiguous and are not used for the reconstruction of the possible settlement history of these communities. Differences in the wealth of graves may have other reasons than just the material wealth of the buried person or burying community (family, kin, descent community, cult community, co-resident group, or a mixture of these, etc.). The composition of the set of grave goods might have been determined by the needs of the ritual, the rhetoric of it, the intentions of those who carried out the ritual, gifts of those who were present, and remains of a funeral meal or an investment by a larger group to create ancestors with specific characteristics. Nevertheless, we do not exclude the possibility that even in small groups there might be 'leaders' who base their position not on material wealth, but on specific capacities. To what extent these played a role in the burial rites, we do not know.

Other aspects, such as the links of the deceased or his or her family with various exchange networks, will also have been of importance, but it is not obvious to what extent access to exchange networks relates to socio-economic differentiation within a single community and to variation in the burial rites. The area where they lived was occupied only shortly, or some generations, before and the inhabitants will have been conscious about the larger entity they belonged to.⁴⁴ The cemeteries could be seen as an expression of various entangled (imaginary) networks between generations over time and distance. These networks are expressed with the grave location choices in the cemetery and with the grave goods accorded to the dead. The exceptional belt set from Stein grave 12 for example, might not have expressed the socio-economic position of the deceased or his family, but might have referred to entangled networks in which the graves in its proximity were eventually also included.

During the first 100 years of the cemeteries, object deposition was common. The men were accorded more or less extended weapon sets (see Chapter 7), but the women were buried with less variable and elaborate sets of gender specific objects. The ma-

jority of the women's grave goods sets consist of strings of beads, a small number of brooches and one earring. This image is clearly different from the cemeteries around the church of Saint Servatius in Maastricht for example. Here the women were buried with extended and variable sets of grave goods in the sixth and seventh centuries.⁴⁵ This difference is not fully understood yet, for it is not only in the Maastricht cemeteries that women were buried with elaborate sets of grave goods. Lavish grave good sets in women's graves have been discovered in rural cemeteries as well.

After 640/50, the number of burials seems to remain stable in Sittard, but it decreases in Obbicht and Stein. The graves without finds in the north-western section of the Sittard cemetery were identified as late seventh century graves. Together with some other graves without finds in other sections, and the graves which could not be dated (exactly), it can be suggested that the number of burials in the period after 640/50 to around 700 are comparable to the period before. This might indicate that the size of the burial community associated with Sittard was stable over a period of circa 120 years.

In Obbicht this seems to be different, although the incompleteness of the cemetery must be kept in mind. Here the number of burials decreased significantly after 640/50, also when the empty graves and not datable graves are considered to date after 640/50. This might have been caused by missing graves, but the available evidence seems to indicate that the number of burials decreased. Thus, it is possible that the associated community might have suffered from decreasing numbers after 640/50, but other explanations for the diminished number of burials are also possible. Some members could have been buried in other locations. In this period, the development of farmyard burials has been observed in a number of excavated settlements.⁴⁶

The number of graves which date after 640/50 is also low in Stein. A number of twenty graves were without finds. If they belonged to the later burial phases, the number of burials might have been stable throughout the period during which the cemetery was in use, but this is not certain.

It is for now carefully suggested that the community sizes diminished in Obbicht and Stein, but remained stable for some decades after 640/50 in Sittard. The changes in Obbicht and Stein may have introduced the changes which brought about the eventual abandonment of the cemeteries.

The last burial phases: Transformations and the eventual abandonment of the cemeteries

At a certain point in time, the three cemeteries were abandoned. For the cemetery of Sittard-Kemperkoul, this point was around 700 AD. Before its abandonment and the choice for alternative burial locations, some obvious changes took place in the burial ground. The existence of the last burial phase with objects (S-K IIb: 640/50-750) is not unambiguous. The graves date after 640/50 to approximately 750 AD; it is thus not certain when this last phase of object deposition ended, but this last phase is not rep-

resented by a high number of graves. Some other graves have date ranges assigned to them which end in the course of the first half of the eighth century, but start already in phase S-K IIIa or even S-K IIId; it is not certain whether they represent the last burial phase with object deposition. Graves 59, 53, 64 and 73 (of phase IIb) obviously expanded the cemetery to the northwest, but grave 40 was located close to the graves of the first burial phase in the centre of the cemetery. It can very well date to the beginning of the assigned date range. The mentioned north-western graves of the last burial phase with object deposition are associated with a number of clustered graves without finds. Some of these graves are narrower than the majority of the Sittard graves, but some are of comparable widths. They are identified as the last burial phase of the cemetery, maybe for some part contemporary with the last phase of object deposition. In the cemetery of Posterholt, a cluster of narrow empty graves is present in the south-eastern section of the cemetery and these are also identified as the last burial phase of the cemetery, dated to the late seventh and early eighth century.⁴⁷ In Bergeijk, a cluster of narrow graves was found in the southern section of the cemetery; these graves are also dated to the late seventh and early eighth century and represent a new burial section after the previous sections of the burial ground were abandoned.⁴⁸ It is discussed whether this new section was taken into use by newcomers or by the existing burying community. A new founder's grave was identified in relation to this new group of graves, which is an exceptional large grave of a woman.⁴⁹ The new phase can be found to the south of this 'founder's grave', which separates it from the rest of the cemetery. The last phase of empty graves in the cemetery of Bergeijk is interpreted as a burial section of new occupants, or as an expression of the experienced transformation in social life at large.⁵⁰

The cluster of empty graves of this last phase in Sittard-Kemperkoul counts fourteen graves, but the recent disturbance of this part of the cemetery certainly destroyed an additional number of maybe seven empty graves. The cluster was not as clearly separated from the rest of the burial ground as it was in Posterholt and Bergeijk. An obvious founder's grave for this new phase is neither identified. It is however, apparent that the majority of the gendered graves in the vicinity of the empty graves are the graves of women, and that graves of children are also more present in this section of the cemetery compared to other sections. In view of the founder's grave of a woman, connected to the last burial phases of the Bergeijk cemetery, this is an interesting observation.

The men became 'invisible' on the basis of gendered grave goods during the last phase of object deposition in Sittard. The former construction of ancestors symbolising masculine values important to the community was not felt necessary anymore in this cem-

etry or during funerary rites. The symbolic construction of feminine values was maintained and children were accorded burials in the proximity of their (relatives') graves; these two features might have expressed the desired continuity of the community which found itself in a world of social, economic and political transformation towards the end of the seventh and the beginning of the eighth centuries.⁵¹

However, the burial ground was eventually abandoned. Other cemeteries, comparable to Sittard, as well as Obbicht and Stein, were also abandoned towards the end of the seventh and the beginning of the eighth centuries. Some explanatory models have been developed for this process.⁵² The inhabitants chose other burial locations such as farm yards, church yards, more remote and important cult sites, or possible new rural, but now Christian grave yards.⁵³ It is obvious that the burial ritual had already changed dramatically before it was decided to abandon the cemetery completely. The final phase was a rather gradual process during which several complementary burial grounds were an option for burial before it finally came out of use. Assuming that this final abandonment was some time after the last phase with grave goods and that approximately one to two burials took place every year, it can be proposed that this final abandonment was around 700 AD in Sittard, and probably also in Obbicht and Stein. Whether the associated settlements remained in use is not known, since they are not found (yet).

With regard to the spatial distribution of the burial phases over the three cemeteries, it was observed that they developed from older to younger sections, but that the older sections were still used, although less intensively, during the later burial phases. The same applies to the identified rows of graves; these are not characterised by graves of only one phase, but included graves of all phases. The exact nature of the relations between the graves in a row cannot be comprehended. The chronological differentiation in the majority of the rows nonetheless shows that the burial ground did not grow organically from one point in specific directions, but that different organisational principles were at work simultaneously and resulted in connections between the dead which surpassed time; various burial groups can be identified already in the first phase of the three cemeteries, but later interments were also associated with the earlier graves. Both contemporary connections and connections over longer periods of time were secured in the burial ground; whether these were only familial relations cannot be established for the lack of skeletal material. The organisation of each burial ground was not ruled by one group but was a result of negotiations between groups, as the organisation of the distinct plots can be imagined to be a result of negotiations within a group.

(42) See Theuvs 1996; Theuvs/Van Haperen 2012, 163. (43) Steuer 1982; Harke 1989; 1990; Halsall 1996; Brather 2008; Effros 2002; 2003; Williams 2003; 2004; 2006; King 2004; Theuvs 2009. (44) Theuvs/Van Haperen 2012, 180-186. (45) Ypey 1953; Kars 2011. (46) Verwers 1996; Theuvs 2000; Theuvs 2000. (47) De Haas/Theuvs 2013, 166-170. (48) Theuvs/Van Haperen 2011, 163. (49) Theuvs/Van Haperen 2012, 163-164. (50) Theuvs/Van Haperen 2012, 163-164. (51) Theuvs/Van Haperen 2012, 164. (52) Theuvs 1996; Theuvs/Van Haperen 2012, 164-165. (53) Theuvs 1999; Theuvs/Van Haperen 2012, 164.

7 Aspects of the burial rituals

The burial evidence of the cemeteries of Sittard-Kemperkoul, Obbicht and Stein contains clues about the prevalent burial rites. The features explored in this chapter are the use of chamber graves and the significance of the spatial arrangement of bodies and specific categories of objects in the coffins and chambers, the variety in the deposited weapon sets, the social backgrounds of deposited pottery vessels with identical roulette stamp impressions as well as the meaning of horse burials and horse related burial objects.¹

Chamber graves and the spatial arrangement of their contents

Wooden grave constructions, and especially chamber graves consisting of a chamber with coffin placed in it, are often linked with elite burials, of which the grave of Childeric (died 481/482)² and the ‘Herr of Morken’ (around 600)³ are obvious examples. Chamber graves can be defined in both a narrow and a broad sense. In the narrow sense, they are graves with a wooden chamber built within a grave pit in which a wooden coffin with the corpse of the deceased person was placed against one of the long sides of the chamber.⁴ In west-east oriented graves the coffin was usually placed against the north wall of the chamber. Such graves were given the qualification of ‘Morken-type’ graves, named after a well-known site in the German Rhineland where they had been found. However this type definition is too narrow to grasp the variability found in large or oversized grave constructions

(grave chambers) that were built in the grave pit. There are chambers in which the deceased was placed without a coffin, there are chambers with a partition wall, in many chambers the coffin is not in the ‘correct’ position along the northern wall, etc.⁵ This begs for a broader definition of chamber graves. Various authors have addressed this problem and discussed the construction of the chamber graves in relation to the variability observed. Koch discussed the various types of wooden grave constructions in the cemetery of Pleidelsheim and a number of cemeteries in the Mannheim area.⁶ Peters discussed in great detail the various types of chamber graves of the Soest cemetery and distinguished ‘*echte Kammergräber* (*typ Morken*)’ from ‘*kammerartige Gräber*’.⁷ The ‘*echte Kammergräber*’ were subdivided into four subtypes of which type 1.1 (*Holzkammer mit sarg*) is equal to the narrow definition of chamber graves of the Morken type. Nieveler studied the chamber graves from the Erftkreis and Kreis Euskirchen, where she could identify only nine chamber graves of the Morken type.⁸ She points to a chronological aspect of chamber graves: they occur in the sixth century but the majority date to the first two-thirds of the seventh century. They are rare in the last part of the seventh century. Finally,⁹ Siegmund discusses chamber graves in the lower Rhine region adjacent to our three cemeteries.¹⁰ He dates these to the second half of the sixth and early seventh century. Defining these graves on the basis of their construction and debating their date and geographical distribution is one aspect, the interpretation of this grave type another. Most authors cited above consider these graves as a ‘Frankish’ phenomenon. Moreover, such cham-

ber graves are considered the graves of the elite, if not of aristocrats.¹¹ Usually the number and variety of grave goods exceed that found in the average grave in the cemeteries in which they were found, which often leads to the hasty conclusion that they are graves of ‘princes’ and aristocrats. This hasty conclusion is based on modern conceptions of the relation between wealth and power and wealth and social status, the status of persons and individuality and the idea that the grave goods represent the personal status of the deceased in the grave. However, there are more reasons why an above average number of grave goods can be found in a grave (see below).¹² Moreover, if the persons are leaders in their communities, what is the geographical scale of their power-base and what is the nature of their power? This relationship between chamber graves and the high social status of the deceased seems to be an ambiguous one. Not all persons with a high status were buried in chamber graves, and not all chamber graves contained persons with a high social status. This can be deduced from the regular presence of chamber graves in some cemeteries in the southern Netherlands and of chamber graves in farmyard burial groups dating to the late seventh century in the same area.¹³

The overview of Merovingian cemeteries in the province of North-Brabant in the Netherlands shows that some cemeteries had a considerable number of chamber graves but that these graves, and also the cemeteries in which they are present, cannot be identified as ‘rich’ in comparison to the privileged burials mentioned above and many other examples from Merovingian Gaul.¹⁴ Some of the chamber graves are the most richly furnished of the cemeteries from North-Brabant, but they are not exceptional. These cemeteries all date to the second half or last quarter of the sixth century and throughout the seventh century.

Especially the cemetery of Sittard, but also those of Obbicht and Stein, can be added to this list since they are not exceptional in terms of material wealth but show a considerable number of chamber graves of the Morken type and single wooden container graves. These three cemeteries also date to the second half of the sixth century and throughout the seventh centuries. The other published cemeteries from the province of Limburg show the variety in the use of chamber graves. In Posterholt, only four of the eighty-six inhumation graves were chamber graves,¹⁵ and in the ‘urban’ Vrijthof cemetery, wooden containers were only sporadically used and a chamber grave was not discovered.¹⁶ This is remarkable since this cemetery is located at a ‘special’ place, in the proximity of a ‘cult’ place, but the choice for building chamber graves or single wooden container graves, which points to special investments in the grave construction, was not chosen as a

grave form; the majority of the dead were buried in trench graves. Perhaps the choice for chamber grave burials was dependant upon other variables than just the expression of wealth or social status; some suggestions are made in the concluding section to this discussion on the chamber graves in which the focus is on the spatial distribution of their grave finds.

The chamber graves and single wooden container graves of Sittard, Obbicht and Stein were discussed in detail in Chapter 3. In the following the spatial arrangement of the grave goods in the coffins and chambers in the (possible) chamber graves of the three cemeteries are considered in more detail. The reconstructions of the wooden container graves from Obbicht and Stein on the basis of the descriptions in the first catalogues, are again shortly discussed below. The arguments for their reconstruction are given, as are the arguments for the reconstructed spatial distribution of the finds. In Obbicht and Stein, only single wooden container graves seem to be present (except for one obvious chamber grave in Stein). It is argued that some of these may have been chamber graves of which the remnants of the second wooden container disappeared or were not observed. The identification of the possible Obbicht and Stein chamber graves is, however, problematic.¹⁷ Nonetheless, discussing them as either single wooden container graves or possible chamber graves contributes to the overall picture of the cemeteries and the understanding of the spatial distribution of finds in chamber graves.

The conclusions with regard to the spatial arrangement of finds in the Sittard chamber graves, are taken as point of reference; on the basis of these conclusions the distribution of finds in the single wooden container graves or possible chamber graves from Obbicht and Stein are discussed and compared to those in Sittard. As a conclusion, interpretations with regard to the meaning of the spatial arrangements of finds in chamber graves are put forward.

The chamber graves in the cemetery of Sittard-Kemperkoul

Chamber graves were relatively frequent in the cemetery of Sittard-Kemperkoul; of the total number of eighty-seven graves, twenty-one could be identified as chamber graves (fig. 7.1, and see also Chapter 3 for a detailed description of the chamber graves).¹⁸ A considerable number of single wooden container graves are also present in the cemetery. Chambers are usually considerably larger than the coffins. The free chamber space is used to deposit (an additional set of) grave goods. Coffins were generally placed in one

(1) Other topics that were considered important to study in the context of the Anastasis project were cremation graves, the reopening of graves, the meaning of vessel assemblages and the location choice of cemeteries. These topics were already introduced in the publications of the cemeteries of Bergeijk and Posterholt (Theuws/Van Haperen 2012; De Haas/Theuws 2013, 172-177). The Anastasis project was in the first place a backlog programme, financed to realize the analysis and publication of a series of unpublished cemeteries. Detailed publication of data was its first goal. For the Anastasis project see: <https://www.universiteitleidennl/en/research/research-projects/archaeology/the-anastasis-project>. (2) See now: Quast 2015. (3) Böhner 1958. http://www.landeshmuseum-bonn.lvr.de/de/forschung/projekte/roemische_helme/HerrvonMorken.html (4) Martin 1976, 12-29. (5) See Smal in Theuws/Kars in prep. (6) Koch 2001, 89-156; Koch 2007. (7) Peters 2011, 18-26. (8) Nieveler 2003,

14-15. (9) Not all discussions of chamber graves have been included here. (10) Siegmund 1998a, 229-230. (11) See also Fischer/Soulat/Victor 2009 (with an unsatisfying distribution map: Fig. 9). (12) Theuws 2013. (13) For the chamber graves in farmyard cemeteries, see the example provided by Verwers 1996. (14) Verwers 1978. Especially the cemetery of Meerveldhoven shows a high number of chamber graves. In the cemetery of Meerveldhoven, a number of at least twenty-five graves with two wooden constructions were found. (15) De Haas/Theuws 2013, 59-61. This cemetery was, however, not completely excavated so the number of chamber graves might be relatively higher. (16) Theuws/Kars in prep. (17) Verwers 1978. (18) Graves 5, 8, 14, 16, 26, 30, 31, 32, 40, 43, 47, 48, 57, 71, 79, 80, 81, 82, 84, 85 and 86.

Fig. 7.1
Sittard-Kemperkoul: plans of chamber graves (scale 1:80).



half of the chamber; in Sittard this is mostly in the western half of the chamber (fig. 7.1). Only a few coffins were placed in the middle of the chamber (graves 16, 40, 57), and two were in the eastern section of the chamber (graves 47 and 79). In other large chambers, no separate coffins could be identified with certainty. Some had interior partition walls (graves 32, 81, 82), while another one did not contain a coffin or interior wall at all. In one case, it was difficult to establish the type of construction (grave 85). It might have been a chamber with a coffin. The coffins in the W-E orientated cham-

bers graves in Meerveldhoven, were for the majority located in the northern half of the chamber.¹⁹ This is comparable to the coffins in the western half of the S-N orientated burials in Sittard.²⁰

Of the twenty-one chamber graves, seven were identified as those of women on the basis of the goods, which were for the majority deposited inside the coffin.²¹ Of these chamber graves, one was disturbed by a reopening pit (grave 8), one was cut by another grave (grave 43), and two were partly disturbed in recent times (grave 80). Ten chamber graves were related to men on the basis of

grave goods, which were also found outside the coffin but inside the chamber.²² Of these graves, one was disturbed by an ancient reopening pit (grave 26) and two were disturbed by recent activities (graves 81 and 84); the other chamber graves were not disturbed. The grave goods in four chamber graves were not gender specific. Two of them were undisturbed (47 and 57), and two were disturbed by recent activities (graves 82 and 85).

The objects deposited in the chamber were intentionally placed there, thus they were not directly associated with the body. The act of placing objects inside the coffin created a direct relation with the deceased in the grave. The objects found outside the coffins were probably put there after the coffin had been placed in the chamber, maybe even after the coffin was closed. In order to draw some conclusions as to the relationship between the dead and the range of objects deposited in the coffin or chamber, the spatial patterns of each category of objects are discussed in the following. The meaning of the separation between objects deposited in the coffin and in the chamber sections is discussed in the concluding section. In the next section, the distribution of finds in the Sittard chamber graves will be discussed. The results form the basis for the reconstruction of the spatial arrangements of the finds in the possible chamber graves of Obbicht and Stein

The spatial distribution of finds over chambers and coffins in Sittard-Kemperkoul

Dress related items: beads

Strings of beads are generally worn around the neck or lower arm, or carried in a purse, which is indicated by their find location in relation to the body. Beads, in varying quantities, were found in six of the seven Sittard chamber graves. They were, for the majority, found at the (presumed) former location of the head, but also near the lower arm; they were thus deposited with the body inside the coffin. In two graves, beads were found outside the coffin. The single bead from grave 8 was found in the disturbed southern section of the chamber, which was the section associated with the upper part of the body inside the coffin. The coffin outline was disturbed by a reopening pit. It was a S-N orientated grave since the original location of shoe fittings were identified in the northern section of the coffin. It can be assumed that a string of beads was originally present, but that it was taken from the coffin by the diggers of the reopening pit; one of the beads might have moved from its original location. Four beads from grave 79 were found inside the coffin, in its southern half. Two other beads were found outside the coffin, but inside the disturbed chamber, together with a strap end. The beads seem to have moved from their original location in the coffin. The beads in Sittard were, as a rule, deposited inside the coffin with the body, and thus never detached from the body outside the coffin.

Dress related items: belt fittings and shoe fittings

The majority of the belt fittings (in three graves of women and in seven graves of men) were found inside the coffins; the bodies in all these examples were dressed with the belt before burial. Only in grave 79 of a woman, a strap end was found to the west of the coffin. This chamber grave was partly disturbed and the finds (beads and strap end) are recorded at a deviant location compared to the finds in the other chamber graves. It is likely that these finds moved from their original position.

In grave 14 of a man, two pairs of nearly identical belt fittings were found inside and outside the coffin. A rectangular outline (c. 65 x c. 60 cm), most likely of a box, was recorded in the south-eastern section of the chamber, next to the southern half of the coffin. One of the two belt fitting pairs was placed on top of the box; the other pair was deposited in the coffin. The two pairs of belt fittings bear great resemblances and might have expressed a connection of which the exact nature remains obscured to us.

The shoe fittings from grave 8 of a woman were deposited with the shoes on the feet of the deceased, thus inside the coffin.

Utensils or belt pendants and purses or boxes (with content)

All the utensils, purse contents or belt pendants from chamber graves (spindle whorls, fire steels, flints, shears, knives, an awl, simple rings, a comb with case, a coin pendant and a ring rod) were found inside the coffins, except for the knife from grave 26 (of a man). It is assumed that these utensils were carried in purses, and as such deposited in close association with the bodies. The (possible) knife from grave 26 was found outside the coffin in the north-eastern corner of the chamber. The actual knife as recorded on the field drawing is, however, not present in the collection. The iron object (at first identified as a knife) illustrated on the field drawing in the north-eastern corner might have been the lance head known from this grave, of which the exact find location was not recorded.

Utensils might also have been deposited in boxes. In three graves, the remnants of what were probably wooden boxes were found: in grave 16 (of a woman) and 5 and 14 (of men). The one in chamber grave 5, was identified on the basis of various iron mounts, found inside the coffin. It is not certain whether the mounts were of a wooden box since traces or shadows of its walls or bottom were not observed. The imprints or shadows of decayed wooden walls of presumably boxes indicated the former presence of a box in grave 14; it was placed to the east of the coffin in the southern section of the chamber. Finds were not found in this box, so it may have contained perishable objects (textile, wood, food). The box from grave 16 was identified on the basis of metal mounts found dispersed throughout the coffin and chamber. A pit disturbed the grave; the mounts might have moved from their original location when the pit was dug. Thus, it is not certain where in the grave the box was placed and whether it originally contained objects.

(19) Verwers 1978. (20) The left arm was against the wall of the chamber. (21) Graves 8, 11, 16, 32, 43, 71, 79 and 80. (22) Graves 5, 14, 26, 30, 31, 40, 48, 81, 84 and 86.

Glass vessels: palm cups and fragments

First, it is remarkable that three of the four palm cups known from the Sittard cemetery were deposited in chamber graves (graves 8, 16 and 26). The palm cup from grave 15 (gender not known), nearly identical to the palm cups from graves 16 and 26, was deposited in a grave of which only the outline of a burial pit and beams were preserved; it might have been a chamber grave. However, no clear patterns can be found regarding the locations of the other three palm cups. The palm cups from grave 16 and 26 were found inside the coffin, near the former location of the feet. Grave 16 was the burial of a woman, grave 26 that of a man. The palm cup from grave 8 (a woman), was found outside the coffin in the north-western corner of the chamber. The palm cup was thus deposited in the section associated with the lower part, and more specifically the feet, of the body. The palm cups were not associated with other vessels, except for grave 26 in which the lid of a ceramic pot was found. The choice to place the cups either within the coffin or outside the coffin may have depended on the possible content of the cup, but it might also be indicative that the palm cups with ribs (which date graves 16 and 26 to 565-610/20) were found inside the coffins, while the plain palm cup (from grave 8, dating to 640/670/80) was found outside the coffin.

A considerable number of glass fragments were found inside the coffin of grave 32 (a woman); they were found in association with the beads from this grave. It was not possible to reconstruct a glass vessel with the fragments, so it is not certain which type of vessel was deposited here. Glass fragments were also found in grave 43; they were found inside the coffin, presumably on the former location of the breast. The vessel type cannot be identified.

It can be concluded that the majority of the glass vessels and fragments from chamber graves were found inside the coffins, and that the majority are associated with the burials of women.

Pottery vessels: biconical pots, spouted pots, bowls, beaker, pottery lid

The eight biconical pots from Sittard chamber graves were all found outside the coffins, except the one in grave 47. The biconical pot from this grave was the only find in the coffin and the chamber was without finds. It was one of the few chamber graves of which the coffin was located in the eastern half of the chamber.

Of the remaining seven pots, one was found in the grave of a woman; the biconical pot from grave 80 was found in the northern half of the chamber, the section associated with the lower body. The other six pots were all found in the chamber graves of men (graves 5, 14, 30, 31, 48 and 81). Four of the pots were found with a lance head in the north-eastern section of the chamber (graves 5, 14, 30 and 81). One of the pots was found in shards (grave 31); it seems as if the pot (complete or already in fragmented condi-

tion) was placed on top of the coffin; the fragments were found at a slightly higher level (55.68 m NAP) than the first traces of the coffin outline (55.60 m NAP) were observed.

Two out of seven spouted pots were found in chamber graves (32 and 86), both outside the coffin. The pot from grave 32 of a woman was found in shards; they were found in the northern section of the chamber (the section associated with the feet), but not exclusively inside or outside the possible coffin or in one of the two parts divided by the possible partition wall. The fragments were, however, recorded on a level (55.76) which is lower than the first observed traces of the coffin or partition wall (56.00). The pot may have been placed leaning against the coffin or partition wall and fell apart after the wall collapsed. The spouted pot from grave 86 of a man was placed in the northern half of the chamber, the half associated with the lower body. It was found together with a lance head and a shield boss to the east of the coffin.

Bowls were found in chamber grave 82 (without gender specific finds) and chamber grave 81 of a man. They were both found in the north-eastern corner of the chambers.

The ceramic lid of a pot was found in the northern section of the coffin, just outside the reopening pit disturbing grave 26. It might have been left behind after the grave was reopened, which explains the absence of the pot to which it originally belonged.

Copper alloy vessel: bowl

The single copper alloy bowl from Sittard was found in chamber grave 14 of a man outside the coffin, in the northern half of the chamber which is associated with the lower part of the body. It was found together with a biconical pot and a lance head in this section of the chamber.

Axes

Of the three axes found in the Sittard cemetery, one was found outside the coffin of chamber grave 5, in the south-eastern section of the grave. This section is associated with the upper part of the body and is generally not used for the deposition of objects in the chamber graves of Sittard-Kemperkoul. The other two axes were found in a single wooden container in grave 20 (close to the head), and in the south-eastern corner of single wooden container grave 37, also considered to be positioned close to the head.

Weaponry: seaxes, lance heads, swords and shields

The weaponry from the Sittard cemetery consists of arrow heads (two), lance heads (fifteen), shield bosses (three), seaxes (ten, and one tip of a seax) and swords (two). The axes, which are tools, are discussed above. The two arrow heads were both found in the single wooden container in grave 38. The other weapons are associated with chamber graves, although not exclusively.

Of the ten seaxes, six (with scabbard remains and fittings) were found inside the coffins of chamber graves 14, 26, 30, 31, 84 and 86. In the chamber graves in which seaxes were found in coffins, lance heads and/or shields were found outside the coffins in the chamber, except in graves 31 and 84. Grave 84 is disturbed; information about finds outside the coffin is not available and in grave 31 only pot fragments were found. Of the other four seaxes discovered, two were found in single wooden container graves; grave 20 was a relatively narrow single container grave and grave 39 was a small rectangular grave. One of the seaxes was found in the middle of grave 41 with one wooden beam, but without traces of a wooden container; it was thus deposited in close association with the body. One seax was assigned to a discarded context (discarded context 27). Thus in Sittard, seaxes were, as a rule, deposited inside the coffins in chamber graves and always in close association with the body.

Of the fifteen lance heads from Sittard, six were deposited in chamber graves: five of them were deposited outside the coffin in the north-eastern corner of the chambers (graves 5, 14, 30, 40, 81 and 86), and one seems to be deposited inside the coffin (grave 26). Grave 26, however, is disturbed by a reopening pit and the location of the lance head was not indicated. The knife recorded as a find in the north-eastern corner of the chamber is not present, and this find might have been the lance head; this is in accordance with the find locations of the other lance heads from the Sittard chamber graves. Of the eight other lance heads, four were found in the north-eastern corner of single wooden container graves (24, 34, 49, 77), one was found in the south-eastern corner of a trench grave (78), one was found in the middle of a trench grave (28) and one was associated with the heap of finds without grave context (29). Only the lance head from grave 28 seems to have been deposited in close association with the body. The lance heads from the four single container graves were deposited at some distance from the presumed former location of the body.

The two swords from the Sittard cemetery were both found in chamber graves. In chamber grave 26 it seems to have been found inside the coffin (the outline at this exact location was not observed, but can be reconstructed on the basis of the remaining outlines recorded), just to the east (right hand side) of the body. The sword from chamber grave 31 was deposited inside the coffin. In this chamber grave all the finds were deposited inside the coffin, except for a biconical pot.

One iron shield boss (with wood remains of the shield) was found in a chamber grave; it was deposited outside the coffin, in the south-eastern half of the chamber of chamber grave 86. The shield was probably placed in a standing position leaning against the eastern wall of the chamber. After some time, the shield fell over and the decayed wood caused the discoloration of the ground

around the remaining boss and grip. One of the other two shield bosses was found in the north-eastern corner of a single wooden container grave (49), in association with a lance head, as well as a pottery beaker and spouted pot; the shield seems to have been deposited at some distance from the body. One shield boss could no longer be assigned to a grave.

Rules seem to regulate the locations for the deposition of each weapon category. The seaxes and swords were meant to be attached to belts, and were in life directly in contact with the body.²³ This is also reflected in the burial evidence; all of the swords and seaxes from chamber graves were deposited inside the coffin, and thus in direct association with the body. The seaxes from the other grave types were also deposited in close association with the body. For the deposition of lance heads, two options were available. When deposited in a chamber grave, the preferable option was outside the coffin. When deposited in single wooden containers, they were also placed at some distance from the body, at the locations where vessels were often placed. The arrowheads (and a bow?) were also deposited in direct association with the body. The shield bosses were deposited at some distance from the body; one was deposited outside the coffin in the chamber, and one in the north-eastern corner of a single wooden container.

The wooden constructions in graves of the of Obbicht cemetery and the spatial arrangement of their finds

The soil conditions at the location of the cemetery of Obbicht made observations difficult.²⁴ In nine graves, traces of wooden constructions were nonetheless discovered (fig. 7.2).²⁵ They were all observed in the northern half of the cemetery, but this distribution may be due to the observation conditions and may not represent the actual distribution of graves with wooden constructions; the original number might have been higher. The precise dimensions of only one wooden construction were recorded in the original catalogue; for the others only dimensions of some walls or vague descriptions of their location were given (see Chapter 3). This suggests that the use of large single wooden constructions might have been a rule in Obbicht, but this conclusion is thus uncertain. Nonetheless, it is worth discussing the possible presence of chamber graves in this cemetery.²⁶ The spatial arrangement of the finds in these graves could be reconstructed on the basis of the descriptions that were given in the original catalogue.

In grave 19 of a woman, the traces of a wooden construction were visible; the burial pit, measures 2.00 m x 1.30 m. It was a large single wooden container grave, although a coffin might have been present but not observed. The beads were in all probability depos-

(23) However many swords were deposited with the sword belt wrapped around the scabbard. In that case, they were deposited separately. Usually the 'wrapped' swords were also deposited next to the body. (24) Moreover, to observe the details necessary for an analysis like this one, high quality excavations are needed. Of course the

excavations by Beckers and Beckers did not meet these modern standards; they were carried out according to the research interests of their time. (25) Graves 19, 20, 25, 29, 36, 43, 45, 47 and 63. (26) The possible coffins are indicated with interrupted red lines.

ited with the body, since they were found at the presumed former location of the head; a coffin could have stood at this presumed former location of the body. A biconical pot was present in the grave, but it cannot be determined whether it was placed in a possible coffin or in the chamber.

In grave 20 of a man, a wooden construction measures 3.00 x 3.00 m. On the basis of its size, it can be assumed that it was a chamber. In the middle of the grave, especially in its western part, soil discolorations indicated the former location of the body. It was either placed in a coffin or directly in the chamber. An axe was deposited near the body. The shield boss and lance head were found along the southern wall, the seax and knife along the northern wall and the two biconical pots and glass claw beaker were deposited close to the eastern wall in the middle of the grave with the copper alloy bowl probably placed in their proximity. A coffin might have been present and may have left some space in the eastern end of the chamber where the vessels were placed. Since the lance head from grave 20 was found with the shield boss, it might have been placed outside a possible coffin.

In grave 29 of a man (2.80 x 1.90 m), the shadows of a wooden container were observed with dimensions nearly similar to the burial pit. It might be the remnants of a chamber in which a coffin could have been present. The lance head, horse bridle and shield boss were found alongside the southern burial pit wall. Belt fittings and fragments of what seemed to be a seax were found scattered throughout the grave. It can be assumed that the lance head, bridle and shield boss were found at their original location, and thus separated from the body.

Grave 36 (2.20 m x 1.80 m) is a relatively richly furnished grave of a woman. Traces of a wooden container were visible, but its exact dimensions were not given. It is depicted as an outline alongside the outline of the burial pit, in line with other observations in Obbicht. Beads in the middle of the grave close to the western wall, indicate the position of the head. The other finds, which include a finger ring and other dress related items, were found along the northern wall, thus to the left of the now completely decomposed

body. A coffin might have been present in the northern half of the chamber in which the deceased was buried. The bucket and biconical pot might, in that case, have been placed outside the coffin. Nevertheless, it is possible that a coffin was never present and that the body and finds were all deposited in a single large container.

Grave 43 (2.00 x 1.60 m) had a wooden construction of 1.80 x 0.85 m. It stood close to the eastern wall of the burial pit. The biconical pot was found inside the wooden container, which indicates that it was a single large container grave.

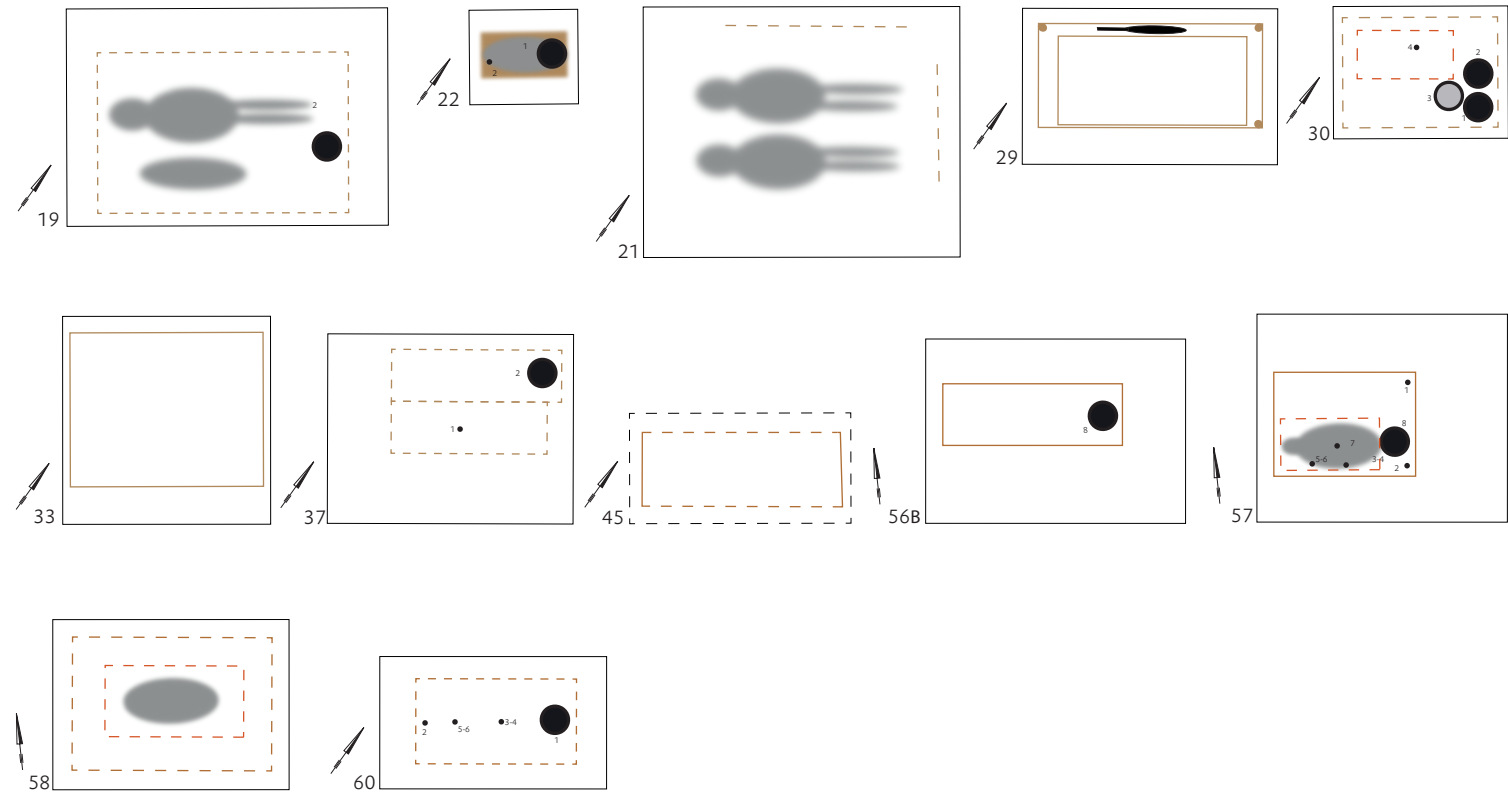
In grave 45 (2.30 x 1.50 m) traces of a wooden construction with a width of 0.85 m were observed, but its length could not be established. Indications for its identification as a chamber grave are not present.

In grave 47 (2.50 by 1.06 m)²⁷ traces of a wooden construction were observed, although it was not recorded where this was and what its dimensions were. The biconical pot shards were found scattered throughout the grave, and a copper alloy mount was found in the middle of the grave. The walls of the reconstructed wooden container were possibly placed alongside the pit walls.

In grave 63 (3.00 x 2.20 m) a band shaped soil discoloration along the northern wall indicated the presence of a wooden construction (a chamber or a coffin). Some skull remnants of a non-adult were found close to the western wall in the middle of the grave. The biconical pot found in the south-eastern corner of the grave would have been placed outside the coffin but inside the chamber, in the case there was a coffin.

The concluding observation is that no chamber graves with coffins were recorded in the Obbicht cemetery. This is not to say that they were not present. Nearly all the graves observed as single wooden container graves could have been chamber graves in view of the dimensions of their wooden constructions and/or the burial pits, except for grave 25 which is the burial of a horse, and graves 43 and 45 which are identified as single wooden container graves. Of the gendered graves with wooden containers, two are graves of men (20 and 29) and two are graves of women (19 and 36).

Fig. 7.3
Stein-Groote Bongerd: plans of chamber graves (scale 1:80).



The wooden container graves of the Stein cemetery and the spatial arrangement of their finds

In the cemetery of Stein, twelve graves with traces of wooden constructions were discovered (fig. 7.3).²⁸ The actual dimensions (but not the exact locations) of the majority of the wooden constructions were given, and in one grave (29) two wooden constructions were observed; this is the only unambiguous chamber grave of the cemetery. We do not have a good impression of the distribution of wooden grave constructions throughout the cemetery due to bad observation conditions. Below it is discussed to what extent we can recognise chamber graves with coffins²⁹ or single container graves.

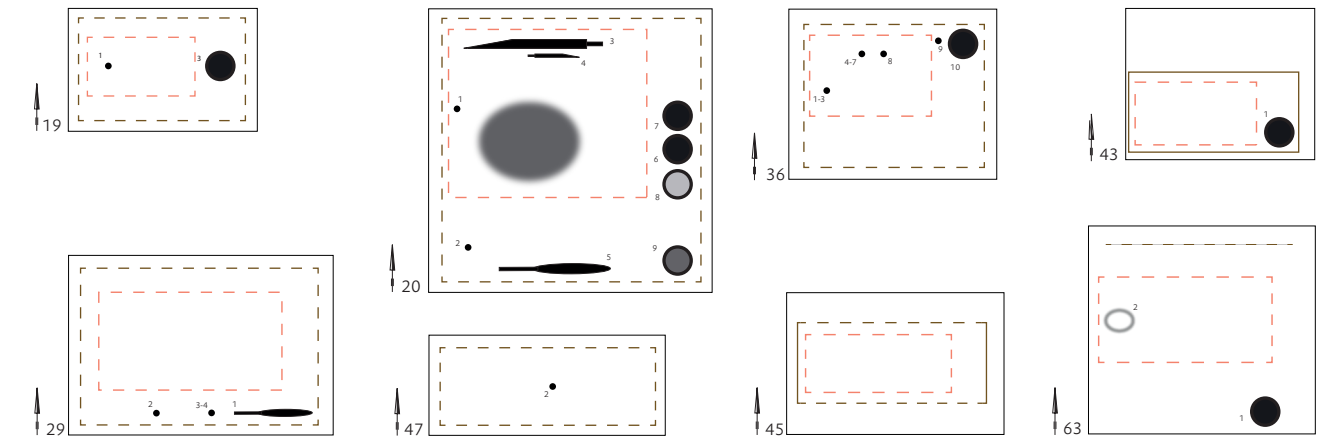
In grave 19 (3.40 x 2.30 m) the wooden container measured 2.65 m x 1.70 m. Unfortunately, its position was not recorded. It was observed that the burial pit was deeper than the bottom of the wooden construction; this might indicate the presence of wooden beams on which the construction was placed. Traces of two bod-

ies were present; one had a length of 2.10 m and a width of 0.92 m and the other a length of 0.95 m and a width of 0.38 m. The larger discoloration showed the contours of a body. The shorter individual was located to the south of the longer one. The locations of the bodies indicate the location of the wooden construction in the southern half of the burial pit as reconstructed on the grave drawing. Remnants of a coffin were not observed; hence, it might have been a large single container in which the two bodies were placed. In view of their lengths, it is determined to be the grave of an adult with a child. Four beads and a biconical pot were found; the excavators observed that the finds were deposited inside the wooden container. The find location of the beads was not recorded, but the biconical pot was found along the short eastern container wall.³⁰ This grave might be a single wooden container grave with two bodies, it might be a chamber with two coffins, the observed outline might be the remnants of two separate coffins or it might have been a chamber with partition wall.

In grave 21 (3.35 x 2.65 m), the remnants of a wooden construc-

(27) The indicated width might be a typo since all the grave dimensions were given in round numbers and its width might thus have been 1.60 m, which is also more in balance with the length of the burial pit. (28) Graves 19, 21, 22, 29, 30, 33, 37, 45, 56, 57, 58 and 60. (29) The possible coffins are indicated with interrupted red lines. (30) The biconical pot is depicted in-between the two individuals since it is not known where exactly it was placed and with which individual it was associated. (31) These remnants are indicated with interrupted lines on the grave drawing since their exact locations are not known. (32) These imprints are indicated as a rectangular stain in the middle of the grave since it was not clear whether the wooden construction was visible as band shaped discolorations or as a larger discoloration caused by the wooden construction floor.

Fig. 7.2
Obbicht-Oude Molen: plans of chamber graves (scale 1:80).



tion were found alongside one of the short walls and one of the long walls of the burial pit (it was not indicated alongside which walls exactly).³¹ Shadows of two bodies were found. Objects were not found in this grave. Any type of chamber could have been present in this grave.

In grave 22 (1.15 x 1.00 m), a child was buried. A soil discoloration of a wooden construction and a decayed body were discovered in the middle of the grave. The container had a width of only circa 60 cm.³² It cannot be indicated as a type of chamber grave.

Grave 29 is the only grave of the cemetery in which two wooden constructions were found. The dimensions of the chamber are 2.35 x 1.10 m and those of the coffin were 2.00 x 0.75 m. The position of the wooden coffin was not recorded. The grave drawing is, therefore, not an exact representation of what the excavators observed. A lance head was found 0.35 m from the long northern wall and 0.70 cm from the short western wall. It is assumed that in this grave, the lance was also placed outside the coffin (as they were for the majority in the Sittard chamber graves). The coffin was in that case, placed alongside the southern wall of the chamber.

In grave 30 (1.85 x 1.40 m), the bottom and walls of a wooden container were observed close to the walls of the burial pit.³³ Two biconical pots and a glass palm cup were found together in the south-eastern corner of the grave, and the beads at the presumed former location of the left hand, close to the long northern burial pit wall. Since the wooden container traces were observed alongside the burial pit walls, all the finds were placed inside this wooden container. A coffin could have been present, which would make this grave a chamber grave, but it could have been a single container grave as well.

Grave 33 (2.20 x 2.20 m) contained traces of the walls of a wooden container close to the short walls, 15 cm from the long northern wall and 40 cm from the long southern wall of the burial pit; these observations were used for the reconstruction of the container dimensions (c. 2.00 x 1.65 m). Finds are not known from this grave. It was probably a single wooden container grave.

Grave 37 (2.60 x 2.00 m) probably held two wooden containers. An outer band with wood remains is 1.80 x 1.10 m and is divided in half by a band shaped soil discoloration with wood remains. The single find from this grave is a red bowl found in the north-eastern corner. The bowl was probably placed inside one of the coffins. The two coffins were probably placed in the eastern and northern half of the burial pit. The other finds from this grave (probably fragments of an iron buckle and an iron strap end with silver inlays) were likely found in one of the coffins.

In grave 45 (burial pit dimensions not given), a rectangular soil discoloration of a wooden container was observed. Its width was 0.82 m, the length was not given. Pottery shards were found dispersed throughout this grave, which suggests it was disturbed by

a reopening pit. It was in all probability, a single wooden container grave.

Grave 56B (2.75 x 1.95 m) showed a rectangular discoloration with a length of 1.90 m and a width of 0.65 m. It was probably a grave with a coffin. The burial pit is, however, considerably larger than the coffin but traces of a chamber were not observed.

In grave 57 (2.65 x 2.20), the contours of a wooden container (1.50 x 1.10 m) were visible. It was placed 90 cm from the eastern burial pit wall, 50 cm from the northern wall and close to the western and southern wall. The location of the decayed body (a child) was at a distance of 15 cm alongside the southern wall of the wooden container. The majority of the finds were deposited in the wooden container. The biconical pot was probably placed in its south-eastern corner. Two iron fragments (one was possibly part of a shield grip) were found in the north-eastern corner. A rectangular back plate was found in the south-eastern corner of the grave. A simple ring and a simple buckle were found in the middle of the container, along its southern wall. A little more towards the head, a remnant of a brooch (missing) and a pair of tweezers (missing) were found. The large black disc bead was found 70 cm from the southern wall and 75 cm from the western wall in the middle of the body traces. Traces of a coffin were not identified, but might have been present at the location of the observed body imprint; it is either a single large container grave or a possible chamber grave. In the case of a chamber grave, the biconical pot, possible remnant of a shield and the back plate were found outside the coffin; the other finds (closer to the body) were, in that case, deposited inside it.

Grave 58 (2.50 x 1.80 m) showed a vague outline of a wooden container in the middle of which was the soil discoloration of a body.³⁴ The other finds (pottery fragments) were found scattered throughout the grave; exact locations were not given. No measurements of the wooden container were given; the outline is reconstructed alongside the burial pit walls in line with the other observations in the cemetery and also in Obbicht. A coffin may have been present at the location of the body, but this remains speculative.

Grave 60 (2.40 x 1.40 m) showed a rectangular filling of gravel and clay indicating the former presence of a wooden container (1.70 x 0.90 m).³⁵ The biconical pot fragments were found scattered alongside the short eastern wall, close to the presumed former location of the feet. The axe was found close to the western wall, thus close to the presumed former location of the head. A fire steel and small simple buckle were found in the middle of the grave, and a bronze knob with wood fragments (of a shield) and iron fragment with a bronze rivet were found also in the middle of the grave, but more towards the head. Since buckles and fire steels are often found in close association with the body, the presumed former location of the body is the middle of the grave. Many oth-

er fragments of arrow heads, a lance head, a knife, numerous wood and indeterminate iron fragments as well as two pottery fragments are also assigned to this grave, but the find locations of these remnants were not recorded by the excavators.

The concluding observation is that of the twelve burial pits with traces of wooden constructions, one was with certainty a chamber grave with coffin (29) and eight were recorded as (large) single wooden container graves of which some may have been chambers with coffins. Grave 22 was of a child and chamber grave 29 was of a man. Of the other wooden construction graves, two were of men (58 and 60), one was of a child (57), one was of a woman (grave 30) and one may have been of a woman. Four other wooden construction graves were without gender specific finds (21, 33, 45 and 56).

Conclusion: the significance of the spatial arrangements of chamber grave objects

The discussion of the object categories in the chamber graves of Sittard show that they can be well furnished with grave goods, but that this was not a rule. Moreover, the richest grave of a woman (grave 11) in Sittard held a single wooden container resting on beams, and was thus not a chamber grave in the strict sense. Of the five possible founders graves in Sittard, three (graves 14, 16 and 26) were chamber graves, one (grave 11) was a single wooden container grave and one (grave 15) might have been a chamber grave. In Obbicht, the possible founder's grave 20 showed traces of a wooden container; it might have been a chamber grave but could have also been a large single wooden container grave, and the possible founder's grave 26 was without wooden container traces. The most probable founder's grave in Stein (grave 12) was without traces of a wooden container. The other possible founders graves (19, 21, 57 and 60) all had traces of wooden containers. In Stein, the richest grave was that of a man (grave 8, dating to 610-640), but this grave was without traces of a wooden container. It seems that in the Sittard chamber graves, more objects were deposited than in the single wooden container or trench graves. It can be concluded that, generally speaking, more time and care was invested in the chamber graves than in the other graves, and maybe this was also the case in Obbicht and Stein, with some exceptions as mentioned. Coffin and trench graves, however, date in general to the later phases of the cemetery when the deposition of objects in graves diminishes. This is not necessarily related to a lower social status of those in coffin or trench graves, but to changing burial rites.

With regard to the distribution of finds, it shows that certain 'rules' were followed in the Sittard cemetery. It seems as if the same rules were followed in Obbicht and Stein, although the evi-

dence is not as straightforward as in Sittard for reasons explained above. The dress related objects (beads, jewellery, belt fittings, purses or straps with utensils) were usually deposited with the body in the coffin. The pottery, glass and copper alloy vessels were, in general, deposited in the grave sections associated with the feet, but at some distance from the body. In the chamber graves, they were usually deposited outside the coffin, except for the glass vessels; of the three palm cups from Sittard, two were found inside the coffin and one outside the coffin in a chamber. Other objects than beads associated with women are rarely present in the chamber graves or possible chamber graves. Weapons show the highest variety in location. Seaxes and swords were deposited inside the coffins, shields and lance heads outside the coffins, although lance heads were, in some cases, also deposited inside single wooden container graves. Axes were always deposited close to the head, but only one was deposited in a Sittard chamber grave, outside the coffin. It is remarkable that in a considerable number of weapon graves from Obbicht and Stein, no wooden container traces were observed; this may be due to the soil conditions which hampered clear observations. One of the possible founder's grave of Stein was without container traces; the lance head was deposited in close association with the body, as opposed to the Sittard lance heads.

The spatial arrangement of burial objects in chamber graves can be understood as the outcome of various considerations, including practical reasons. Dressing a dead body for burial is a common practice and shields and lances may have been too large to place in the coffin. However, the spatial arrangements are more likely a result of decisions with regard to the desired image of the dressed body in burial rites and the desired image of the complete grave, which expressed, among others, the closeness and remoteness of the body in relation to the complete range of burial objects.³⁶ The dressed dead body was, in all probability, not an exact copy of how somebody looked in life. The deceased was transformed after death and during the burial rite, and choices were made in this process as they were with regard to the deposition locations of all the not dress-related objects in the grave. The final image of the complete grave conveyed messages that were understood by the burial participants.

Sets of objects similar to the ones known from chamber graves can be found in trench graves and single wooden container graves. The undisturbed chamber grave and its spatial arrangement of body and objects might provide the ultimate evidence of how the relation between objects and the body was generally perceived, since the boundary between the adorned body and the rest of the grave goods is, in these particular graves, rather unambiguously visible to us. But how can this conscious arrangement of the body and burial goods in a grave be understood? Focussing on the se-

(33) Since the dimensions of the traces are not documented, the wooden container walls are depicted as an interrupted line alongside the burial pit walls. (34) It is not clear where exactly in the burial pit these traces were found; it is drawn as a container with walls. (35) It is not clear where exactly the wooden container was positioned in the burial pit; it is therefore drawn in the middle of the pit. The locations of the finds are described in relation to the grave walls; it is not clear whether this was in relation

to the grave pit walls or the wooden container walls. On the newly created drawing of the grave, the locations of the finds are reconstructed in relation to the wooden construction walls since objects were generally placed in the single wooden container if a chamber with a coffin was not present. (36) Pader 1982.

quential performance of ritual practices³⁷ and the construction of visibility and invisibility can provide some insights, without claiming that the definite conclusion is presented here.

We do not know what exactly happened to the corpse immediately after death in early medieval times, but it can be imagined that it was prepared for burial and that this was done according to a set of commonly accepted and applied rules.³⁸ After this stage and maybe some other ritual stages not known to us, the dressed body was laid in the grave with clothes, that were at the time of excavation almost completely gone, and an additional set of objects associated with dressing or adorning the corpse; these items are the wide range of dress accessories and the above mentioned seaxes and swords. During some stages in the burial rite, the dressed body will have been visible for participants and communicated certain messages that were understood by them.³⁹ These messages could have mirrored shared values and ideas which were thus reproduced or were elements in a debate on these (for instance gender identities) which stressed the transformative character of the ritual. The (dressed) body was, at that moment, a central point of focus: an idealised or transformed image of the dead was created and the total network of relations (in the past, present, and future) were embedded in the adorned corpse.⁴⁰ The complete dressed body might have referred to various relations between the dead person and other persons, both through space and time, but also between the community of the deceased and other communities, as to the aspired ones; the nature of the expressed relations will have been manifold and could have depended on the gender and age of the deceased, and probably on many other social categories.

One of the next ritual stages was making the body invisible. In the case of trench graves, the body became probably invisible in two stages in the case the body was wrapped in cloth: first when the corpse was wrapped and then after the burial pit was filled with earth. In the case of chamber graves, the dressed body became invisible after the coffin was closed.⁴¹ This might have occurred at the cemetery or already before the corpse arrived at the burial ground. With this stage in the consecutive sequence of burial actions, the deceased was (visually) separated from the participants.⁴² What was left visible for some time was the chamber and the coffin. Perhaps contents were already placed in the chamber simultaneously with the coffin, or maybe the next ritual stage consisted of feasting and the ritual placement of additional objects after the coffin was closed and placed in the chamber.⁴³ The act of placing objects, or the presence of objects in the chamber, again conveyed messages understood by the participants in the bur-

al rite. In the Sittard chambers, and probably also in Obbicht and Stein, especially vessels or vessel sets were placed outside the coffin in the chamber, as were, but less frequently, lance heads and the few shields. Thus, the Sittard chamber graves of women became ‘neutral’ after the coffins were closed⁴⁴, whereas some of the graves of men remained ‘masculine’ after the coffins had been closed.

The majority of the objects placed in the chamber were single vessels or vessel sets. They might have referred to specific communal contexts of feasting, consumption, serving, sharing and display,⁴⁵ and the lance heads and shield bosses also had their specific set of symbolic references.⁴⁶ The next stage was sealing the chamber which made the additional set of chamber objects invisible. Yet another stage could be the creation of above ground markers such as posts, post settings, hills, circular ditches, grave stones, etc., involving various participants.

It remains to be questioned whether the symbolic references of the chamber objects were consciously separated from the references incorporated in the dressed body, as it remains to be questioned whether this same message was also communicated in the single wooden container graves and trench graves. It is suggested, mainly on the basis of the rich ship funerals from Anglo-Saxon England, that burials were “a sequence of nested places that were displayed and concealed consecutively, to construct remembrance”.⁴⁷ With regard to the chamber graves of Sittard (and maybe also Obbicht and Stein), the nested places are the body, the coffin and the chamber. The dressed body on display may have concealed specific objects hidden in the clothes or underneath the body.⁴⁸ The coffin was a nested place of the body and the objects that dressed the body, and the chamber as nested place held another set of objects. Another nested place is the pit in the natural subsoil that held all the remains, including the chamber,⁴⁹ above which the markers could have been placed.

For the participants in the Sittard burial rites, the vessels (with food and drink?) and the shields and lance heads were the last items visible, and thus were involved in constructing remembrance before the chamber was closed. The dressed body, as mentioned before, may have referred to the complex networks of social relations embedded in the specific person or social category or (family) group he or she represented. Gender roles and age, and maybe many other social categories, may have meant that with each burial the reference to different social networks were activated, negotiated, reproduced and finally remembered. After making these networks invisible, the object sets in the chambers remained visible and the next stage of ritual imprint was entered.⁵⁰ During this

stage, the new order of the survivors might have been expressed with vessels or vessel combinations referring to communal activities (feasting, consumption, serving, sharing and other every day activities) that stand at the basis of a sense of community and therefore its continuity; the vessels referred to the communal future.⁵¹ When the coffin was closed the dead individual was symbolically separated from this communal future which found its new order without the deceased or with the deceased in a new form. Maybe the shield and lance fit within the sequential burial actions of separation and the expressions of future ambitions. It remains to be questioned whether separation and references to a communal future were achieved in the same way with trench grave burials and larger or smaller single wooden container burials. They have comparable sets of objects, and the locations of the object categories are similar in these grave forms. Stages of progressing invisibility may have also been a rule for these burials, but archaeologists cannot identify these stages. The proposed interpretation of the spatial patterning of the body and grave objects is open for discussion and, in all probability, other alternative viewpoints on the ritual stages of the consecutive display and concealment of the body and finds in (chambers) graves can be thought of.

The deposition of weapons in the Sittard, Obbicht and Stein cemeteries

One of the general observations on the Merovingian burial ritual is the gender specific nature of sets of grave goods.⁵² Weapons are almost exclusively found in graves of men. ‘Weapons’ is a broad term. It is possible to debate the nature of some objects that are usually considered to belong to the category of weapons. Moreover, a distinction is made between weapons to attack and weapons to defend. Objects that can be considered ‘real weapons’ to be used in combat are the sword and the shield. They are intimately associated with the values of the warrior and martial ethics.⁵³ One can add the lance/spear to those two, but since Roman times the lance also has been intimately associated with the hunt.⁵⁴ Bow and arrows can also be considered ‘real weapons’, but they might as well be associated with the hunt and are thus not exclusively related to a warrior status or warrior ideology.⁵⁵ The seax can be considered a useful weapon as is illustrated by Gregory of Tours who recounts several times how adversaries were killed with a seax.⁵⁶ On the other hand, seaxes appear in various sizes, some are not much bigger than a large knife.⁵⁷ Seaxes might also hold similar status and func-

tions to that of the machete used by peasants as an agricultural tool. It is thus an object with an ambiguous status. It refers to both the worlds of the agriculturalist *and* the warrior. The same goes for the axe. It is meant to chop wood but can also be used to hurt or kill a person. It was suggested before that the axe in late Roman graves referred to reclamation and claiming land in the first place. When those who reclaimed land and became land owners also added the capacity to protect to their status, swords and shields appeared in graves too. The combination of axes with ‘real’ weapons thus symbolised the status of a landowner who can protect (rather than a warrior who has land). The deposition of an assemblage of real weapons and axes in graves brought about the idea that axes were also ‘real’ weapons, an idea supported by the development of a type of axe (*francisca*) that seemed to have been designed for use in combat.⁵⁸ The objects related to the hunt also were important to define mastery over a certain group of people (the hunting party) and a territory: one hunts where one is a master.⁵⁹ Weapons are not only useful in the practices of combat, they are also very useful to represent power and authority. During the entire Middle Ages the sword was a symbol of authority.⁶⁰ The iconography of the late Roman period and the early Middle Ages shows how important the lance/spear was in the representation of power and authority both in the Roman and Germanic worlds. The same goes for the shield, the combination of shield and spear is often depicted.⁶¹ It can be concluded that since late Roman times, the deposition of combinations of ‘weapons’ in graves is related to a complicated symbolism involving the values of the warrior, the values of the agriculturalist/landowner and leadership (power and authority). Which of these values is stressed during the deposition of a specific set of ‘weapons’ in an individual grave is difficult to tell. There will not have been a one to one relation between the deposition of a specific weapon with a single value. Many ‘weapons’ refer to two or three of these aspects. It underlines that various social statuses have not yet crystallized. The values of an agriculturalist, a warrior and a leader might all be relevant for a single person. It is only later in the Middle Ages that the differences between those who worked, those who prayed and those who fought became more obvious in ideology and practice.⁶²

Weapon depositions and combinations of weapons in Merovingian graves have been studied extensively in the past. They have been considered in relation to the status of the person in whose graves they were deposited, as in Christlein’s *Besitzabstufungen*, in relation to the legal status of the deceased, in relation to combat techniques (‘the seax replaced the sword’),

(37) Ekengren 2013, 173-193. (38) For early Christians this is described (Backgrounds of Early Christianity, Everett Ferguson, 2003, 244), but we do not know exactly to which degree these practices were already incorporated in early medieval Northern Gaul. (39) Halsall 1995; 1996. (40) Chapman 2000; Gramsch 2013, 459-461. (41) Some Sittard graves showed that objects (predominantly pottery vessels or vessel shards) were placed on top of the coffin, which implies that coffins had a lid. (42) Ekengren 2013, 187. (43) Ekengren 2013, 188. (44) Which might explain the placement of palm cups in the Sittard coffins since these are predominantly associated with the burials of women; creating gender neutral chambers might have been done on purpose in Sittard. (45) Ekengren 2013, 186; See for an overview and some interesting suggestions with regard to the significance of vessel depositions Theuws/Van Haperen 2012, 166-175. (46) Theuws 2009. (47) Williams 2006, 140. (48) Ekengren 2013, 187. As an example, the concealment of a glass fragment is mentioned for the burial of an Roman Iron Age woman from Skovgårde, Denmark. Glass fragments in the Sittard chamber graves were also found in close association with the bodies; this might indicate that they were hidden in the clothes or shrouds wrapped around the body,

but not necessarily. It is however, obvious that glass fragments in Sittard were always deposited in close association with the body. In Chapman (2000) it is discussed how fragments can represent enchain relations; this viewpoint might indicate that the fragments were visible for the participants in the burial rite. (49) Smal in Theuws/Kars in press. (50) Ekengren 2013, 188. It is suggested that the objects in the chamber were put there after the new identity of the dead individual was established and put out of sight, and that these were objects used by the living. (51) Theuws/Van Haperen 2012, 166-175. (52) For instance: Halsall 1995. (53) Theuws/Alkemade 2000. (54) Theuws 2009. (55) For this reason both Böhme and Siegmund excluded the bow and arrows from their analysis of weapon graves (Böhme 1974; Siegmund 2000). (56) Gregory of Tours, History of the Franks (translation by L. Thorpe 1974). (57) Hence the problems Siegmund had in defining seaxes and knives (Siegmund 1998a, 87-94). (58) Although I think that it is a questionable idea to throw your axe at the enemy. (59) Theuws 2009. (60) Theuws/Alkemade 2000. (61) See below.

in relation to the ethnic identity of the deceased, in relation to the age at death, etc.⁶³ In continental research, these approaches share the same supposition: the set of weapons in a grave reflects the (complete) armament of the person in whose grave they were found.⁶⁴ It is the supposition that the set of weapons allows one to draw conclusions about the status of the deceased person. There is little consideration of the symbolic nature of the deposition of ‘weapons’ and the influence of values and ideas in society on the use of weapons, the symbolism of weapons, the transformative nature of the burial rite and the burial rite as an arena of negotiation of positions in society.⁶⁵ The great variability in the deposition of weapons in cemeteries of nearby burial communities should warn us against too simplistic interpretations of the weapon sets in graves. It is this variability which is striking when looking at the weapon depositions in the three cemeteries under study here. In what has been presented above, it is suggested that the three cemeteries share characteristics. Their size indicates that they are related to burial communities of equal size that are not very far apart; comparable burial rites are expected for these reasons. However, we have seen that there are also striking differences; for instance, in the orientation of the graves. Each burial community seems to have applied its own rules. The differences in weapon deposition are also striking. This might to some extent to be due to the reopening of graves and the removal of weapons. The quality of the excavation of the Obbicht and Stein cemeteries does not allow us to accurately establish the rate of reopening of graves. In the Sittard cemetery, only weapon grave 26 seems to have been reopened, so the weapon depositions in Sittard provide an insight into the past deposition of weapons. We also included the Meerveldhoven cemetery in the analysis. It seems to be highly comparable to the Sittard cemetery in terms of size, dating and the use of chamber graves. In Meerveldhoven, a limited number of weapon graves (graves 45 and 38) seem to have been reopened, but in view of the regularities in weapon depositions in this cemetery, this does not seem to have affected the image of weapon deposition substantially or reopening must have led to a very selective removal of weapons from graves with more than three weapons.

Table 7.1 shows how many graves with weapons were found in relation to the total number of excavated inhumation graves (see chapter 5 for exact numbers). These figures might give an idea of how common it was to bury men with weapons. In the fourth column the percentage of excavated graves is given. We suppose that c 10% of the graves were of children and that from the remaining number of graves (column 5) approximately half were those of men (column6). In column 7, the estimated percentage of adult

men with weapons in their graves is given. These figures have not been calculated per burial phase. The figures show that, as a rule, more than half of the men were buried with weapons, except for Stein. These figures might change over time but there is not a clear homogeneous trend in these four cemeteries. In Sittard and Stein, the weapon graves are fairly regularly distributed over the various phases (tables 7.2-5). A relative change (decline) in the number of weapon burials in these cemeteries is only possible if more men were present who were not buried with weapons. This is difficult to establish without skeletal remains. In Obbicht, the majority of the weapon graves belong to the early phases of the cemetery (phases I and IIa, before c. 620), some weapon graves of phase IIb could be early as well. In Meerveldhoven, the majority of weapon graves dates to the middle and second half of the seventh century (after c. 640). Thus, there is not a general increase or decrease in the intensity of weapon burial in these four cemeteries, but in each burial community there are different practices. It is possible that these figures are, to some extent, determined by the unknown rate of grave reopening in the Obbicht and Stein cemeteries (and probably also by the somewhat poorer (disturbed) condition of the two cemeteries), although in Obbicht, many weapon graves were still present.

A closer look at tables 7.2-5 and figures 7.4-7 shows that there are interesting differences in the weapon deposition within these four cemeteries. The number of weapons deposited depends, of course, on the number of weapon graves. If we determine the percentage of graves in which a *type of weapon*⁶⁶ is deposited in a cemetery we can, in spite of the low numbers, see some trends in weapon choices (table 7.6).⁶⁷ Spears or lances were found in more than half of the weapon graves in Sittard, Obbicht and Meerveldhoven, but not in Stein where only four were found (fig. 7.4).⁶⁸ Seaxes are also often deposited; in three cemeteries they are found in more than half of the weapon graves, in Sittard in only 43%.⁶⁹

Interesting differences appear between cemeteries. One shield only was discovered in Stein (11 weapon graves: 9%) (fig. 7.6)⁷⁰ whereas in Meerveldhoven, 12 were found in 16 weapon graves (fig. 7.7). This cannot reflect the situations in the lifetime of those men as it would mean that the men buried in Stein fought relatively unprotected. The same goes for Sittard where few shields were found (fig. 7.4). The low number of shields in Stein is probably related to the low number of lances. In other cemeteries this combination occurs regularly. It is difficult to say why this choice was made. Axes are relatively rare in all cemeteries, but this can be due to the relatively late starting dates of these cemeteries which all began to be used in the second half (maybe later?) sixth century

when the deposition of axes in graves was already a disappearing practice. Swords are usually rare in cemeteries in northern Gaul compared, for instance, with southern Germany.⁷¹ In Obbicht, however, a quarter of the weapon graves contain a sword which is a high percentage. In the other cemeteries, swords could have been targeted by those who reopened the graves, but this is conjecture. To conclude this section: table 7.6 shows that some weapons were, in general, often deposited; foremost, these are seaxes and lances, but shields were also regularly deposited. Arrows, axes and swords are rather rare deposits during the period these cemeteries were in use. It can also be seen that there are significant exceptions to these ‘rules’ which were the result of a choice made by individual burial communities. The number of shields in Stein is very low, whereas it is very high in Meerveldhoven. The number of lances is also low in Stein.

Another aspect is the number of weapon types deposited in a single grave (tables 7.2-5, last columns). The average number of weapon types deposited in Sittard is 1.5, in Obbicht 2.0, in Stein 1.4 and in Meerveldhoven 2.4. The number of weapon types in graves is thus considerably larger in Meerveldhoven than in the other cemeteries. Usually one or two weapons were deposited, three or more weapons are rare. In Sittard, only two graves contained three weapons in 21 weapon graves (10%), in Obbicht five graves had three or four (maybe five) weapons in 21 weapon graves (25%), in Stein only one grave had four weapons in 11 weapon graves (9%) and in Meerveldhoven six graves had three to five weapons in 16 graves (38%). These figures could be influenced negatively by the reopening of graves and the removal of weapons. In Meerveldhoven, two of the weapon graves (38 and 45) may have been reopened and in Sittard only one (26), although it still contained three weapons. More reopening of graves could have taken place in Obbicht and Stein, which in the case of Stein, might explain the low number of weapons (but this might also be (partly) due to the disturbed condition of the cemetery and the bad condition of the finds).

Many times only one weapon was found in a grave (table 7.7). In Sittard 13 times, which is 62% of the weapon graves of which eight had a lance, four a seax and in one grave were arrows. In Obbicht, there is a more equal distribution of singular weapons (in 33% of the weapon graves). In Stein, where 9 out of 11 weapon graves are single weapon graves, the seax is the dominant single weapon and in Meerveldhoven single weapon graves are rare. The somewhat higher number of seaxes in Stein, instead of lances, might be an argument for supposing a low rate of reopening, for it is usually the lance and not the seax that was left behind.⁷² This would mean

cemetery. (68) Although in the restoration company some remnants were discovered which may change the image of the differentiation of weapons in this grave: a copper alloy knob with wood remnants (possibly of a shield?), fragments of two arrow heads and fragments of what might be the socket of a lance head. This means that Stein grave 60 is not a single weapon grave with an axe, but that possibly four weapon types were present in this grave (which might also mean that it dates differently than to phase IIa). (69) However, if one seax was taken out of a reopened grave and added to the present number found the percentage is already 48%. (70) However, see note 65. (71) See the large number of swords, for instance, in the cemetery of Schretzheim (Koch 1977). See also Siegmund 2000, 174-213.

Table 7.1
The relative number of weapon graves in the cemeteries of Sittard, Obbicht, Stein and Meerveldhoven. * = without the discarded context, ** = without grave 65, * ** = with the possible inhumation graves.

Cemetery	Number of weapon graves	Number of excavated inhumation graves	%	N-10%	men	% men
Sittard	21	87*	24	78	40	53
Obbicht	21	67**	31	60	29	72
Stein	11	76***	15	68	34	32
Meerveldhoven	16	54	30	49	25	64

Table 7.2
Sittard-Kemperkoul: weapon graves.

Grave	Lance/ Spear	Arrow	Seax	Sword	Shield	Axe	Total types of weapons
Phase SK IIa: 565-610/20							
5	1					1	2
24	1						1
26	1		1	1			3
28	1						1
37			1 (? tip)			1	1 (2?)
78	1						1
Phase IIb: 565-640/50							
14	1		1				2
34	1						1
77	1						1
81	1						1
Phase IIc: 580/90-640/50							
30	1		1				2
39			1				1
Phase IId: 610/20-640/50							
20			1			1	2
29	2						1
31			1	1			2
41			1				1
49	1				1		2
86	1		1		1		3
Phase IIIa: 640/50-670/80							
84			1				1
Phase IIId: 640/50-c.750							
40	1						1
Cannot be dated							
38		2					1
21 graves	15	2	9 (10?)	2	2	3	

(62) Duby 19895, 165-168. (63) See among the many studies that could be cited here: Steuer 1968; Christlein 1973; Steuer 1982, 309-361; Wotska 1989; Siegmund 1996, 2000. (64) Although this is a matter of debate (Härke 1992). Siegmund (2000) again proposes to see the typical sets of weapons in the areas of his ‘Kulturmodelle’ as reflections of real weapon sets. The western Franks obviously did not like swords as much as the Alamans did. His idea of homogeneous *Kulturmodelle* should be discarded. It is based on a limited choice of cemeteries, a specific choice of cemeteries and ignoring unwelcome variability within his ‘Kulturmodelle’. (65) Exceptions can be found in non-continental archaeology: Stoodley 1999; Hadley/More 1999. See also Härke 1990, 1992. On the circulation of weapons see Bazelmans 1996; Härke 2000; La Rocca/Provero 2000; Theuws/Alkemada 2000. (66) Three arrows counts as one. (67) Below we will also discuss some trends through time in the choice for weapons per

Table 7.3
Obbicht-Oude Molen: weapon graves. * = missing.

Grave	Lance/ Spear	Arrow	Seax	Sword	Shield	Axe	Total types of weapons
Phase IIa: 565-610/20							
5			1	1			2
6		2					1
11		1					1
20	1		1		1	1	4
28				1*	1		2
29	1		1?		1		2 (3?)
30				1	1	1	3
31	1	1?	1	1		1	4 (5?)
37B	1	1?					1 (2?)
Phase I+IIa: 510/20-610/20							
22			1 (knob)				1
Phase IIb: 565-640/50							
4	1	1	1		1		4
12			1*				1
23	1	1					2
40B	1		1	1	1*		4
Phase IIc: 610/20-640/50							
46	1		1				2
51B	1*		1				2
Phase I+IIc: 510/20-640/50							
53					1		1
Not datable							
34	1						1
51A	1		1				2
56		2*	1?				1 (2?)
33	1		4				2
21 graves	12	7 (8?)	14 (17?)	5	7	3	

Table 7.4
Stein-Groote Bongerd: weapon graves. * = missing.

Grave	Lance/ Spear	Arrow	Seax	Sword	Shield	Axe	Total types of weapons
15	1						1
Phase IIa: 565-610/20							
12	1*			1*			2
29	1						1
60						1	1
Phases: I+IIa: 510/20-610/20							
40			1*				1
Phase IIb: 565-640/50							
54			1				1
55	1						1
Phase IIc: 610/20-640/50							
8	1		1	1	1		4
49			1				1
72			1				1
Phase III: 640/50-670/80							
64		3					1
11 graves	5	3	5	2	1	1	

Table 7.5
Meerveldhoven: weapon graves.

Grave	Lance/ Spear	Arrow	Seax	Sword	Shield	Axe	Total types of weapons
Phase a (late sixth/early seventh century)							
53	1		1	1	1	1	5
Phase b (first halve seventh century)							
24	1				1		2
45	1				1		2
49	1		1		1		3
51	1				1		2
Phase b (second halve seventh century)							
12			1		1		2
14	1	1	1		1		4
15	1		1		1		3
16	1		1		1		3
36	1		1		1		3
37			1		1		2
38		3		1?			1 (2?) (2?)
52	1						1
Not dated							
1		6					1
9	1				1		2
17					1?		1?
16 graves	11	10	8	1 (2?)	12 (13?)	1	

Table 7.6
The relative presence of weapon types in the cemeteries of
Sittard, Obbicht, Stein and Meerveldhoven.

	Sittard N	Sittard %	Obbicht N	Obbicht %	Stein N	Stein %	Meerveld- hoven N	Meerveld- hoven %
N weapon graves	21		21		11		16	
Lance/Spear	15	71	12	57	5	45	11	69
Arrow	1	5	5	24	1	9	3	19
Seax	9	43	15	71	5	45	8	50
Sword	2	10	5	24	2	18	1	6
Shield	3	14	7	33	1	9	12	75
Axe	0	0	3	14	1	9	1	6

Fig. 7.4
Sittard-Kemperkoul: the distribution of weapons (scale 1:250).



Fig. 7.5
Obbicht-Oude Moolen: the distribution of weapons (scale 1:250).

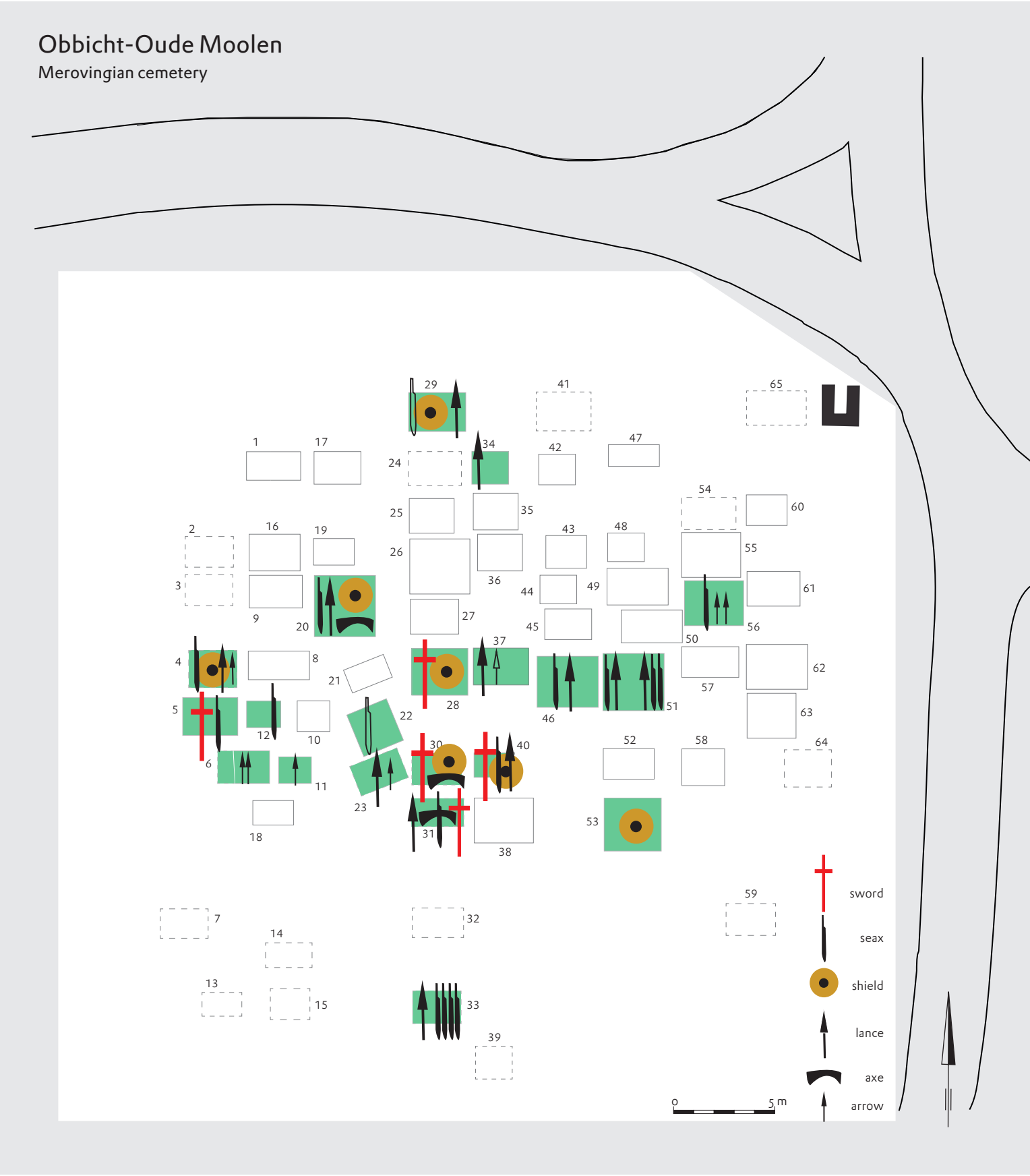
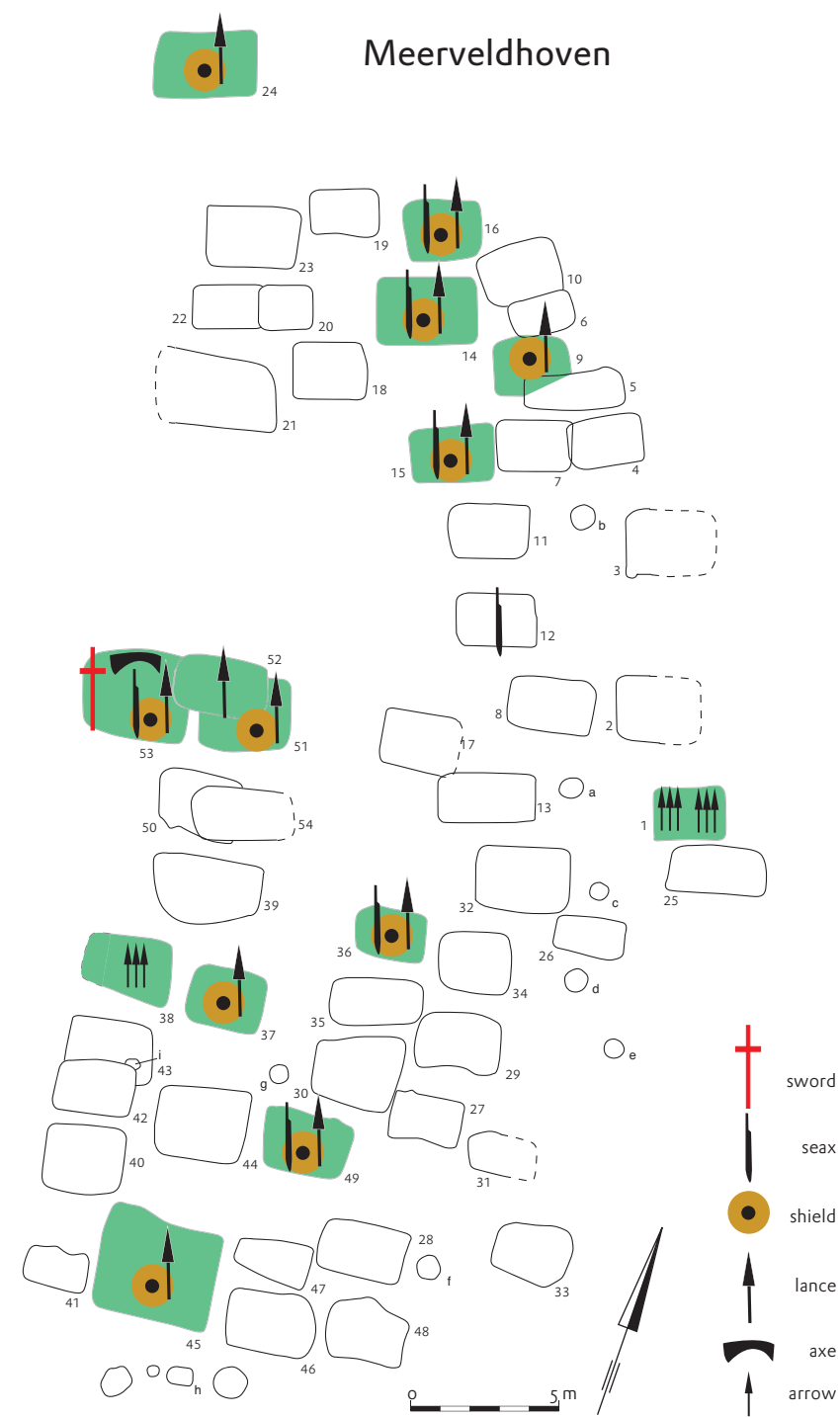


Fig. 7.6
Stein-Groote Bongerd: the distribution of weapons (scale 1:250).



Fig. 7.7
Meerveldhoven: the distribution of weapons (scale 1:250).



that lances were not often deposited in Stein, or in the case reopening had taken place, the lance was targeted more often than in other cemeteries (but also the disturbed condition of the cemetery may have caused this picture). Arrows, shields and axes were not often chosen for the single weapon graves. The small number of axes could be due to the late starting dates of the cemeteries (second half/late sixth century). By that time, the deposition of axes in graves was gradually diminishing. That lances and seaxes are the most common single weapon depositions, is in accordance with their relatively abundant presence in the total set of weapons in these cemeteries (table 7.6). Why one burial community deposited mainly lances (Sittard) and the other community more seaxes, is a matter of debate. Is it due to the different ways men were armed in these villages or did different communities stress different statuses? Remember that lances (hunting, authority) and seaxes (multi-functional with agricultural connotations) may refer to different male identities that were stressed in the burial rite.

Next to single weapon graves, there are graves with various combinations of weapons. There is an astonishing great variation in the combinations of weapons, although some combinations occur more often than others. In view of the large number of lances and seaxes, it is not surprising that these are found often in weapon combinations. To analyse these combinations, it is helpful to start with the cemetery of Meerveldhoven (table 7.5). It can be seen that two combinations each occur four times: the combination of lance and shield (graves 24, 45, 51, and 9, marked in brown) and the combination of lance, seax and shield (graves 49, 15, 16 and 36, marked in green). There seems to be a chronological aspect to these combinations, but that may be a coincidence determined by the low numbers. The graves with the first combination are mainly dated to the first half of the seventh century by Verwers, those of the second combination mainly to the second half of the seventh century.⁷³ The two graves with four and five weapons (14 and 53) have the second combination (lance, seax, shield), supplemented with arrows in one case and a sword and an axe in the other. Grave 53 is probably the oldest grave in the cemetery and grave 14 dates to the second half of the seventh century. Thus, in Meerveldhoven, there seems to be two basic weapon sets: one with lance and shield and another with lance, seax and shield. The lance and shield is a classical combination often depicted and certainly of a highly symbolic nature.⁷⁴ In later times, the seax was added to this combination in Meerveldhoven. What about such combinations in the other cemeteries?

In Sittard, only one of each of these combinations was found (graves 49 and 86), both dating to the first half of the seventh century (phase IIId) (table 7.2, marked in brown and green). In Obbicht, only one (possible) combination of lance, seax and shield

Table 7.7
The weapons in single weapon graves in the cemeteries of Sittard, Obbicht, Stein and Meerveldhoven.

	Sittard	Obbicht	Stein	Meerveldhoven
Lance	8	2	2	1
Seax	4	2	5	
Arrow	1	2	1	1
Shield		1		
Axe			1	
Total	13	7	9	2
Total weapon graves in cemetery	21	21	11	16
% of total weapon graves	62%	33%	82%	13%

was discovered dating to the early phase of the cemetery (table 7.3, grave 29 marked in green). Another such combination in grave 20 was complemented by an axe and yet another one with a sword in grave 40. A similar combination with lance, seax and shield was complemented by a sword was found in Stein (grave 8, table 7.4). The low number in this cemetery may be due to the low number of lances deposited. In Sittard and Obbicht, another combination was found several times, namely the combination of lance and seax (tables 7.2 and 7.3, marked in blue: Sittard graves 14 and 30, Obbicht graves 46, 51B, 51A). In one grave in Sittard, such a combination was complemented by a sword (grave 26). Next to these combinations, all kinds of other combinations occur, however, each in small numbers.

It is interesting to look at specific weapons, such as swords. They are the weapon of the warrior *par excellence* and an important symbol of power.⁷⁵ One would expect to find swords in elaborate weapon combinations. Is this the case? In Sittard, swords occur in graves with two and three weapons, in Obbicht, in graves with two, three, four and four or five weapons, in Stein, in graves with two and four weapons and in Meerveldhoven, in a grave with five weapons.⁷⁶ Swords thus do occur in elaborate weapon sets, but there are almost as many cases where swords were found with only one other weapon. On the other hand, there are graves with three or more weapons in which no sword is present, such as the combinations of lance, seax and shield as mentioned before or in grave 31 of Obbicht with four (or maybe five) weapons (lance, seax, shield and axe (and maybe an arrow head)) or grave 14 in Meerveldhoven (lance, arrow, seax and shield). It is thus not self evident whether those persons in whose grave a sword was deposited, were given elaborate weapon sets and those who received elaborate weapons sets were given a sword. This is an argument against the idea that

the actual armament of a person was deposited in the grave. The choice for the set of weapons may be determined by other considerations which are difficult to discover. These same considerations may be responsible for the great variety in weapon depositions, although in some cemeteries, certain combinations recur several times, as in Meerveldhoven.

Another important observation is that the intensity of weapon burials, the deposition of specific weapons and the deposition of specific combinations of weapons differ substantially between cemeteries.⁷⁷ The limited number of weapons deposited in Stein and the accent on seaxes as single weapons, are just two examples of how cemeteries can differ from others. However, we have to keep in mind that in this case, grave reopening or the disturbed conditions of the cemeteries of Obbicht and Stein might have determined to some extent the differences between cemeteries. But considering grave reopening as a cause of this differentiation is also an interesting element, because this means that the practice of grave reopening shows great differences between the three cemeteries dealt with in this book.⁷⁸

A last topic to be discussed in the context of weapon graves is chronological developments. Only one type of 'weapon', the axe, seems to be confined to a specific period. All of the axes found in the four cemeteries were found in the early graves of the cemeteries (late sixth/early seventh century). This is an interesting feature. It is not likely that in later times men no longer had axes but rather it was clearly a choice not to deposit axes in later graves. They were thus related to the earliest burials, or in other words, to the generation of settlers claiming land. In the introduction to this section, we referred to the interpretation of the late Roman rite of depositing axes in graves as a means of establishing claims on land (*agri deserti*?) by new settlers.⁷⁹ The axes must have been associated with clearing land and were thus not just a weapon. They were most likely deposited in the graves of men that symbolised claims on land through the reference to clearances in the forests (with an axe) they occupied.⁸⁰

Another chronological observation is that in three cemeteries (Sittard, Obbicht and Stein), the majority of the weapon graves date to before the middle of the seventh century, in contrast to Meerveldhoven, where a considerable number of weapon graves are dated by the excavator to the second half of the seventh century.⁸¹ Could this be a regional difference between the Meuse valley region and a more peripheral inland region further to the west? We will have to analyse yet other cemeteries to gain better insight into the regional differences in burial rites, such as the deposition of weapons.⁸²

Haperen in prep. (79) Theuws 2009. (80) That they settled in forests is clear from the location of settlements on relatively fertile soils taken in by oak/beech or oak/birch forests (Theuws 2012). (81) Verwers 1978. (82) See for instance the analyses by Halsall for the Metz region and changes in burial rites around 600 AD (Halsall 1995). (83) Wagner/Willemsen 2012, 148. (84) Panhuysen/Dijkman/Hulst/Panhysen 1992, 272, afb. 23,7; Van Wersch 2006, 41, fig. 17; Van Wersch 2011, 238.

(72) Van Haperen in press. (73) Verwers 1978. (74) See for instance the warriors on the mosaics in the apse of San Vitale in Ravenna (Mauskopf/Deliyannis 2010, 240, and plate VIIa). Or the warriors in the later ninth century Utrecht psalter (<http://bc.library.uu.nl/het-utrechts-psalter.html>). (75) Theuws/Alkemade 2000. (76) The other grave in Meerveldhoven with a possible sword (grave 38) was probably reopened. (77) This is also an argument against the existence of 'Kulturmodelle' as representations of ethnic identities (Siegmond 2000), unless one supposes that burial communities with different ethnic identities created the cemeteries discussed here. (78) See Van

Pots with similar roulette stamp impressions

Pots with identical roulette stamp impressions are known from Sittard grave 86, Obbicht grave 43, Rhenen grave 159⁸³ and a least one fragment with a similar impression is known from Maastricht-C  ramique kiln 4 (fig. 7.8).⁸⁴ The pot from Sittard is a smoked spouted pot on which two lines of stamp impressions similar to the ones on the pots from Obbicht and Rhenen are applied in combination with multiple lines of rectangular roulette stamp impressions. The pot from Obbicht is a grey biconical pot on which four lines of these stamp impressions are applied, and the smoked biconical pot from Rhenen grave 159 shows an upper wall decoration of three lines of similar stamp impressions. The fragment from the Maastricht oven (produced in an oxidising milieu, paste B of the production centre) shows two lines of this roulette stamp impression alternating with two zones of multiple lines of rectangular roulette stamp impressions. The stamp consisted of one rectangular grid filled with four columns and four rows of rectangles, four mirrored S-shapes, one diagonal (Andrews) cross, one S-shape and two diagonal (Andrews) crosses.

It is not uncommon that two or more pots show identical stamp decorations.⁸⁵ In the southern Netherlands, another example is known from a pot found in grave 52 of the Bergeijk cemetery and grave 243 in Rhenen again.⁸⁶ Pots with similar stamps can show considerable distances between them. The Bergeijk/Rhenen specimens are 77 km apart as the crow flies. The Obbicht/Sittard/Maastricht specimens are 20 km apart, but the distance between Maastricht, of which it is certain that the pot (of which only a fragment was found) was produced here, and Rhenen is 125 km. The examples mapped by Siegmund are mostly distributed over an area within a radius of 15-20 km, which is comparable to the radius of the area Obbicht/Sittard/Maastricht. He suggested that this is the normal radius of activity and contacts of rural communities.⁸⁷ This seems to be a bit small and the distribution areas of pottery may not be an accurate indicator of the rural dwellers contacts and mobility. Other object types, such as belt fittings, show a different image.⁸⁸

The distribution of pottery shows a complicated pattern in the   le-de-France/Oise/Somme region.⁸⁹ This region (north-south oriented, c. 200 x 100 km) seems to form a distribution area of pottery of its own separated from regions to the east (the Aisne region) and to the west (Normandy). Within the region, however, sub-regions could be defined on the basis of series of identical stamps. These sub-regions might form a radius of 50 to 80 km around a production centre. Legoux considers the distribution patterns a result of commercial exchange, but this might not be the case for the pots with the elaborate decorations he studied. Whether they were produced for a *'client  le   loign  e'* remains to be seen. Their regular ap-

pearance in a cemetery, such as Bulles, is an argument against this proposition. Legoux suggests that they were produced in higher level production centres and might have been distributed along other channels, such as intra-family gift exchange. He considers pots with much simpler (roulette) decoration as products of more localized (lower level) production centres.

Small rural communities were, in all probability, not self-sufficient and dependent upon the exchange of products with neighbouring communities, as they were for marriage partners.⁹⁰ Obbicht, Stein and Sittard are 10 km apart, and contacts between the communities would have occurred on a more or less regular basis. Contacts between the local communities of Obbicht, Stein and Sittard with the centre of Maastricht, 20 km to the south, would also have occurred, but it is not certain whether these contacts were of the same nature as between the three local communities. Rhenen (province of Gelderland) is located at a distance of circa 105 km as the crow flies from Sittard and Obbicht, and 125 km from Maastricht. The contacts between the communities in Limburg and Rhenen would, in view of this distance, have been of a different nature than between themselves. Various explanations for the spatial distribution pattern of the pots with similar stamp impressions from Maastricht, Obbicht, Sittard and Rhenen can be put forward. At the basis of these explanations stand some basic questions with regard to the organisation of pottery production and distribution.

The first is: were the pots with identical stamps produced at the same location?⁹¹ We need to know how the production of pottery (discovered in cemeteries and settlements) was organised. Groups who lived closer in proximity might have cooperated in the production of pottery by specialised craftsmen and shared the products.⁹² However, the pottery collections from the Obbicht and Sittard graves are rather different in appearance; the Sittard specimens seem to have been made with more care, or maybe more knowledge, than the Obbicht specimens. The Stein and Obbicht (both near the Meuse river) specimens on the other hand, are rather comparable. The majority of the pots from all three cemeteries have smoked surfaces, which points toward similar production customs. Small-scale pottery production, as can be expected in the surroundings of Obbicht, Stein and Sittard, will have left faint archaeological traces since it is possible that the pots were baked in pits and not professional kilns. It is for now assumed on the basis of the variety in the quality of the pottery from these three cemeteries that the majority of the pots from the three cemeteries dealt with in this book were produced and distributed locally and possibly in cooperation with a specialist.

Pottery kilns are known from Maastricht, and the fragment with the stamp impressions discussed in this section was found in one of these kilns.⁹³ Pottery was produced here in large quantities but

Fig. 7.8
Pots with identical stamp ornament from Sittard, Obbicht, Rhenen and Maastricht
(pots scale 1:4, surface photographs scale 1:1, stamp drawing scale 1:1)



the products are not found in high numbers far from this centre, at least it was observed that the products were not abundantly present in the regions located upstream of the Meuse River.⁹⁴ This might indicate that in Maastricht and close surroundings, pottery was used in high quantities and replaced rather rapidly, and that only a relatively small amount of the products of these kilns were used in the burial rites in Maastricht and its close surroundings. The fragment of the pot produced in Maastricht, however, makes it likely that the two pots from Sittard and Obbicht were also produced here. The communities of Obbicht, Stein and Sittard might have used the more locally produced pottery and pottery obtained from other production places simultaneously.⁹⁵ This would fit the model proposed by Legoux for the production and distribution of pottery in the Paris basin.⁹⁶ The size of the Rhenen cemetery and the associated community (or communities) is much larger

than the three cemeteries in Limburg. It can be assumed that in Rhenen, pots were also produced locally and obtained from more remote places. The pot with stamp impressions similar to the ones in Obbicht, Sittard and Maastricht might, from this point of view, have entered Rhenen from the south.

The second question is: were pots with identical stamps exchanged or did the stamps 'travel' with specialised craftsmen who used their collection of stamps on pottery produced on the spot? Pottery vessels were produced in high quantities and the art of making pottery was probably not that complex; pottery producers would have been present in each region, which makes it unlikely that potters travelled far. In the case of Obbicht, Stein and Sittard, as discussed above, it can be assumed that a group of craftsmen specialised in pottery production and decoration were based in the surroundings and provided the settlements, and may-

(85) Bohner 1953, Taf.210, Taf.2.14; Siegmund 1998a, 134-135; Legoux 2006. (86) Theuws/Van Haperen 2012, 109 and fig. 6.42. (87) Siegmund 1998b, 182-183. (88) See Theuws/Van Haperen (2012, 180-186) on 'a world of connections and peasant agency'. (89) Legoux 2006. (90) Theuws 1986. (91) Most authors seem to accept that this is the case. (92) Christlein 1978, 105-108; Damminger 1998, 66. (93) Panhuysen/Dijkman/Hulst/Panhysen 1992, 272, afb. 23,7 (94) Van Wersch 2011.

(95) It was observed that consumers in the Middle Meuse valley had access to products from different origins/workshops (verbal comment Line Van Wersch). (96) Legoux 2006. See also Wickham 2005, 794-798.

be the wider region, with pottery products.⁹⁷ The presence of locally based pottery production can explain why the majority of the Maastricht products were not found in large quantities far from this centre; local production provided the smaller communities with enough pottery products. In view of the size of the Rhenen cemetery and the associated community or communities, a group of pottery craftsmen would also have been present here.

The spatial distribution of the more elaborately decorated pots seems to indicate that the more complicated decorations were perceived differently and were desired for reasons other than the locally produced 'normal' pots. Both 'specialised travelling craftsmen' and specialised workshops of which the products were baked in the Maastricht kilns can explain the distribution of similar stamped pottery vessels on a large spatial scale.⁹⁸ The pots with special decorations may have been distributed from a (high level) workshop, but the apparent distribution patterns may also indicate that (travelling) craftsmen had an important role in the 'distribution of decoration' and associated meanings. This possibility can be included in the construction of production and distribution models of raw products, half-worked products and finished products that can be found throughout Merovingian Gaul, for which the chemical analysis in the case of pottery can provide answers.

The third question is: were pots used in exchange networks in a similar way as other objects, such as brooches and metal belt fittings, during the Merovingian period? The pots may have been exchanged in such networks (complex series of types of exchanges), but they also may have been brought to other communities in the context of familial exchange (marriage relations) or might have travelled with newcomers to other places. However, most products from the Maastricht kilns do not seem to have moved over large distances in high quantities, and it seems as if pottery was not as regularly exchanged as some other objects known from Merovingian graves. The stamp used on the pots from Maastricht/Sittard/Obbicht and Rhenen and the one used on the pots from Bergeijk and Rhenen are fairly complicated in comparison with the other simple roulette stamps. Could there be two different production and distribution levels as in the Île-de-France? Another look at the distribution map of Siegmund shows that in his research area, there might be two different spheres of production and distribution as well.⁹⁹ One north-south oriented sphere along the Rhine with relatively short distance exchanges and one lateral (east-west) sphere from the Rhineland into the Meuse region and into Belgium covering much larger distances. A new analysis of the stamps and their types would be necessary to see whether there is a relation between the nature of the stamps (simple or complicated) and distance.

Altogether, the spatial distribution of pots with similar stamps,

or other sorts of objects produced in the same workshop (or series of workshops), indicates that connections between communities were present. The nature of these connections can be manifold. The contacts between Obbicht, Sittard and Stein (and probably also Maastricht) would have been more intense than their contacts with communities as the one(s) in Rhenen. Does this mean that the presence of similarly stamped pots in Maastricht, Obbicht and Sittard require a different explanation from the one present in Rhenen? We might suppose that the pot found in Rhenen left the area of the south of Limburg and entered the community of Rhenen either by (commercial) exchange or with people migrating from the south to this community. It remains to be questioned whether the same applies to the pots from Obbicht and Sittard.

The social background of the entire pottery production process with regard to the degree of specialisation (how are the skills obtained and passed on, how specialised was pottery production, what was the spatial level of production (household or larger entities of production)), to the role of craftsmen (did craftsmen travel, were there certain general 'rules' for pottery production, were craftsmen mediators of knowledge of the society at large, did they transmit 'culture', etc.), to the distribution of finished products (was it perceived as individual or communal property, did pottery vessels travel with people, were pottery products perceived as merchandise, were differently decorated pots also perceived differently, etc), and the deposition of these products in graves are topics which deserve further reflection. Investigation into these topics, also with regard to other categories of objects, can shed light on the organisation of Merovingian society on different spatial and societal levels and the nature of the relations between people occupying Merovingian Europe.

A horse burial, horse related burial objects and the symbolic reference to human-horse relations

Horse burials are known from the early to the later Merovingian period,¹⁰⁰ as they are also known from Anglo-Saxon England.¹⁰¹ Apart from human interments with complete horse skeletons and single horse graves, graves of humans with only some horse parts and/or horse equipment are also known. These phenomena are especially thought to be associated with the aristocracy.¹⁰²

However, horse burials are also known from more modest cemeteries. In the province of Limburg for example, two graves with complete horse skeletons, without any significant grave goods, were found in the cemetery of Borgharen.¹⁰³ These were two stallions, one with an age of 3-4 years and one with an age of 3.5 to 4.5 years. Marks on the first left ribs of the two horses show that they

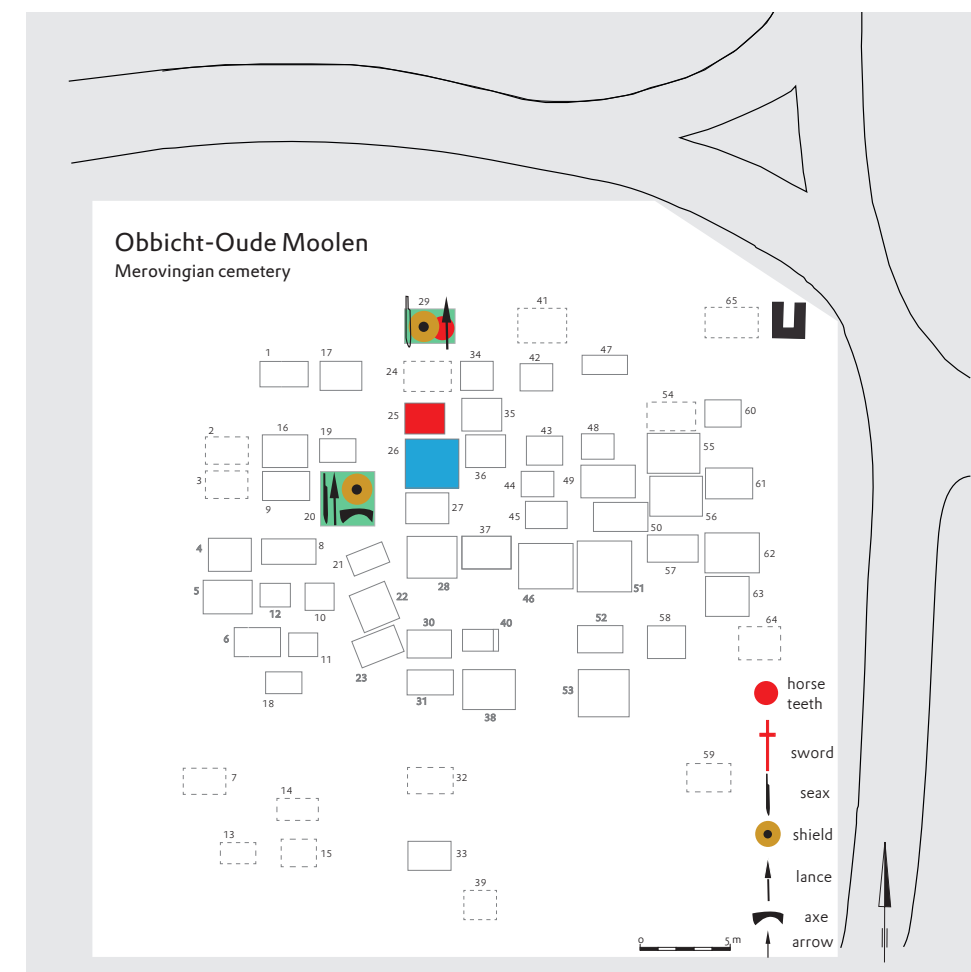
were both killed or sacrificed to be interred in the cemetery. The horse graves are dated to 561-649 AD and 564-653 AD.¹⁰⁴ It remains to be questioned whether complete horse burials should be understood as interments associated with specific human burials (as grave gifts) or as sacrifices. It is argued that both options might apply.¹⁰⁵ The locations of horse interments in the cemetery might provide some arguments as to how the depositions could be perceived. The two horses from Borgharen are the northernmost interments of the, up till now, excavated cemetery; they might have been deposited as sacrifices at the fringes of the cemetery, but it is more likely that they were related to individual human burials as will be described below.

Another example from Limburg is the horse grave from Obbicht (grave 25). It was recorded that a nearly complete skeleton was found in this undisturbed grave with a wooden construction. The excavated bones are no longer present, but some molars survived and could be analysed.¹⁰⁶ Sets of teeth from two individual horses are present. Unfortunately, the two sets have find numbers which

assign them both to grave 25. It seems as if one set was assigned to this grave by mistake since it was recorded that horse teeth were also found in grave 29. An additional set of teeth with find numbers matching with grave 29 are, however, not present in the collection of finds from Obbicht. The ages of the two horses could be estimated on the basis of the molars from the right upper jaws. Horse 1 was 5 to 9 years old when it died, and horse 2 was 7 to 8 years old; they were approximately the same age at death but were older than the ones from Borgharen, which could, in view of their age, mean they had not yet become experienced riding horses.¹⁰⁷ The two horses from Obbicht, on the other hand, were old enough to have been sufficiently trained as riding horses.

The location of horse grave 25 in the Obbicht cemetery shows that it probably belonged to the earliest phases of the cemetery (fig. 7.9). The graves in its surroundings are all dated to Obbicht phase IIa (565-610/20) or IIb (565-640/50). Only grave 24 to its north was without finds and could not be dated, and grave 27 to its south had rather indifferent finds and could neither be dated.

Fig. 7.9
Obbicht-Oude Molen, the horse grave (red),
two weapon graves (green) and one 'possible
founder's grave' (blue).



(97) Hodges/Whitehouse 1983, 83. They claim that "one or two potters were able to meet the needs of entire regions in Merovingian Gaul". (98) Chemical analysis of the pots with identical stamps from Obbicht, Sittard, Rhenen and the fragment from Maastricht has yet to prove if they were produced at the same location. This analysis will be carried out by Line Van Wersch in the near future. (99) Siegmund 1998, 241, Abb. 89. (100) Muller-Wille 1970-1971; 1993; 1996, 209-211, Abb. 146; Martin 1976, 129-133, Abb. 32; Prummel 1993. An overview of Merovingian horse burials in the Netherlands is presented in Van de Jagt et al. 2014, 184-188. See also Sicherl 2011, 197-215.

(101) Fern 2007. (102) Neuffer-Müller 1983; Koch 2001, 157-159; Nieveler 2007, 27. (103) Lauwerier et al. 2014, 58-62; 164-174, 182-190, 215-217. (104) Van der Jagt et al. 2014, 164-174, 182-190. (105) Martin 1976, 129-130; Oexle 1984. (106) Analysis by Inge van der Jagt MA, of the RCE (State Service of Cultural Heritage). See Chapter 4 in this volume for a detailed description of the results. (107) Van der Jagt et al. 2014, 183.

The horse grave might be related to grave 29 of a man in which a horse bridle and horse teeth were found, but it is also located in the proximity of the possible founder's grave (grave 20, dating to 565-610/20) of the cemetery or it may have marked grave 26 to its south, a large grave but without finds, as a distinct (possible founder's) grave. Marking important burials with horses in their proximity might have been a 'tradition', although with different scales of 'richness', which can be observed through time.¹⁰⁸ In Obbicht grave 29, no other horse parts than the horse teeth were discovered. They might be one of the sets analysed. Grave 29 was located somewhat to the north of horse grave 25, and was the grave of a man. Apart from the horse teeth, a horse bridle was found in this grave, together with a lance head, a shield boss and some belt fittings that might have been part of the horse equipment; it may also be the case that a connection was expressed between this grave and the horse grave.

Two different interments signifying the role of horses in the burial rite are thus present in the cemetery of Obbicht; a complete horse interment without finds which might be related to a founder's grave of a man (20 or 26) and a human interment with horse teeth and horse-related objects symbolically referring to

the presence of a horse or to human-horse relations. Horse equipment or objects representing horses are known from numerous Merovingian graves.¹⁰⁹ These objects can be of great material wealth, but can also be modest.

A good example of a prosperous find is known from the excavated grave site at Saint-Dizier.¹¹⁰ Here, a burial of a complete horse was found in the proximity of the burials of humans: a young woman and a young and an older man dating to 525-550. The horse was an adult stallion of 8 to 10 years (it was used as a riding horse: traces on the first premolars showed that it wore a bit). A bit was not found in the horse grave, but one was found in one of the graves of the men; this find was thought to signify the relation between this man and his horse. In this grave, a purse mount in cloisonné style representing two horse heads, was found.¹¹¹

A number of objects referring to horses, apart from the horse teeth and the horse bridle found in Obbicht grave 29, are also known from the province of Limburg. A pair of iron stirrups inlaid with copper alloy stripes was found in grave 7 of the cemetery of Borgharen (fig. 7.10). They were found in a relatively rich grave of a man, in which also a shield boss, arrow head, axe, gold tremisses, seax related mounts, and belt fittings were found.¹¹² As men-

tioned, two horse burials were also present in this cemetery, and the stirrup might, as was concluded for Saint-Dizier, refer to the relation between this burial of a man and the interred horses in its proximity. Another example of a horse-related object is known from the church of Saint-Servatius in Maastricht; here a small iron plate buckle with a silver inlaid ornament forming a horse's head was found. It cannot be assigned to a grave or matched with other finds from the Merovingian graves excavated on this site (fig. 7.10). It can thus not be concluded whether it was also associated with a man's grave as the other horse related objects obviously were. Simple iron or copper alloy rings, which are regularly found in Merovingian graves, could have been part of horse equipment. Such rings were also found in the cemetery of Obbicht (as they were in Stein and Sittard), but these could have served a number of other functions as they are also known from graves of women.

The other discussed horse-related objects were exclusively associated with burials of men, but are all very different. This category of objects refers to horses either as status symbols, to the functions they had or to other meanings less obvious to us. It was observed that graves with horse-related objects are often known from burials grounds in which horse graves were also present, as the examples of Obbicht, Borgharen and the burial site of Saint-Dizier also showed.¹¹³ These examples show that the deposition of horse-related objects in burials was not a practice restricted to a specific time frame, but that it occurred, although in different manifestations, throughout the Merovingian period. The horse burials themselves are often related to individual graves of men identified as 'rich' or special on the basis of their location in the cemetery, their size and the range and richness of the grave goods. The horse burial from Obbicht is not part of an extremely rich cemetery, but is nonetheless located close to a possible founder's grave of the cemetery or cemetery plot, which is also the 'richest' grave of a man in terms of grave goods.

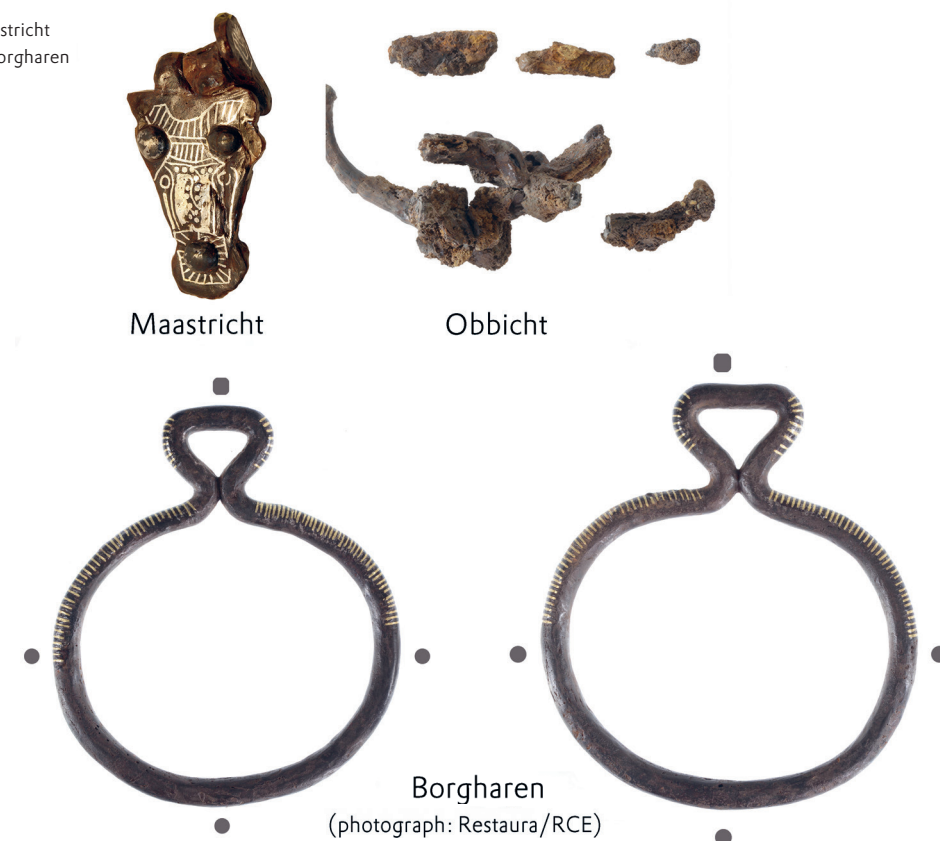
Altogether, the discussed examples underline the special meaning of horses in life and/or death. A horse could have fulfilled various functions. It could have been used for transport, for agricultural activities, for consumption and for warfare. Various suggestions have been put forth to explain both the burial of horses in distinct graves or in graves with humans, and the use of horse representations and horse-riding-related objects. The explanation of horse burials as a (surviving) pagan rite is often mentioned.¹¹⁴ Links to deities in the Germanic pantheon, or more specifically horse sacrifice in relation to the cult of Wodan or Odin, are suggested,¹¹⁵ as is the need for horses in the afterlife, either to ride safely to the otherworld or to ride in the otherworld.¹¹⁶ Considering it merely as a surviving pagan practice is now thought to be an unproductive

explanation in view of the long period during which horses were used in the burial rite and the complex relation between upcoming Christianity and the manifestation of the Merovingian burial rite.¹¹⁷ The use of horses and horse representations in burial rites are also seen as indicative for high status human burials,¹¹⁸ or as references to ethnic identities.¹¹⁹ However, such statements do not scrutinize the practice to its full extent.

Since the Merovingian burial rite is considered to be a rhetorical ritual strategy which transforms the dead into (required images of) ancestors and (re)produces the ideal societal order, other suggestions are also made. The expressed relation between horses and humans in cemeteries might refer to the "ideal representation of a warrior"¹²⁰ (as symbol of protection), or they may refer to hunting or land clearance and tenure (symbolic claims on land),¹²¹ and perhaps other references were also relevant. These symbolic references are especially relevant for the founder's grave of a cemetery, and apply to the described example from Obbicht (horse in the proximity of the possible founder's grave of a man with a set of weapons). The horse from Obbicht might thus be a 'grave good', and part of the symbolic set of references that were incorporated in the founder's grave.

Interments of dogs, wolves, deer and falcons are also known from Merovingian burial sites,¹²² as are objects which represent animals other than horses, such as birds, snakes and bulls.¹²³ Recent research into the cognitive and symbolic meaning of animals sheds new light on the meaning of animal representations, since they "embody symbolic forms of complex cultural knowledge".¹²⁴ The production, exchange and use of objects representing animals expressed, among others, the larger societal order of humans and animals and were understood by the people of that time. How this relates to the use of animals and animal-related items in the specific context of burials, especially in the area around Obbicht and Borgharen, is not yet understood and requires further investigation.¹²⁵

Fig. 7.10
Horse related objects from Maastricht (Servatius complex-Church), Borgharen and Obbicht. Various scales.



(108) Nieveler 2009, 27. It is mentioned that in Frankish cemeteries the graves of horses are to be found close to rich graves of men. (109) Oexle 1992. (110) Truc 2012; <http://www.inrap.fr/preventive-archaeology/Events/Last-discoveries/p-1365-lg1-The-grave-goods-of-the-aristocratic-Frankish-burials-at-Saint-Dizier.htm> (111) Truc 2012, Fig. 4-24. (112) Kars/De Kort 2014, 119-126,afb. 6.59. (113) See for example the overview of graves with stirrups and the presence of horse burials in their proximity in Kars/De Kort 2014, 122-123, table 6.40. (114) The Christian doctrine prohibited the consumption of horse meat as it did the sacrifice and interment of animals (Sykes 2014). It is now, however, thought that the development of the Merovingian burial rite was not strongly governed by the rise of Christianity before it was firmly established

in society and that Merovingian grave appearances do not allow for their strict identification as a result of either Pagan or Christian burial rites. (115) Schutz 2001, 103; Cleary 2013, 383. (116) Grundy 2014, 3-4. (117) Bazelmans 2002; Effros 2003, 164. (118) Schutz 2001, 103; Nieveler 2009, 27; Cleary 2013, 383. (119) Koch 2001, 158-159. (120) Effros 2003, 165. (121) Theuws 2009. (122) Martin 1969, 133-135; Nieveler 2007, 27. (123) Hedeager 2011, 61-98. (124) Hedeager 2011, 67. (125) An overview of animal interments and animal iconography from the cemeteries of the province of Limburg will be developed for this purpose (Kars/Van der Jagt in prep.)

PART 3
CATALOGUES

Mirjam Kars/Frans Theuws/Maike de Haas

8 Catalogues of contexts and finds

The catalogues printed below contain short descriptions of all the numbered contexts (graves) and their associated finds, followed by the finds without context, of the cemeteries of Sittard-Kemperkoul, Obbicht-Oude Molen and Stein-Groote Bongerd.

The Sittard-Kemperkoul graves and finds were uncovered during the ROB (now RCE: Cultural Heritage Agency) excavation in 1982, which preceded the city expansion resulting in the new housing estate named Sittard-Kemperkoul. The Obbicht-Oude Molen and Stein-Groote Bongerd graves and finds were excavated by Beckers and Beckers and their team in the 1930s (only of Obbicht the exact year of excavation (1936) is known).

The catalogues are summaries of the larger sets of data entered into databases. The database structure was created especially for early medieval burial sites and enables the cohesive administration of the wide variety of aspects of graves, finds, human remains and cemeteries.

The Sittard-Kemperkoul, Obbicht-Oude Molen and Stein-Groote Bongerd databases can be consulted for more information on grave structures and finds in the E-depot Nederlandse Archeologie, or EDNA (the electronic depot of Dutch archaeology: www.edna.nl). In addition to the databases, EDNA also stores all the digital copies of the original documentation, which consists of the field drawings and photographs (only for Sittard-Kemperkoul), and the contents of this book's catalogues, namely the text of the catalogues (PDF), grave drawings (PDF/Adobe Illustrator CC), drawings of the finds (PDF/Adobe Illustrator CC) and photographs of the finds (TIFF-format).

The catalogues printed below contain the following standard fields (fields are omitted when relevant evidence is not available), which are for each cemetery somewhat different depending on the information available:

CONTEXT NUMBER

This is the number assigned to contexts during the excavations; these are foremost graves in the case of the three cemeteries. The context numbers correspond with the grave numbers.

CONTEXT TYPE

This indicates the (presumed) nature of the context. The vast majority of the excavated contexts are graves.

TRENCH

This is the trench number in which the context was discovered and excavated (only for Sittard-Kemperkoul).

GRAVE STRUCTURE

This indicates the grave's construction type (in the case of the three cemeteries these are trench graves with or without wooden constructions and the few tree trunk graves in Sittard-Kemperkoul).

GRAVE PIT LENGTH AND WIDTH

These indicate the burial pit's reconstructed length and width.

GRAVE PIT DEPTH

For Sittard-Kemperkoul this refers to the depth of the recorded graves/contexts measured from the first level of excavation to the bottom of the graves, excluding the beams. For Obbicht-Oude Molen and Stein-Groote Bongerd this refers to the recorded depth of the bottom of the graves as recorded in the original catalogue; this was in all probability the bottom of the graves measured from the ground level at the time of excavation.

ORIENTATION

For Sittard-Kemperkoul the orientations of the graves are given in precise degrees in relation to the exact south-north axis (an exact S-N orientation would be 0 degrees), and as descriptions on the basis of the (presumed) lay out of the body. In

Sittard-Kemperkoul the head was generally located in the southern end of the grave. The descriptive orientations were established as follows:

351 - 9 degrees: S-N

≥ 10 degrees: SW-NE

≤ 350 degrees: SE-NW

When an N-S orientation of the body is assumed, the description of the grave orientation is adjusted accordingly (see grave 3: NW-SE).

In the more extended description of the graves (*Grave descriptions*), the orientation is mentioned again but in more general terms (either S-N or N-S). For Obbicht-Oude Molen and Stein-Groote Bongerd the orientations of the graves are given as descriptions on the basis of their depiction on the original cemetery plans in the original publication of Beckers and Beckers and the (presumed) orientation of the body. For a limited number of Stein graves the orientations in exact degrees were provided and as such recorded in the catalogue of Stein printed below.

STRATIGRAPHIC RELATION

Refers to the stratigraphic relations between contexts.

GRAVE DESCRIPTION

This discusses the construction of the grave, the presumed general orientation of the body (S-N, N-S, W-E or E-W) on the basis of human remains, body (part) silhouettes or locations of finds, and also the formation processes that affected the grave's appearance.

PHYSICAL ANTHROPOLOGY

These are notes on the human remains found in the graves and information concerning the deceased inferred from the grave structure.

DATE GRAVE

This is the presumed date of the grave based on the finds it contained. Two date ranges (which can show some discrepancies) of each complete grave inventory are given: a considerable wide date range on the basis of the FAG-phases (which includes the date ranges of each object for the greatest part), and a more reasoned date range on the basis of the established Sittard-Kemperkoul (S-K), Obbicht-Oude Molen (O-OM), and Stein-Groote Bongerd (S-GB) phases. An explanation and discussion of how these phases were created and how the reasoned date range was assigned to each individual grave can be found in chapter 5.

FINDS

In this section short descriptions of each individual grave find are given; they are ordered on the basis of numbers which correspond with the numbers indicated on the accompanying grave drawings. Additional information consists of unique find numbers, find depths (for Sittard-Kemperkoul measured from the first level of excavation, and for Obbicht-Oude Molen and Stein-Groote Bongerd measured from the ground level at the time of excavation), classifications and associated date ranges, and the locations where they are currently stored or on display.

For Sittard-Kemperkoul these locations are either the Provincial Depot for archaeological finds of the province of Limburg (PDB Limburg), or Museum Het Domein, which is the museum of history and contemporary art in the city of Sittard.

For Obbicht-Oude Molen and Stein-Groote Bongerd these locations are either Archaeological Museum Stein or Restoration company Restaura in Haelen (province of Limburg). The finds stored in Restaura were at the time of this publication not yet preserved or restored. They were for the majority present in corroded and fragmented condition and were difficult to analyse in detail and in some cases also difficult to assign to a grave. Photographs and X-ray photographs were taken of the boxes in which the finds were stored in the restoration company; these photographs are depicted in the catalogues below. The X-ray photographs revealed some interesting features and provided a fairly complete overview of the rest of the Obbicht and Stein collections stored at Restaura. Some unnoticed finds might however appear after restoration, for which funds were not found yet at the time of this publication.

Under the header *Location*, finds no longer present in the collections are indicated as *missing*.

ILLUSTRATIONS

The individual grave plans are drawn at a scale of 1:40. On these plans the colour brown is used to indicate the traces or outlines of wooden containers and grey is used to indicate human remains or body imprints. For Obbicht-Oude Molen en Stien-Groote Bongerd these outlines are for the majority reconstructed on the basis of the often rather vague descriptions in the original catalogues; they are for the majority indicated with interrupted brown lines since their exact dimensions and precise locations in the burial pits are often not known.

For Sittard-Kemperkoul the grave finds are indicated with solid black representing their shape as indicated on the field drawings; these do not have to represent the actual shapes of the cleansed and restored objects. The beads are indicated with small black dots.

For Obbicht-Oude Molen and Stein-Groote Bongerd the vessels are indicated as circles filled with black (pottery), light grey (glass) or dark grey (copper alloy). The shapes of swords, seaxes, knives and lance heads are schematically indicated when their find locations and orientations in the graves could be reconstructed. If not, they are indicated with dots and associated find numbers, as are all the other finds of which the find locations were recorded in the first catalogues or could be reconstructed. The locations of these finds cannot be considered exact, since their distance from the burial pit walls was given in centimetres but it is not know which part of the finds was taken as point of measurement. Nonetheless, their indicated locations on the grave drawings provide a fairly accurate image of the spatial arrangements of the finds in the graves. In chapter 4 the reconstructed find locations are discussed in more detail.

The illustrations and photographs of the finds are depicted on a scale of 1:2, except for the illustrations and photographs of vessels (pottery, glass and copper alloy), weapons (swords, seaxes, lance heads, arrow heads), and axes and knives, which are depicted on a scale of 1:4. Other scales are explicitly indicated when relevant.

DRAWINGS

All the drawings of the finds from Sittard-Kemperkoul were made by Bob Donker of the University of Amsterdam, except for the few finds on display in Museum Het Domein in Sittard; these were drawn by Maaïke de Haas. The finds from Obbicht-Oude Molen and Stein-Groote Bongerd were partly drawn by Bob Donker and partly by Alicia de Zwart.

PHOTOGRAPHS

The finds from Sittard-Kemperkoul were photographed by Paulien Gemmeke and Sjoerd Aarts of 'Archeofact'. The collections of finds from Obbicht-Oude Molen and Stein-Groote Bongerd were partly photographed by Anneke Dekker (University of Amsterdam) and partly by Pauline Gemmeke of 'Archeofact'.

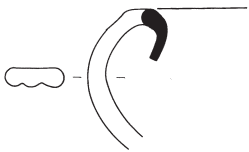
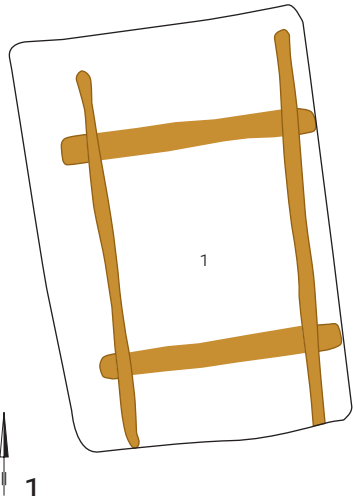
1
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	223
Grave pit width	156
Grave pit depth	22
Orientation	353 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. Traces of only the long sides of the wooden container were preserved.

DATE GRAVE
Cannot be dated

FINDS
1 Pottery vessel: fragments
Find number: 1-1-1
Wheel thrown fragments of a jug, jar or spouted pot: eight fragments of the rim, shoulder and handle with two grooves were found scattered throughout the grave. The exact find locations were not recorded.
Location: PDB Limburg



1-1-1

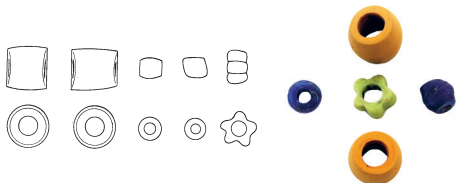
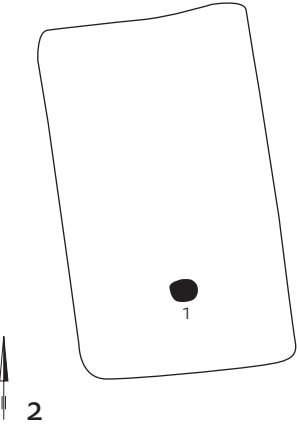
2
INHUMATION GRAVE

Trench	1
Grave structure	trench grave?
Grave pit length	192
Grave pit width	114
Grave pit depth	2
Orientation	353 (S-N)

DESCRIPTION
Merovingian inhumation grave. The location of beads suggests that the grave's orientation was south-north, but this remains uncertain since human remains were not found. The burial pit was rectangular with slightly rounded corners. Grave 2 was excavated in two separate trenches (both part of trench 1).

DATE GRAVE
SK: chronological indifferent
FAG phases 3-9: 460/80-710

FINDS
1 Bead, glass
Find number: 2-1-1.1
Orange, opaque, barrel shaped.
Number: 2
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8 - (8) 10
Rhineland date: (570) 610 - (640) 705
Location: PDB Limburg



2-1-1

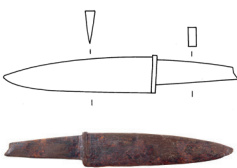
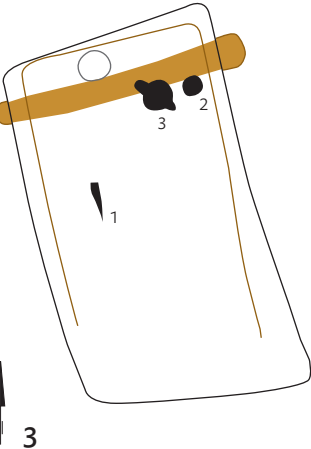
Bead, glass
Find number: 2-1-1.2
Blue, transparent, small bead.
Number: 2
Type: BT30 / S-Per 47.1
Kombinationsgruppe: A
Rhineland phase: 3-4
Rhineland date: 485-555
Location: PDB Limburg

Bead, glass
Find number: 2-1-1.3
Green, opaque, cylindrical ribbed.
Number: 1
Type: GO39
Location: PDB Limburg

3
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	191
Grave pit width	120
Grave pit depth	30
Orientation	345 (NW-SE)

DESCRIPTION
Merovingian inhumation grave. The location of a vague skull imprint indicates that the grave's orientation was north-south. Whether the skull was originally part of an articulated body is, however, not certain since no other human remains were found. The burial pit was rectangular with slightly



3-1-1

rounded corners and held a wooden container placed on at least one wooden beam. A second wooden beam was presumably present, but its remains were not documented. This may be due to the fact that the grave was excavated in two different trenches. The southern part of the grave did not contain any features. The northern part displays the wooden container and beam. The beam was dug into the burial pit's eastern and western walls.

PHYSICAL ANTHROPOLOGY
Not suitable for examination.

GRAVE DATE
SK IIId: 610/20-640/50
FAG: 580/90-670/80

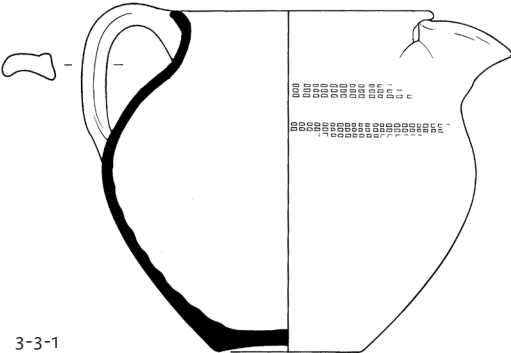
FINDS
1 Knife, iron
Find number: 3-1-1
Find depth: 56.15
Small iron knife, hilt partly missing.
Length blade: 8.1 cm
Location: PDB Limburg
2 Pottery vessel
Find number: 3-2-1
Find depth: 56.20
Ribbed beaker with two horizontal ridges and a dark grey/brown wall surface and red/brown core; fragments of the rim are missing.
Height: 10.9 cm
Type: L/P/V 398
L/P/V phase: MR1-MR2
L/P/V date: 600/10-660/70
Location: Museum het Domein



3-2-1



3-3-1

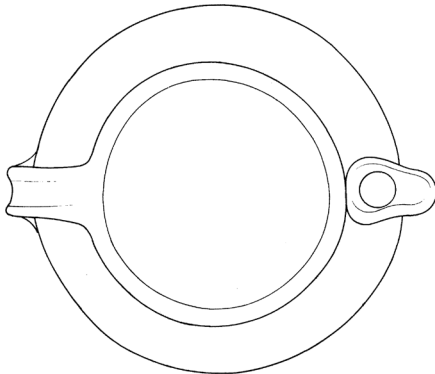


3 Pottery vessel
Find number: 3-3-1
Find depth: 56.27
Spouted pot with a grey-brown wall surface. The upper wall is decorated with two zones of three lines of rectangular roulette stamp impressions; the pot is nearly complete, some fragments of the spout are missing.
Height: 18.1 cm
Type: Siegmund Kwt3.22
Rhineland phase: 7B-8A
Rhineland date: 600-625
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Alternative type decoration: L/P/V 414 (MA1 - MR2: 470/80-660/70)
Location: PDB Limburg

4
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	208
Grave pit width	166
Grave pit depth	20
Orientation	345 (SE-NW)

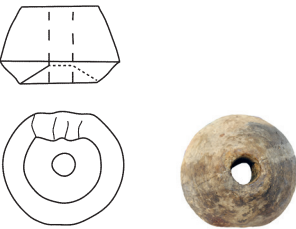
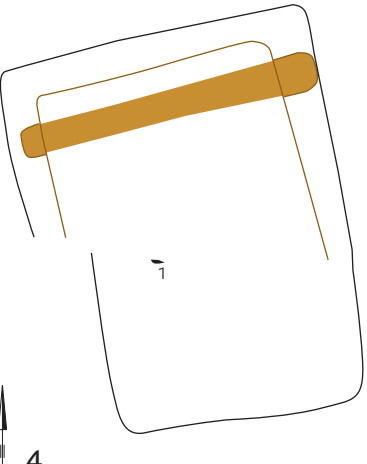
DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on at least one wooden beam.



A second wooden beam was in all probability present in the southern part of the grave, but its remains were not documented during excavation. This may be due to the fact that the grave was excavated in two different trenches. It seems likely that the excavators missed the grave structures in the southern part of the grave.

GRAVE DATE
SK I + SK II: 510/20-640/50
FAG phases 3-7: 460/80-640/50

FINDS
1 Spindle whorl, ceramic
Find number: 4-1-1
Biconical ceramic spindle whorl, asymmetric, with a black surface.
Diameter: 3.1 cm
Type: L/P/V 347
L/P/V phase: MA1-MR1
L/P/V date: 470/80 - 630/40
Location: PDB Limburg



4-1-1

5
INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	285
Grave pit width	164
Grave pit depth	40
Orientation	339 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was south-north, based on the location of the preserved human remains. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was a wooden coffin that held the body. It contained a body silhouette of which the skull was missing. The shadows of the southern short wall of the coffin are gone; this part of the coffin might have been disturbed, hence the absence of the skull. The deceased was positioned on its back in an extended position. The lower arms were crossed over the abdomen. The length of the body silhouette (measured from the upper arms to the feet) was 156 cm.

PHYSICAL ANTHROPOLOGY
Not suitable for examination

GRAVE DATE
SK IIa: 565-610/20
FAG phases 5-7: 565-640/50

- FINDS**
- 1 Lance head, iron
Find number: 5-1-1
Find depth: 55.78
Iron lance head with mid rib and a closed socket with wood remains.
Total length: 26.6 cm
Type: Siegmund Lan2.1
Rhineland phase: 7-8A
Rhineland date: 585-625
Alternative type: L/P/V 38 (MA2-MA3: 520/30-600/10)
Alternative type: FAG S-Lan2.1 (5-6: 565-620)
Location: PDB Limburg
- 2 Pottery vessel
Find number: 5-2-1
Find depth: 55.82
Biconical pot with a dark grey surface and an orange wall core. The upper wall is decorated with three zones of three/four lines of rectangular roulette stamp impressions. Approximately 60% of the pot is present.
Height: 13.0 cm
Type: Siegmund Kwt3.22

- Rhineland phase: 7B-8B
Rhineland date: 600-625
Alternative type: FAG-S Kwt5A (5-6: 565-610/20)
Alternative type decoration: L/P/V 414 (MA1-MR2: 470-670)
Location: PDB Limburg
- 3 Axe, iron
Find number: 5-3-1
Find depth: 55.78
Iron axe with a straight/slightly curved upper edge and wood remains in the shaft opening.
Blade length: 19.5 cm
Type: Siegmund FBA2.1
Rhineland phase: 6-7
Rhineland date: 570-610
Alternative type: FAG S-FBA2.1 (5-6: 565-610/20)
Alternative type: L/P/V 4 (MA2-MA3: 520/30-600/610)
Location: PDB Limburg
- 4 Human remains
Find number: 5-4-1
Find depth: 55.73 (feet); 55.76 (pelvis)
Location: PDB Limburg
- 5 Belt fitting, iron
Find number: 5-5-1
Find depth: 55.75
Rectangular back plate with four copper alloy rivets and leather remains on its back side.
Plate length: 5.7 cm

Plate width: 4.1 cm
Type: Siegmund Gür4.1/4.2/4.3/4.5
Rhineland phases: 7-8
Rhineland date: 585-640
Location: PDB Limburg.

Belt fitting, copper alloy.
Find number: 5-5-2
Find depth: 55.75
Small simple copper alloy buckle (of a purse?) with a straight copper alloy tongue.
Maximum loop length: 2.1 cm.
Type: L/P/V 112
L/P/V phase: PM-MA3
L/P/V date: 440/50-600/10
Location: PDB Limburg

- 6 Knife, iron.
Find number: 5-6-1
Find depth: 55.82
Iron knife with a slightly curved back.
Blade length: 9.1 cm
Location: PDB Limburg.

Strip, iron
Find number: 5-6-2
Find depth: 55.82
Bent iron strip, probably the mount of a wooden box (wood remains, of what was presumably a box, are indicated on the field drawing).
Length: 5.3 cm
Type: Nieveler 2003; wooden boxes with iron fittings
Phase: 3-7

Date: 460/80-640/50
Location: PDB Limburg

Indeterminate fragment, iron
Find number: 5-6-3
Find depth: 55.82
Iron fragment, triangular.
Length: 3.2 cm
Location: PDB Limburg

Shears, iron
Find number: 5-6-4
Find depth: 55.82
One of the blades of a pair of iron shears.
Blade length: 7.6 cm
Type: L/P/V 355
L/P/V phase: MA1-MR3
L/P/V date: 470/80-700/10
Location: Museum Het Domein

Shears, iron
Find number: 5-6-5
Find depth: 55.82
One of the blades of a pair of iron shears.
Blade length: 6.6 cm
Type: L/P/V 355
L/P/V phase: MA1-MR3
L/P/V date: 470/80-700/10
Location: Museum Het Domein

Indeterminate fragment, iron
Find number: 5-6-6
Find depth: 55.82
Iron band/rod with copper alloy rivet.

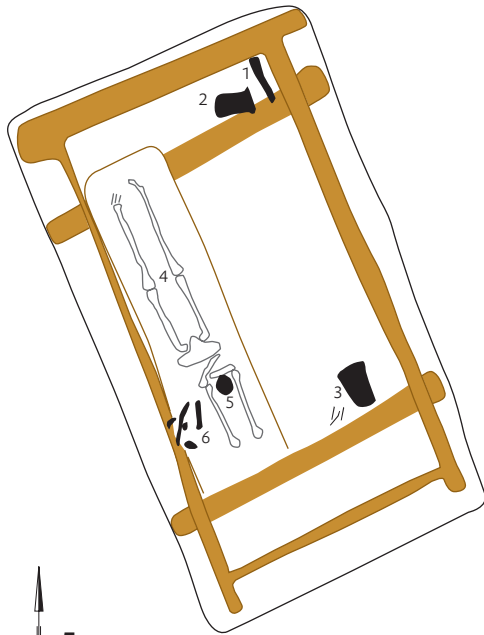
Length: 4.8 cm
Diameter rivet: 1.4 cm
Location: PDB Limburg

Fire steel, iron
Find number: 5-6-7
Find depth: 55.82
Fragment of a triangular iron fire steel with curved extremities.
Length: 5.4 cm
Location: PDB Limburg

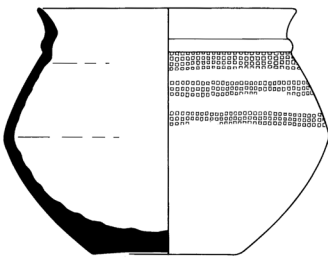
Awl, iron
Find number: 5-6-8
Find depth: 55.82
Iron awl with a rectangular shank section.
Length: 8.5 cm
Location: PDB Limburg.

Stone
Find number: 5-6-9.1
Find depth: 55.82
Flint
Length: 3.9 cm
Location: PDB Limburg.

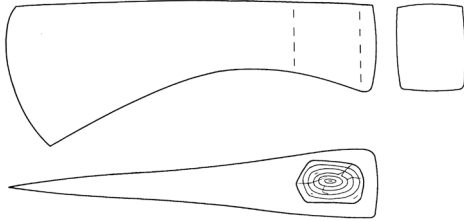
Stone
Find number: 5-6-9.2
Find depth: 55.82
Flint
Length: 2.5 cm
Location: PDB Limburg.



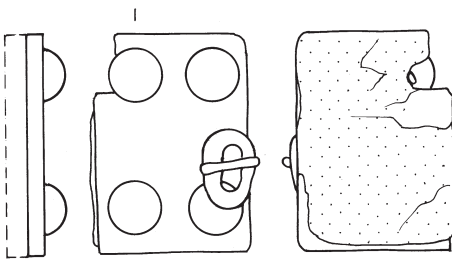
5-1-1



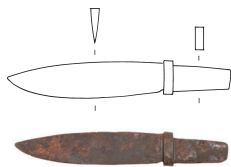
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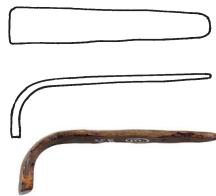
5-3-1



5-5-1 + 5-5-2



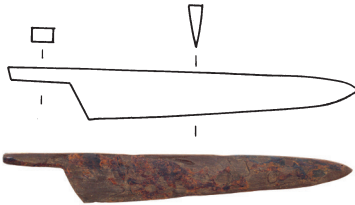
5-6-1



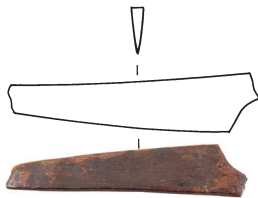
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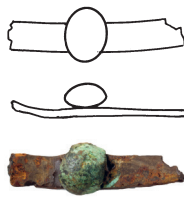
5-6-3



5-6-4



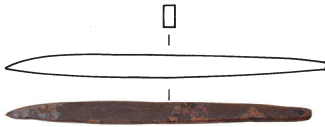
5-6-5



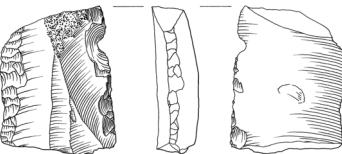
5-6-6



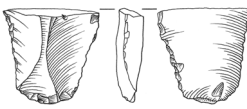
5-6-7



5-6-8



5-6-9.1



5-6-9.2

6

INHUMATION GRAVE

Trench	1
Grave structure	possible wooden container grave
Grave pit length	228
Grave pit width	156
Grave pit depth	6
Orientation	348 (SE-NW)
Stratigraphic relation	below context 7

DESCRIPTION

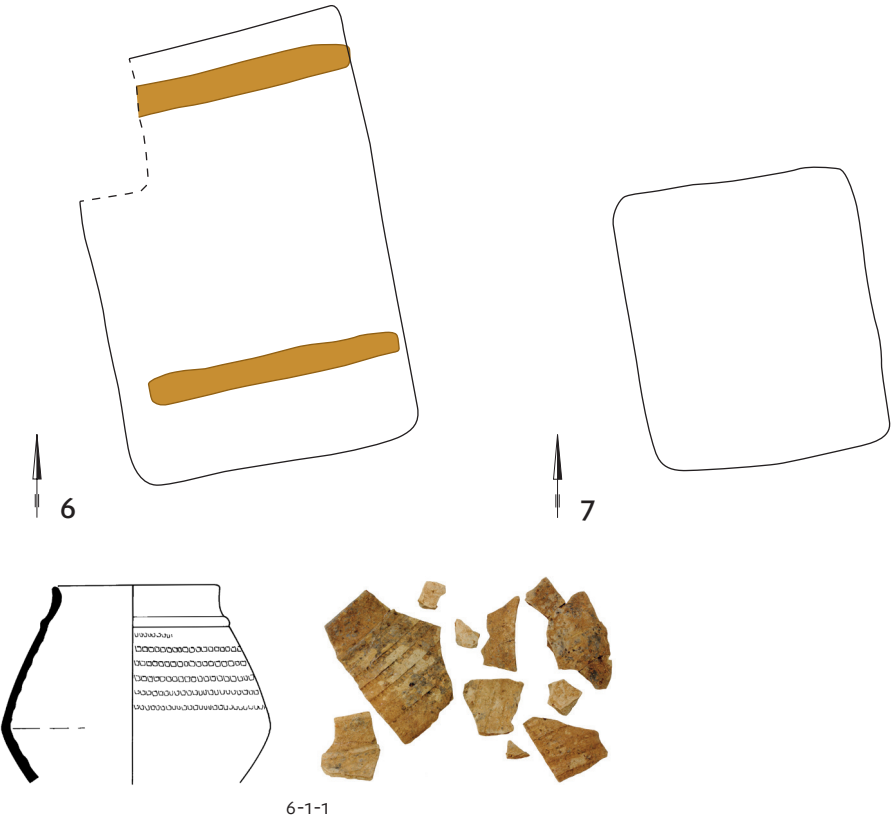
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained two wooden beams. The presence of beams suggests that the grave held a container, but its remains were not found during excavation. Grave 6 is cut by grave 7. It is clear that grave 6 is older than grave 7.

GRAVE DATE

SK IIa: 565- 610/20
FAG phases 5-6: 565-610/20

FINDS

1 Pottery vessel
Find number: 6-1-1
Find depth:-
Fragments of a biconical pot with a brown surface decorated with single lines of rectangular roulette stamp impressions. Fragments of the base are missing. Approximately 10% of the pot is present. The find location was not recorded on the field drawing.
Height: could not be reconstructed.



Belly diameter: 14.3 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6-7
Rhineland date: 570-610
Alternative type: Siegmund Kwt3.11 (6-7: 570-610)
Alternative type: FAG-Kwt5A (5-6: 565-610/20)
Alternative type decoration: L/P/V 414 (MA1-MR2: 470-670)
Location: PDB Limburg.

7

POSSIBLE INHUMATION GRAVE

Trench	1
Grave structure	trench grave?
Grave pit length	151
Grave pit width	129
Grave pit depth	10
Orientation	350 (SE-NW)
Stratigraphic relation	above context 6

DESCRIPTION

Possible Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. In view of its dimensions it might have been the grave of a child. The burial pit was rectangular with slightly rounded corners. Apart from its shape there are no indications that this feature was indeed a grave. Traces of a wooden container were not found, and neither were grave goods. Possible grave 7 cuts grave 6; it is clear that possible grave 7 is younger than grave 6.

GRAVE DATE

Cannot be dated

8

INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	253
Grave pit width	162
Grave pit depth	18
Orientation	348 (SE-NW)

DESCRIPTION

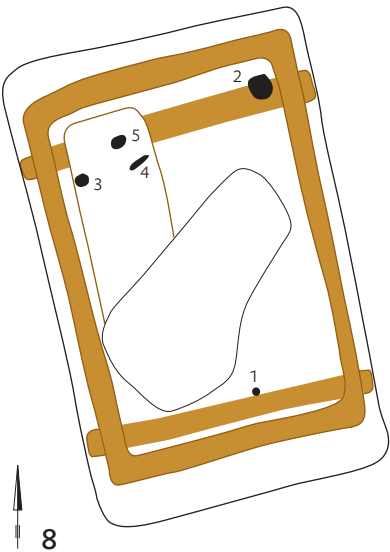
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was the wooden coffin that held the body of the deceased. However, a body silhouette or human remains were not discovered. A reopening pit cuts the southern half of the grave: it disturbed a part of the wooden coffin and the centre of the grave. The single bead known from this grave seems to have moved from its original location. The bead might have been part of a string of which the other beads were taken from the grave. The walls of the wooden chamber and the burial pit remained undisturbed.

GRAVE DATE

SK IIIa: 640/50-670/80
FAG phases 7-8: 610/20-670/80

FINDS

1 Bead, glass
Find number: 8-1-1
Find depth: 56.09
Bead, glass, blue, transparent, globular compressed, double connected bead.
Number: 1



Type: BT25 / S-Per 47.7
Kombinationsgruppe: G-H
Rhineland phase: 6-10
Rhineland date: 570-705
Location: PDB Limburg

2 Glass vessel
Find number: 8-2-1
Find depth: 56.04-56.08
Palm cup of light blue glass. The cup has an asymmetric bottom and a hollow rim. Air bubbles are visible and fragments of the rim and wall are missing.
Height: 5.9 cm
Type: Maul B1a
Maul phase: JMII (JMIII)
Maul date: 570 - 670/80
Alternative type: Feyeux 55.0 (550-620)
Location: Museum Het Domein

3 Belt fitting, iron
Find number: 8-3-1
Find depth: 56.03
Iron triangular belt fitting (foot wear), which was either a counter plate or part of a plate buckle. The plate has two copper alloy rivets and is decorated with silver inlays: the decoration pattern is considerably weathered and difficult to identify.
Plate length: 4.6 cm
Plate width: 2.5 cm
Type: Siegmund Snaz.4
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg

Belt fitting, iron
Find number: 8-3-2
Find depth: 56.03
Fragment of an iron strap end (foot wear) with one rivet hole and decorated with a geometric pattern of silver inlays.
Length: 1.6 cm
Type: Siegmund Snaz.4



Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg.

Rivet, copper alloy
Find number: 8-3-3
Find depth: 56.03
Four fragments of copper alloy rivets (probably part of plate 8-3-1).
Type: Siegmund Snaz.4
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg.

4 Belt fitting, copper alloy
Find number: 8-4-1
Find depth: 55.98
Copper alloy tongue shaped strap end with two copper alloy rivets and decorated with two grooves on the base of the front side.
Length: 4.7 cm
Type: L/P/V 199
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: PDB Limburg

Organic remains
Find number: 8-4-2
Find depth: 55.98
Wood or bone fragments.
Length fragment 1: c. 2.5 cm
Length fragment 2: c. 1.0 cm
Location: PDB Limburg

5 Belt fitting, iron
Find number: 8-5-1
Find depth: 55.98
Triangular iron counter plate, plate of a plate buckle or additional plate (used as foot wear fitting). The decoration consists of silver inlays forming a single braided band, filled with dots, which is surrounded with stripes.
Length: 4.1 cm

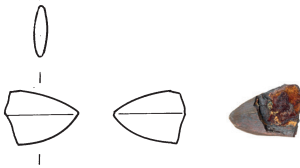


Type: Siegmund Snaz.4
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg

Belt fitting, iron
Find number: 8-5-2
Find depth: 55.98
Iron tongue shaped strap end (foot wear fitting), decorated with silver inlays forming a geometric pattern of stripes.
Length: 3.4 cm
Type: Siegmund Snaz.4
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg

Belt fitting, iron
Find number: 8-5-3
Find depth: 55.98
Fragment of a buckle loop (foot wear fitting) of probably a plate buckle (8-5-1?). It is decorated with stripes of silver inlay.
Type: Siegmund Snaz.4
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg

Knife, iron
Find number: 8-5-4
Find depth: 55.98
Tip of an iron knife (or strap end?)
Length: 2.0 cm
Location: PDB Limburg.



9
INHUMATION GRAVE

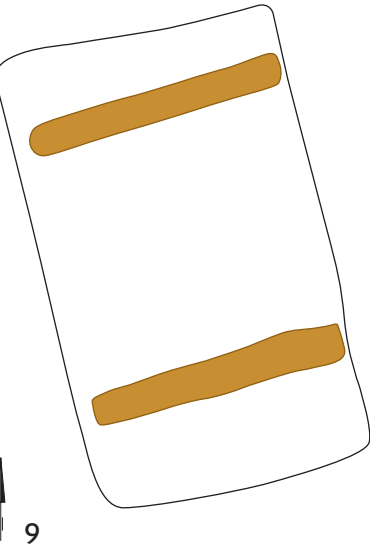
Trench	1
Grave structure	possible wooden container grave
Grave pit length	249 (SE-NW)
Grave pit width	151
Grave pit depth	6
Orientation	347 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained two wooden beams. The presence of beams suggests that the grave initially held a wooden container; its remains were not found during excavation.

GRAVE DATE
SK IIC: 580/90-640/50
FAG phases 6-7: 580/90-640/50

FINDS
1 Rivet, copper alloy
Find number: 9-1-1
Copper alloy rivet with a domed head, probably of a plate buckle.
Diameter: 1.6 cm
Location: PDB Limburg.

Rivet, copper alloy
Find number: 9-1-2
Copper alloy rivet with a domed head and carved rim, probably of a plate buckle.

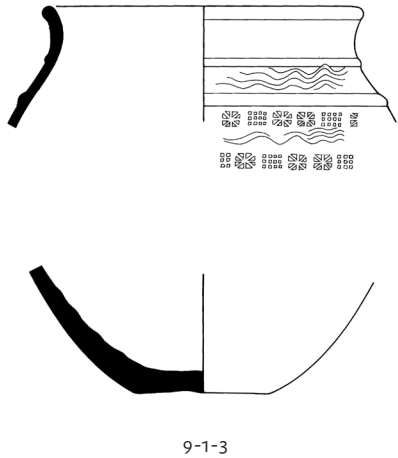


9-1-1 9-1-2

Diameter: 1.6 cm.
Location: PDB Limburg

Pottery vessel
Find number: 9-1-3
Biconical pot with an orange exterior. The upper wall is decorated with one zone of undulating grooves above the ridge, and one zone of undulating grooves and roulette stamp impressions (grids consisting of impressed rectangles alternating with grids filled with radial patterns of lines) underneath the ridge. The pot is restored and completed (14 fragments were available). Approximately 30% of the pot is present.
Height: not reconstructed
Type: Siegmund Kwt3.21/3.22.3.23
Rhineland phase: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5G/5H (565-640/50)
Alternative type decoration: L/P/V 432 (560-640)
Location: PDB Limburg

Pottery vessel
Find number: 9-1-4
Orange fragment of probably a spouted pot or jug (remnants of a handle can be observed) with a dark grey core. The fragment is decorated with multiple lines of rectangular roulette stamp impressions.
Type: L/P/V 414 (decoration)
L/P/V phase: MA1-MR2
L/P/V date: 470-670
Alternative type: Siegmund late roulette stamp group (Kwt3.21/3.22/3.23: 7-8 (585-640))
Location: PDB Limburg



9-1-3



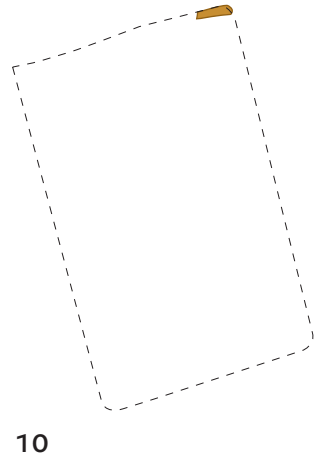
9-1-4

10
POSSIBLE INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	187
Grave pit width	118
Grave pit depth	0
Orientation	348 (SE-NW)

DESCRIPTION
Possible Merovingian inhumation grave. The orientation of this possible grave was probably south-north, but we cannot be certain of this since no human remains were found. The outline of the feature was rectangular with almost straight corners, but is very vague. The presence of what seem to be wood traces in the north-eastern corner of the context suggests that the recorded outline may represent the former wooden container instead of the burial pit.

GRAVE DATE
Cannot be dated



10

11
INHUMATION GRAVE

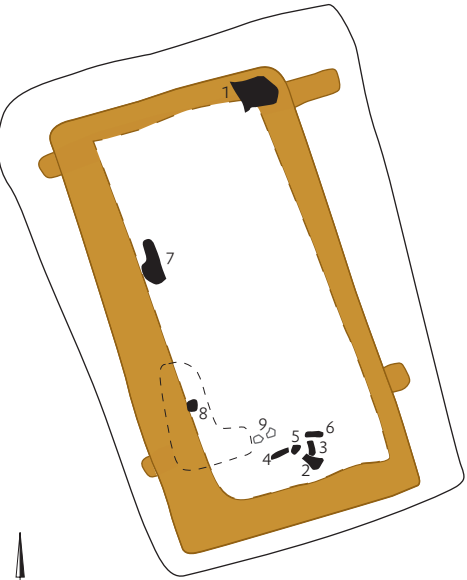
Trench	1
Grave structure	wooden container grave
Grave pit length	268
Grave pit width	195
Grave pit depth	30
Orientation	343 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The location of beads and teeth suggest that the grave's orientation was south-north. The burial pit was rectangular with slightly rounded corners and held one wooden container supported by two wooden beams. The wooden bottom floor of the container was partly preserved along the walls of the container. The container was probably a wooden coffin that held the body. However, a body silhouette or other human remains, apart from the teeth, were not discovered. In view of the location of the beads, which were supposedly deposited around the neck of the deceased, it seems likely that the body was deposited close to the western wall of the container.

PHYSICAL ANTHROPOLOGY
Not examined

GRAVE DATE
SK IIB: 565-640/50
FAG phases 4-7: 510/20-640/50

FINDS
1 Pottery vessel
Find number: 11-1-1
Find depth: 55.82-55.97
Biconical pot with a brown surface. The upper wall is decorated with two zones of six to eight lines of rectangular roulette stamp impressions. The available fragments of the pot were glued together, some of the missing parts were filled up, and fragments of the rim are missing.
Height: 13.4 cm
Type: Siegmund Kwt3.22



11

Rhineland phase: 7B-8A
Rhineland date: 600-625
Alternative type: FAG Kwt5B (565-640/50)
Location: Museum Het Domien

- 2

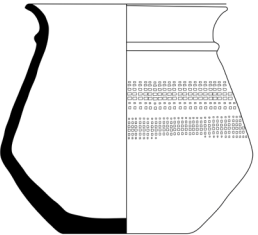
Pottery vessel
Find number: 11-2-1
Find depth: 55.98
Orange egg-shaped beaker of a fine burnished ware on a foot. The neck is missing but the surface of the fracture is rather smooth; the upper part of the beaker was probably already gone before its deposition.
Height: 6.0 cm
Date: Roman
Location: Museum Het Domein.
- 3

Melon bead, glass
Find number: 11-3-1
Find depth: 55.91
Blue opaque melon bead, one half missing.
Date: Roman
Location: Museum Het Domein
- 4

Plate, iron
Find number: 11-4-1
Find depth: 55.95
Rectangular iron plate.
Length: 4.4 cm
Width: 1.5 cm
Location: Museum Het Domein
- 5

Stone
Find number: 11-5-1
Find depth: 55.91
Grey egg-shaped polished stone.
Length: 3.2 cm
Location: Museum Het Domein.
- 6

Glass, fragment
Find number: 11-6-1
Find depth: 56.00
Thick blue glass fragment with production lines.
Date: Roman
Length: 3.7 cm
Location: Museum Het Domein



11-1-1

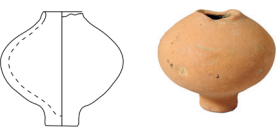


- 7

Belt fitting, copper alloy
Find depth: 55.90
Find number: 11-7-1
Two fragments of a copper alloy strap end with one rivet hole in the base of the plate and engraved lines along the edges of the front side; it forms an ensemble with 11-7-3 and 11-7-4.2 and is dated accordingly.
Length: 4.1 cm
Type: L/P/V 130
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: Museum Het Domein.

Simple rings, iron.
Find number: 11-7-2
Find depth: 55.90
Two fragments of two iron rings joined by rust. Some corroded (organic?) material is attached to them and a fragment of a twisted iron wire is attached to one of the rings. They have a circular hollow section (hollow due to corrosion?)
Diameter: cannot be reconstructed.
Type: L/P/V 357
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: PDB Limburg

Belt fitting, copper alloy
Find number: 11-7-3
Find depth: 55.90
Small copper alloy plate buckle with a fixed triangular plate, used as foot wear. The decoration consists of impressed points along the edges and larger dots on the middle field of the front side of the plate. The two eyes on the back side of the plate are damaged. Leather remains are attached to the loop. It forms an ensemble with 11-7-1 and 11-7-4.2.
Plate length: 2.7 cm
Type: L/P/V 130
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: PDB Limburg



11-2-1



11-3-1



11-4-1

Comb with case
Find number: 11-7-4.1
Find depth: 55.90
Severely damaged fragment of a double sided composite comb with a fragment of the case attached to it. Various other objects (probably the former content of a purse) are attached to this comb with case fragment.
Length: 11.7 cm
Type: Siegmund Ger3,23
Rhineland phase: 4-7
Rhineland date: 530-610
Location: Museum Het Domein

Belt fitting, copper alloy
Find number: 11-7-4.2
Find depth: 55.90
Copper alloy strap end with one rivet hole through its split base; attached to a fragment of a comb with case (11-7-4.1). The decoration consists of an engraved line along the edges of the front side. It forms an ensemble with 11-7-1 and 11-7-3 and is dated accordingly.
Length: 4.1 cm
Type: L/P/V 130
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: Museum Het Domein

Loop, iron
Find number: 11-7-4.3
Find depth: 55.90
Iron loop, attached to a fragment of a comb with case (11-7-4.1)
Length: 6.5 cm
Location: Museum Het Domein

Ring rod, iron.
Find number: 11-7-4.4
Find depth: 55.90

Part of the ring of an iron ring rod (rod missing), attached to a fragment of a comb with case (11-7-4.1).
Length: 4.5 cm
Loop width: 2.3 cm
Type: L/P/V 353
L/P/V phase: MA2-MR1
L/P/V date: 520/30-700/10
Location: Museum Het Domein

Coin pendant, copper alloy
Find number: 11-7-5
Find depth: 55.90
Copper alloy coin pendant with a fragment of a ring preserved in its suspension hole.
Diameter: 3.1 cm
Location: PDB Limburg

8 Bead, glass
Find number: 11-8-1.1.1
Yellow, opaque, small globular compressed.
Number: c. 156
Type: YO30 / S-Per33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.1.2
Blue, opaque, globular.
Type: BO1
Number: 2
Type: S-Per 37.1?
Kombinationsgruppe: (H) I
Rhineland phase: (8) 10-(8) 10
Rhineland date: (610) 670-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.1.3
Blue, transparent, short cylindrical.
Number: 2
Type: BT35 / S-Per 47.1
Kombinationsgruppe: A
Rhineland phase: 3-4
Rhineland date: 485-555
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.1.4
Bead, glass, red, opaque, barrel shaped. Decoration: white waves, crossed.
Number: 4
Type: Koch-Schretzheim 1977: 34,11 / 34,12
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.8 (Kombinationsgruppe F-H: 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.1.5
Red, opaque, barrel shaped, double connected.
Decoration: white waves, crossing.
Number: 1
Type: S-Per: 35.8
Kombinationsgruppe: F-H
Rhineland phase: 5-10
Rhineland date: 555-705
Alternative type: S-Per: 35.7 (Kombinationsgruppe H: 610-705)
Alternative type: Koch-Schretzheim 1977 34,16 (4: 590/600-620/30)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.1.6
White, opaque, short cylindrical. Decoration: blue transparent waves, crossing.
Number: 1
Type: Koch-Schretzheim 1977: 34,7
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 32.7 (Kombinationsgruppe E-H: 530-705)
Alternative type: S-Per: 32.6 (Kombinationsgruppe F-H: 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.1.7
Orange, opaque, barrel shaped.
Number: 1
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.1.8
Green, transparent, cylindrical, double connected.
Number: 1
Type: GT25 / S-Per 46.3
Kombinationsgruppe: H-I
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.1.9
Red, opaque, globular. Decoration: white undulating/combed bands and five blue raised eyes.
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.1.10
White, opaque, biconical. Decoration: blue transparent waves, crossing, and red opaque dots.
Number: 1
Type: Koch-Schretzheim 1977: 21,5
Schretzheim phase: 3
Schretzheim date: 565/60-600

Alternative type: S-Per: 32.8 (Kombinationsgruppe F-H: 555-705)
Alternative type: Koch-Pleidelsheim 2001; 21,23
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.1
Yellow, opaque, small globular compressed.
Number: 117
Type: YO30 / S-Per 33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.2
Red, opaque, long cylindrical. Decoration: combed opaque yellow and green threads.
Number: 1
Type: Koch-Schretzheim 1977: 49,15
Schretzheim phase: 3-4
Schretzheim date: 565-620/30
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.3
Red, opaque, globular compressed. Decoration: white opaque waves, crossing.
Number: 5
Type: Koch-Schretzheim 1977: 34,11/34,12
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.8 (Kombinationsgruppe F-H: 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.4
Red, opaque, globular compressed, triple connected. Decoration: white opaque waves, crossing.
Number: 1
Type: Koch-Schretzheim 1977: 34,16
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.8 (Kombinationsgruppe F-H: 555-705)
Alternative type: S-Per: 35.7 (Kombinationsgruppe H: 610-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.5
Orange, opaque, barrel shaped.
Number: 1
Type: OO19 / S-Per 34.1
Kombinationsgruppe (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

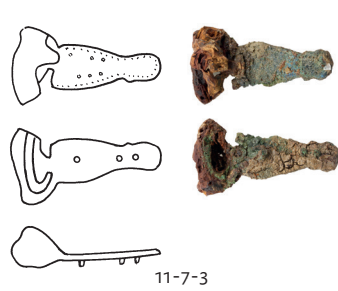
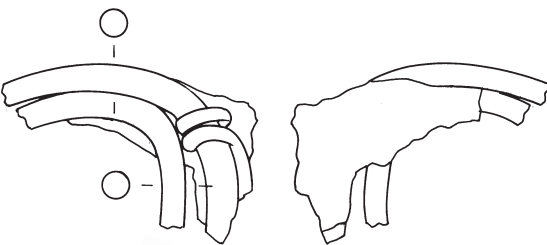
Bead, glass
Find number: 11-8-1.2.6
Blue, transparent, small, cylindrical short.
Number: 8
Type: BT35/S-Per 47.1
Kombinationsgruppe: A
Rhineland phase: 3-4
Rhineland date: 485-555
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.7
Yellow, opaque, large, globular.
Type YO1
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.8
Yellow, opaque, globular.
Type: YO1
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.9
Black, transparent/opaque, small, cylindrical short.
Number: 2
Type: BLO35 / S-Per 31.1
Kombinationsgruppe: C-D
Rhineland phase: 3-6
Rhineland date: 485-585
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.10
Red, opaque, globular compressed. Decoration: yellow waves, crossing.
Number: 1
Type: Koch-Schretzheim 1977: 34,18 / 19



Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.11 (Kombinationsgruppe (D-H) F-G: (485) 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.11
Opaque red, barrel shaped. Decoration: yellow waves, crossing, and yellow dots in between.
Number: 1
Type: Koch-Schretzheim 1977: 20,6
Schretzheim phase: 3/4 -4
Schretzheim date: 565/620/30-565
Alternative type: S-Per :35.12 (Kombinationsgruppe F-G: 570-670)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.2.12
Black, opaque, thick, cylindrical long. Decoration: white spiral band.
Number: 1
Type: Koch-Pleidesheim 2001: 42,46
Koch phasen: 1-2
Schretzheim date: 525/30-565/70
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.1
Yellow, opaque, small, globular compressed.
Number: 136
Type: YO30 / S-Per 33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Museum Het Domein



11-8-1.3



11-9-1



11-10-1 (SCALE 1:2)

Bead, glass
Find number: 11-8-1.3.2
Green, transparent, small, cylindrical short/globular compressed.
Type GT30/35
Number: 21
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.3
Red, opaque, globular compressed. Decoration: white waves, crossing.
Number: 2
Type: Koch-Schretzheim 1977: 34,11 / 34,12
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.8 (Kombinationsgruppe F-H: 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.4
Red, opaque, cylindrical.
Type: RO11
Number: 2
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.5
Red, opaque, barrel shaped. Decoration: white bands.
Number: 1

Type: Koch-Schretzheim 1977: 42,7
Schretzheim phase: 3
Schretzheim date: 565/60-600
Alternative type: S-Per: 35.13
(Kombinationsgruppe: D-G (H): 485-670 (705))
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.6
White, opaque, barrel shaped.
Number: 1
Type: WO19 / S-Per 32.3?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.7
Blue, opaque, globular.
Type: BO1
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.8
Black, opaque, small, short cylindrical.
Number: 11
Type: BLO35 / S-Per 31.1
Kombinationsgruppe: C-D
Rhineland phase: 3-6
Rhineland date: 485-585
Location: Museum Het Domein



11-8-1.4

Bead, glass
Find number: 11-8-1.3.9
Red, opaque, globular.
Number: 1
Type: RO1 / S-Per 35.6?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.10
Orange, opaque, cube.
Number: 1
Type: OO9 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.11
Red, opaque, barrel shaped.
Number: 1
Type: RO19 / S-Per 35.6?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.12
Yellow, opaque, globular compressed. Decoration: yellow waves, crossing.
Number: 3
Type: Koch-Schretzheim 1977: 34,18 / 19
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.11
(Kombinationsgruppe: (D-H) F-G: (485) 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.13
Orange, opaque, biconical.
Number: 1
Type: OO20 / S-Per 34.1 (groups: (G) H-I)
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.14
Red, opaque, globular compressed. Decoration: yellow waves, crossing, yellow dots in between waves.
Number: 1
Type: Koch-Schretzheim 1977: 20,4
Schretzheim phase: 3/4 - 4
Schretzheim date: 565-620/30
Alternative type: S-Per 35.12 (Kombinationsgruppe F-G: 570-670)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.15
Blue transparent, long biconical. Decoration: white opaque zigzag bands and red opaque dots.
Number: 1

Type: Koch-Schretzheim 1977: 21,5
Schretzheim phase: 3
Schretzheim date: 565/60-600
Alternative type: S-Per: 32.8 (Kombinationsgruppe F-H: 555-705
Alternative type: Koch-Pleidelshheim 2001; 21,23
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.3.16
Red, opaque, barrel shaped, double connected.
Decoration: white waves, crossing.
Number: 1
Type: S-Per: 35.8
Kombinationsgruppe: F-H
Rhineland phase: 5-10
Rhineland date: 555-705
Alternative type: S-Per: 35.7 (Kombinationsgruppe H: 610-705)
Alternative type: Koch-Schretzheim 1977 34,16
(4: 590/600-620/30)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.1
Yellow opaque, small, globular compressed.
Number: 136
Type: YO30 / S-Per 33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.2
Red opaque, globular compressed/barrel, double connected. Decoration: white waves, crossing.
Number: 4
Type: Koch-Schretzheim 34,11 / 34,12
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per 35.8 (Kombinationsgruppe F-H: 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.3
Red opaque, globular compressed. Decoration: white waves, crossing.
Number: 2
Type: Koch-Schretzheim 34,11 / 34,12
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per 35.8 (Kombinationsgruppe F-H: 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.4
Black, opaque, thick, cylindrical. Decoration: white spiral band.
Number: 2
Type: Koch-Pleidelshheim 2001; 42,46/Schretzheim group 42.
Schretzheim phase: 1-3
Schretzheim date: 525/30-590/600
Location: Musum het Domein

Bead, glass
Find number: 11-8-1.4.5
Red opaque, cylindrical, square section. Decoration: yellow opaque edge bands, white opaque combed bands, polychrome eyes: opaque yellow with opaque green.
Number: 1
Type: Koch-Pleidelshheim 2001; 60,1 / 60,2
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.6
Blue transparent, globular (compressed).
Type: BT1
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.7
Green opaque, globular
Number: 5
Type: GO1 / S-Per 37.1?
Kombinationsgruppe: (H) I
Rhineland phase: (8) 10
Rhineland date: (610) 670-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.8
Black, long cylindrical. Decoration: yellow spiral band.
Koch-Schretzheim 1977/Pleidelshheim 2001: group 42 (42,43?)
Schretzheim phase: 1-3
Schretzheim date: 525/30-590/600
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.9
Yellow, opaque, large, globular.
Type: YO1
Number: 6
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.10
White, opaque, biconical.
Number: 5
Type: WO20 / S-Per 32.3
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.11
Colourless, transparent, thick, short cylindrical. Decoration: yellow opaque edge band and zigzag band.
Number: 2
Type: S-Per 2.1 / 2.2
Kombinationsgruppe: H-I
Rhineland phase: 8-10
Rhineland date: 610-705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.12
Roman melon bead: blue, opaque, ribbed.
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.13
White, opaque, globular compressed. Decoration: blue transparent waves, crossing.
Number: 8
Type: Koch-Schretzheim 1977; 34,1
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per 32.7 (Kombinationsgruppe E-H: 530-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.14
White, opaque, globular compressed, double connected. Decoration: blue transparent waves, crossing.
Number: 1
Type: Koch-Schretzheim 1977; 34,6
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per 32.2 (Kombinationsgruppe H-I: 610-705)
Alternative type: S-Per 32.7 (Kombinationsgruppe E-H: 530-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.15
Red, opaque, small, globular compressed.
Number: 6
Type: RO30 / S-Per 35.4
Kombinationsgruppe: D (E-G)
Rhineland phase: 3 (4)- 6 (8)
Rhineland date: 485 (530)-585 (640)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.16
Red, opaque, thick, short cylindrical.
Number: 5
Type: RO11 / S-Per 35.6?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.17
Red, opaque, cylindrical, polygonal section (five sides).
Number: 2
Type: RO32 / S-Per 1.3
Kombinationsgruppe: D-I
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.18
White, opaque, thick, short cylindrical.
Type: WO11

Number: 3
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.19
Red, opaque, globular compressed. Decoration: yellow opaque waves, crossing, with yellow opaque dots in between.
Number: 3
Type: Koch-Schretzheim 1977; 20,7
Schretzheim phase: 3-4
Schretzheim date: 565-620/30
Alternative type: S-Per 35.12 (Kombinationsgruppe F-G: 570-670)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.20
Red, opaque, globular compressed. Decoration: yellow opaque waves, crossing.
Number: 2
Type: Koch-Schretzheim 1977; 34,18
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per 35.11 (Kombinationsgruppe (D-H) F-G: (485) 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.21
Red, opaque, cylindrical. Decoration: yellow opaque bands and dots.
Number: 2
Type: Koch-Schretzheim 1977; group 16
Schretzheim phase: 3
Schretzheim date: 565-590/600
Alternative type: Koch-Pleidelsheim 2001; 16,3
Alternative type: S-Per 35.23? (Kombinationsgruppe D-F: 485-670)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.22
Yellow, opaque, globular compressed. Decoration: black opaque waves crossing and red opaque dots in between.
Number: 1
Type: Koch-Schretzheim 1977; group 21
Schretzheim phase: 3
Schretzheim date: 565-590/600
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.23
Blue, opaque, globular (compressed).
Type BO1
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.24
White, opaque, barrel shaped.
Number: 1
Type: WO19 / S-Per 32.3?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.25
Red, opaque, large, barrel shaped/biconical.
Decoration: white opaque waves, crossing, white horizontal middle band, white opaque dots.
Number: 1
Type: Koch-Schretzheim 1977; 34,15
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per 35.8 (Kombinationsgruppe F-H: 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.26
Black, opaque, globular compressed.
Number: 1
Type: BLO30 / S-Per 31.1
Kombinationsgruppe: C-D
Rhineland phase: 3-6
Rhineland date: 485-585
Location: Museum Het Domein

Bead, amber
Find number: 11-8-1.4.27
Irregular shaped.
Type: A40
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.28
Red, opaque, cylindrical. Decoration: white opaque twirling bands, yellow opaque edge and middle bands.
Number: 1
Type: Koch-Schretzheim 1977; 58,1
Schretzheim phase: 3-4
Schretzheim date: 565-620/30
Alternative type: S-Per 35.26/27 (Kombinationsgruppe: D-H: 485-705)
Alternative type: S-Per 35.28 (Kombinationsgruppe: C-D: 485-585)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.29
White, opaque, stretched/long biconical. Decoration: transparent blue waves, crossing, and red opaque dots in between.
Number: 1
Type: Koch-Schretzheim 1977; 21,5
Schretzheim phase: 3
Schretzheim date: 565/60-600
Alternative type: S-Per 32.8 (Kombinationsgruppe F-H: 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.30
White, opaque, cylindrical with polygonal section (five sides).
Number: 1
Type: WO32 / S-Per 1.3
Kombinationsgruppe: D-I
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.31
Blue, transparent, long cylindrical.
Number: 1
Type: BT6 / S-Per 1.2 (Kombinationsgruppe: A / B-C)
Rhineland phase: 3/2-4
Rhineland date: 485/440-555
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.32
Red, opaque, globular compressed. Decoration: yellow opaque waves, crossing, and yellow opaque dots in between.
Number: 1
Type: Koch-Schretzheim 1977; 20,7
Schretzheim phase: 3-4
Schretzheim date: 565-620/30
Alternative type: S-Per 35.12 (Kombinationsgruppe F-G: 570-670)
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.33
Blue, transparent, cylindrical.
Type: BT11
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.34
Green, transparent, large, globular compressed.
Type: GT2
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.35
Red, opaque, biconical. Decoration: yellow, white and black opaque combed bands.
Number: 1
Type: Koch-Schretzheim 1977; Group 48,2-4
Schretzheim phase: 2-3
Schretzheim date: 545-590/600
Location: Museum Het Domein

Bead, glass
Find number: 11-8-1.4.36
Blue, transparent, large, biconical. Decoration: white, red, black and dark blue opaque combed/ swirling bands.
Number: 1
Type: Koch-Schretzheim 1977; group 50
Schretzheim phase: 2-3
Schretzheim date: 545-590/600
Location: Museum Het Domein

9 Human remains
Find number: 11-9-1
Human remains: teeth
Location: PDB Limburg

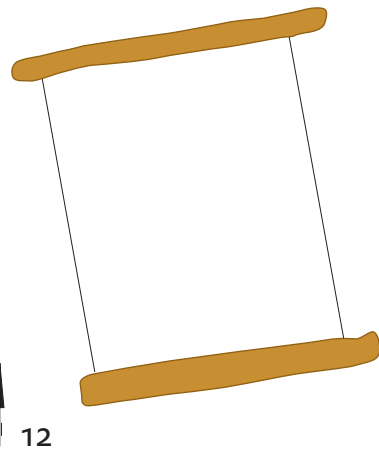
10 Glass vessel
Find depth: underneath beads 11-8 (55.90)
Find number: 11-10-1
Upper part of a light green bell beaker with an incurved wall, slightly visible vertical to diagonal ribs, and a straight but thickened rim. Air bubbles are visible. The bell beaker was found in fragmented condition; the loose fragments were glued together, the rim is incomplete and the lower part of the vessel is absent.
Location: Museum Het Domein.

12 INHUMATION GRAVE

Trench	1
Grave structure	possible wooden
container grave	
Grave pit length	190
Grave pit width	134
Grave pit depth	3
Orientation	350 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The recorded features are either the outlines of the burial pit with two wooden beams or traces of a container placed on two wooden beams.

GRAVE DATE
Cannot be dated



13 INHUMATION GRAVE

Trench	1
Grave structure	tree trunk grave
Grave pit length	208
Grave pit width	141
Grave pit depth	13
Orientation	351 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container. The northern end of grave 13 was not excavated, but a profile drawing of the northern trench wall displays the grave's section (see chapter 5). This section shows that the bottom of the container was concave which indicates that the body was buried in a tree trunk coffin.

GRAVE DATE
SK Ila: 565-610/20
FAG phases 5-6: 565-610/20

FINDS
1 Pottery vessel
Find number: 13-1-1
Biconical pot with a light brown to grey surface and dark stains (fire traces?) on the pot's exterior. The upper wall is decorated with 4 to 5 single lines of rectangular roulette stamp impressions. The pot is nearly complete, though found in fragmented condition. The fragments are glued together.
Height: 10.2 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6-7
Rhineland date: 570-610
Location: Museum Het Domein



13-1-1

14

INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	256
Grave pit width	179
Grave pit depth	36
Orientation	342 (SE-NW)

DESCRIPTION

Merovingian inhumation grave. The grave's orientation was south-north. The burial pit was rectangular with slightly rounded corners and held two wooden containers, two wooden beams, and a large wooden box. The outer container was the wooden chamber supported by two wooden beams. The larger inner container was the wooden coffin that held the body of the deceased. A skull imprint was still visible in the southern end of the coffin. The wooden chamber also contained a

wooden box (or a second, smaller coffin), which was placed in its south-eastern corner, next to the wooden coffin with remnants of the body. Skeletal remains or finds were not found in this box. It had a length of 64 cm and a width of 44 cm, and is thus nearly twice as large as the box deposited in grave 71. In view of its size it can be questioned whether it was a box, similar to the boxes regularly deposited in Merovingian graves, or a coffin of a very young child. In the north-eastern corner wood remains were preserved underneath a bronze bowl. According to Zoetbrood, the wood remains were part of a wooden bowl. However, it is also possible that they are remnants of the wooden container floor.

PHYSICAL ANTHROPOLOGY

Not suitable for examination

GRAVE DATE

SK IIb: 565-640/50
FAG phases 5-7: 565-640/50

FINDS

1 Belt fitting, iron.
Find number: 14-1-1
Find depth: 55.98-55.06
Iron plate buckle with round plate and three domed copper alloy rivets. The edges of the tongue base are decorated with a stamped in rows of triangles.
Plate length: 5.5 cm
Loop length: 6.2 cm
Type: Siegmund Gür4.1
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Gür4.1/2 (565-610/20)
Alternative type: Koch-Schretzheim 1977: (590/600-620/30)
Location: PDB Limburg.

Belt fitting, iron
Find number: 14-2-1
Find depth: 55.98-55.06
Iron counter plate with round plate and two (of originally three) domed copper alloy rivet; the pins (with leather remains) of the other rivets are visible at the back side of the plate.

Plate length: 5.2 cm
Type: Siegmund Gür4.1
Rhineland phase: 7
Rhineland phase: 585-610
Alternative type: FAG Gür4.1/2 (565-610/20)
Alternative type: Koch-Schretzheim 1977: (590/600-620/30)
Location: PDB Limburg.

2 Belt fitting, iron
Find number: 14-2-1
Find depth: 55.83
Iron plate buckle with round plate and one (of originally three) domed copper alloy rivet.
Plate length: 4.5 cm
Loop length: 5.6 cm
Type: Siegmund Gür4.1
Rhineland phase: 7
Rhineland phase: 585-610
Alternative type: FAG Gür4.1/2 (565-610/20)
Alternative type: Koch-Schretzheim 1977: (590/600-620/30)
Location: PDB Limburg

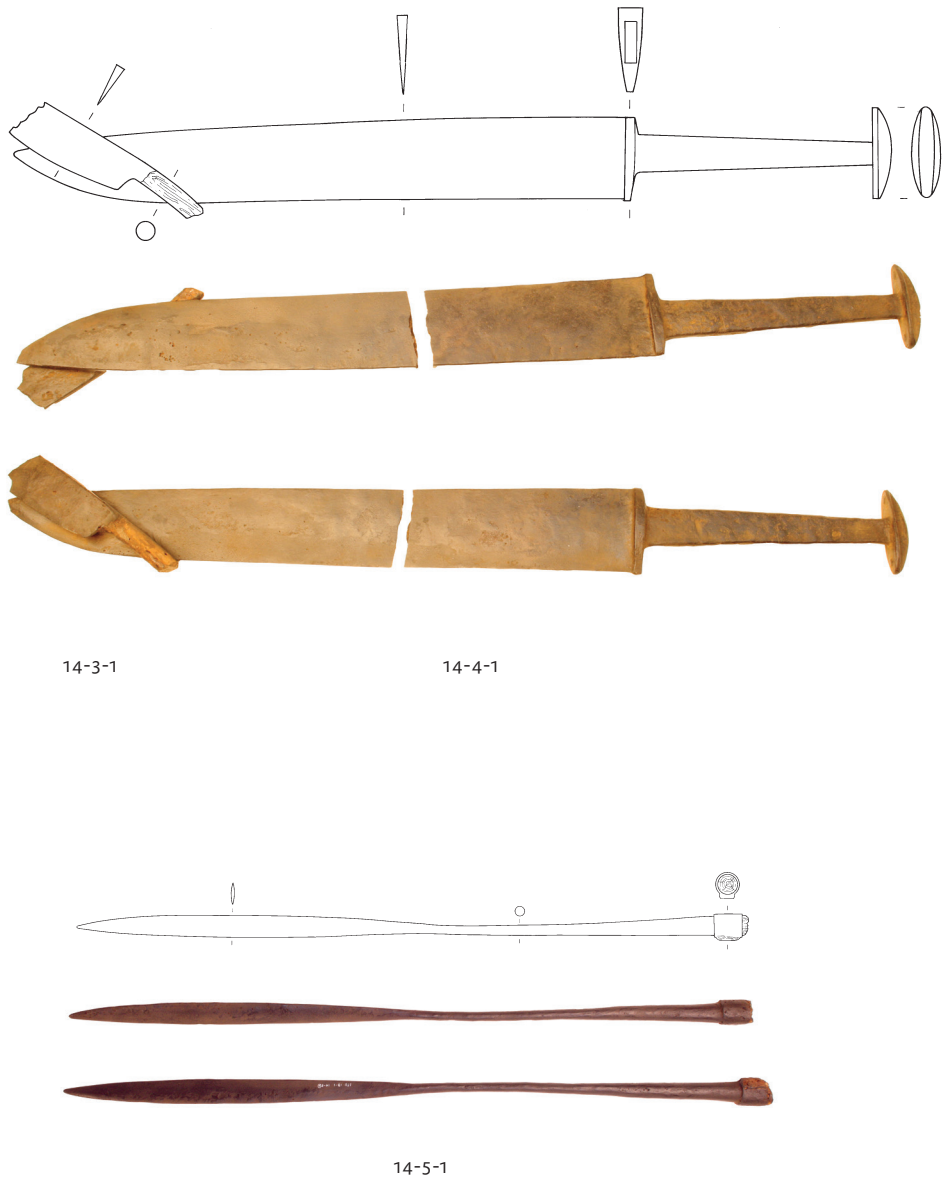
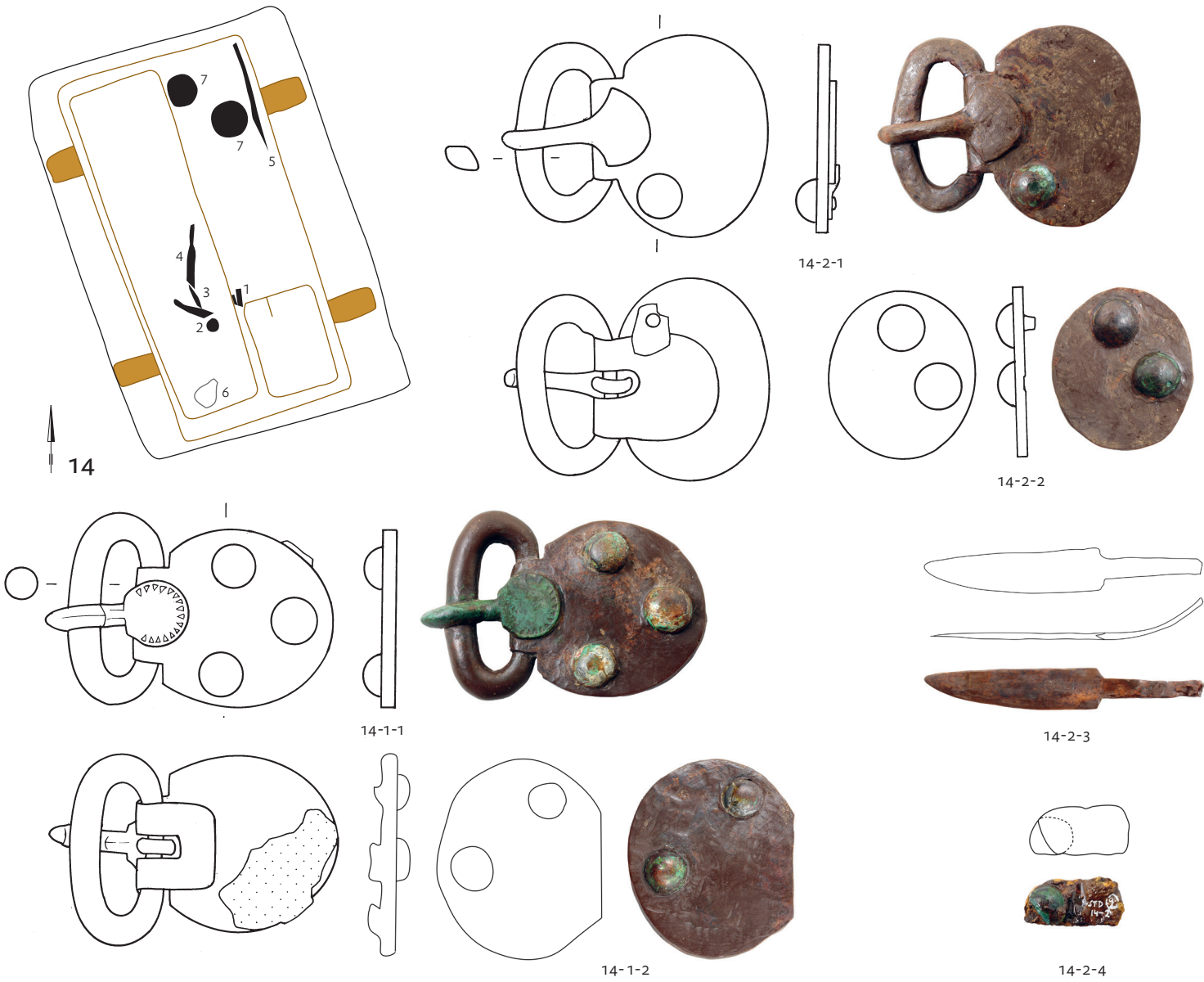
Belt fitting, iron
Find number: 14-2-2
Find depth: 55.83
Iron counter plate, not decorated, and with two (of originally three?) domed copper alloy rivets present. Heavily restored; the plate base was probably originally not this round.
Plate length: 4.6 cm
Type: Siegmund Gür4.1
Rhineland phase: 7
Rhineland phase: 585-610
Alternative type: FAG Gür4.1/2 (565-610/20)
Alternative type: Koch-Schretzheim 1977: (590/600-620/30)
Location: PDB Limburg

Knife, iron
Find number: 14-2-3
Find depth: 55.83
Iron knife with a straight back and bent hilt.
Length blade: 11.6 cm
Location: PDB Limburg

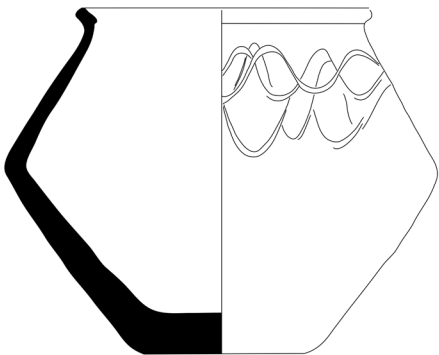
Belt fitting, iron
Find number: 14-2-4
Fragment of what is probably an iron counter plate or plate buckle with one domed copper alloy rivet. Leather remains seem to be attached to the back side of the plate. It was probably a fragment of one of the other plates from this grave and by mistake not included in the restoration process.
Length: 3.2 cm
Location: PDB Limburg

3 Knife, iron
Find number: 14-3-1
Find depth: 55.82
Iron knife, attached to seax 14-4-1. Half of the blade is missing; wood remains are preserved around the iron hilt core.
Length blade: 6.3 cm
Location: PDB Limburg.

4 Seax, iron
Find number: 14-4-1
Find depth: 55.81
Iron seax with copper alloy hilt knob. A knife (14-3-1) was found attached to its tip.
Length blade: 32.8 cm



- Type: FAG Sax2.1
FAG phase: (5) 6-7 (8)
FAG date: (565) 580/90-640/50 (680)
Alternative type: Siegmund Sax2.1 (585-655)
Location: PDB Limburg
- 5 Lance head, iron
Find number: 14-5-1
Find depth: 55.86
Iron lance head with a long oval blade and closed socket with wood remains and a band around the base of the socket. An unidentifiable fragment is attached to the band around the socket base.
Length blade: 36.0 cm
Type: Siegmund Lan2.2
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: L/P/V 36 ((MA3-MR1 (520/30-630/40)) MR2: 630/40-660/70)
Alternative type: FAG S-Lan2.2 (5-7: 565-640/50)
Location: PDB Limburg
- 7 Pottery vessel
Find number: 14-7-1
Find depth: 55.95
Biconical pot with an orange surface and of a coarse burnished ware. Black stains (fire traces) are visible on the carination. The upper wall is decorated with shallow undulating grooves.
Height 18.1 cm
Type: Siegmund Kwt2.31
Rhineland phase: 5
Rhineland date: 555-570
Location: Museum Het Domein



14-7-1



- Bowl, copper alloy
Find number: 14-7-2
Find depth: 55.85
Copper alloy bowl with a simple horizontal outward folded rim.
Height: 7.1 cm
Diameter: 27.4 cm
Type: FAG-BrgF
FAG phases: 4-5
FAG date: 510/25-580/90
Location: Museum Het Domein.

- Wood remains
Find number: 14-7-3
Find depth: 55.80
Wood remains underneath the copper alloy bowl: remains of a wooden bowl or the floor of the chamber.
Location: PDB Limburg



14-7-2



14-7-3

15 INHUMATION GRAVE

Trench	1
Grave structure	possible wooden container grave
Grave pit length	284
Grave pit width	186
Grave pit depth	8
Orientation	350 (SE-NW)

- DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained two wooden beams. The presence of beams suggests that the grave initially held a container, but its remains were not found during excavation.

- GRAVE DATE

SK IIa: 565-610/20
FAG phases 5-6: 565-610/20

- FINDS

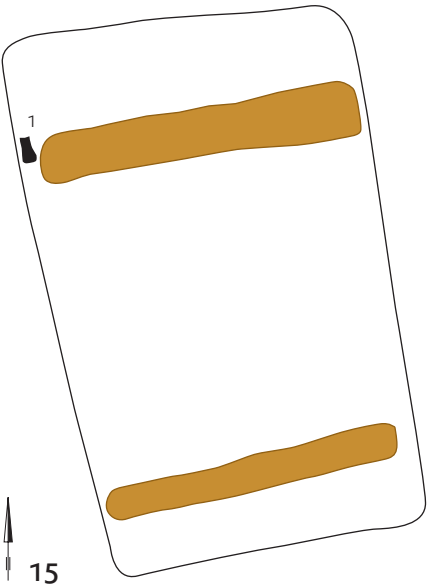
1 Glass vessel
Find number: 15-1-1
Find depth: 55.98
Palm cup of olive green glass with 12 vertical wall ribs of which four are prolonged forming a cross on the bottom of the cup. Air bubbles are visible and a fragment of the wall is missing.
Height: 6.9 cm
Type: Maul A1b
Date: 560/70-630/40
Alternative type: Feyeux 55.3k (550-600)
Alternative type: Siegmund Glaz.1 (585-610)
Location: Museum Het Domein

16 INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	265
Grave pit width	197
Grave pit depth	47
Orientation	353 (S-N)

- DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The presence of beads near the western wall inside the second inner container suggests that it was the wooden coffin that held the body. However, a body silhouette or human remains were not discovered inside this container. A small rectangular pit, containing charcoal and fragments of a pottery vessel, cuts the eastern walls of both containers. This could be a small reopening pit, but the large amount of charcoal seems to indicate that it was a fire pit. The mounts of a wooden box were found dispersed throughout the grave, which seems to indicate that it was disturbed at some time. Since the mounts were found at a lower level than the bottom of the fire pit, it cannot have damaged the box and the grave might already have been disturbed or reopened before the fire pit was dug. Moreover, a pottery vessel with a distinct white fabric that might be later in date than the other datable finds from the grave, was found in the pit at a higher level than the other finds. It can be concluded that the pit was dug some time after the grave was created. It is not certain whether the grave was intentionally disturbed by this pit since its appearance is rather different from the other reopening pits known from the cemetery; the pit which its charcoal remains might be a result of cemetery related rituals other than the practice of reopening graves.



15

- GRAVE DATE

SK IIa: 565-610/20
FAG phases 5-6: 565-610/20

- FINDS

1 Charcoal
Find number: 16-1-1
Charcoal in dried or burned loam.
Location: PDB Limburg

2 Pottery vessel
Find number: 16-2-1
Find depth: 56.22
Egg shaped pot with a white/grey/yellow surface, volcanic inclusions and orange spots (rust?). The bottom is partly missing.
Height: 18.0 cm
Type: Siegmund Wwt2.22
Rhineland phases: 10-11
Rhineland date: 670-740
Alternative type: FAG S-Wwt2.22 (9-10: 670/80-750)
Location: PDB Limburg

3 Bead, glass
Find number: 16-3-1.1
Find depth: 55.88
Yellow, opaque, small, globular compressed, double connected.
Number: 2
Type: YO25 / S-Per 33.6
Kombinationsgruppe: G-H
Rhineland phase: 6-10
Rhineland date: 570-705
Location: Museum Het Domein

- Bead, glass
Find number: 16-3-1.2
Find depth: 55.88
Yellow, opaque, small, globular compressed.
Number: 3
Type: YO30 / S-Per 33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Museum Het Domein

- Bead, glass
Find number: 16-3-1.3
Find depth: 55.88
White/grey opaque, barrel shaped/biconical.
Number: 1
Type: WO20 / S-Per 32.3
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

- Bead, glass
Find number: 16-3-1.7
Find depth: 55.88
Red, opaque, globular compressed/barrel shaped.
Number: 1
Type: RO18 / S-Per 35.6?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

- Bead, glass
Find number: 16-3-1.11
Find depth: 55.88
Orange, opaque, barrel shaped.
Number: 2
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

- Bead, amethyst
Find number: 16-3-1.12
Find depth: 55.88
Almond shaped.
Number: 1
Type: S-Per 5.2
Location: Museum Het Domein

Bead, glass
Find number: 16-3-1.14
Find depth: 55.88
Red, opaque, short cylindrical. Decoration: yellow opaque waves, crossing.
Number: 1
Type: Koch-Schretzheim 1977; 34,20
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per 35.11 (Kombinationsgruppe (D-H) F-G: (485) 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 16-3-1.15
Find depth: 55.88
Red, opaque, short cylindrical, double connected.
Decoration: white opaque waves, crossing.
Number: 2
Location: Museum Het Domein

Bead, glass
Find number: 16-3-1.16
Find depth: 55.88
Red, opaque, short cylindrical. Decoration: white opaque waves, crossing.
Number: 1
Type: Koch-Schretzheim 1977; 34,17
Schretzheim phase: 4

Schretzheim date: 590/600-620/30
Alternative type: S-Per 35.7 (Kombinationsgruppe H: 610-705)
Alternative type: S-Per 35.8 (Kombinationsgruppe F-H: 555-705)
Location: Museum Het Domein

Bead, glass
Find number: 16-3-1.18
Find depth: 55.88
Blue, transparent, globular compressed, double connected.
Number: 1
Type: BT25 / S-Per 37.2
Kombinationsgruppe: F-I
Rhineland phase: 5-10
Rhineland date: 555-705
Location: Museum Het Domein

Bead, glass
Find number: 16-3-1.19
Find depth: 55.88
Red, opaque, large, biconical. Decoration: yellow opaque edge bands, blue transparent vertical bands and red opaque horizontal bands.
Number: 1
Type: S-Per: 35.20
Kombinationsgruppe: H-I
Rhineland phase: 8-10

Rhineland date: 610-705
Alternative type: Koch-Pleidelsheim 2001; 72,1
Location: Museum Het Domein

Bead, glass
Find number: 16-3-1.0
Find depth: 55.88
Red-brown biconical bead. Decoration: white waves and three yellow bands.
Number: 1
Location: Missing

Bead, glass
Find number: 16-3-1.0
Find depth: 55.88
Red-brown ring shaped bead. Decoration: five white and blue eyes, five yellow dots, and two yellow bands.
Number: 1
Location: Missing

Bead, glass
Find number: 16-3-1.0
Find depth: 55.88
Red-brown ring shaped bead. Decoration: four white and green-blue eyes and white waves.
Number: 1
Location: Missing

4 Glass vessel
Find number: 16-4-1
Find depth: 55.90
Missing, description from the thesis of Zoetbrood: palm cup of yellow-green glass and 16 vertical ribs of which four are prolonged forming a cross on the bottom of the cup. Air bubbles are mentioned.
Height: not known.
Type: Maul A1b
Date: 560/70-630/40
Alternative type: Feyeux 55.3k (550-600)
Alternative type: Siegmund Glaz.1 (585-610)
Location: missing

5 Mount, iron
Find number: 16-5-1
Find depth: 55.90/55.95
Probably a corner fitting of a wooden box.
Length: 7.9 cm
Type: Nieveler 2003; wooden boxes with iron fittings
Phase: 3-7
Date: 460/80-640/50
Location: PDB Limburg

Mount, iron
Find number: 16-5-2
Find depth: 55.90/55.95
Probably a corner fitting of a wooden box.
Length: 7.3 cm
Type: Nieveler 2003; wooden boxes with iron fittings
Phase: 3-7
Date: 460/80-640/50
Location: PDB Limburg

Mount, iron.
Find number: 16-5-3.1
Find depth: 55.90/55.95
Probably a corner fitting of a wooden box.
Length: 8.0 cm
Type: Nieveler 2003; wooden boxes with iron fittings
Phase: 3-7
Date: 460/80-640/50
Location: PDB Limburg

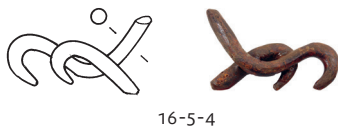
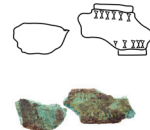
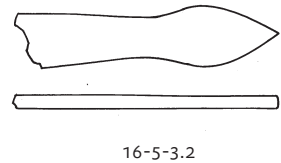
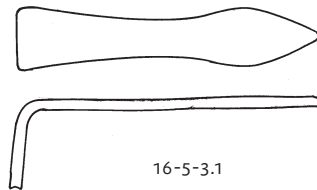
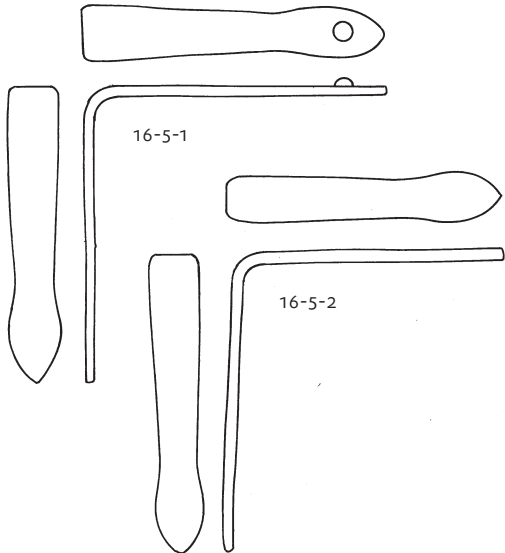
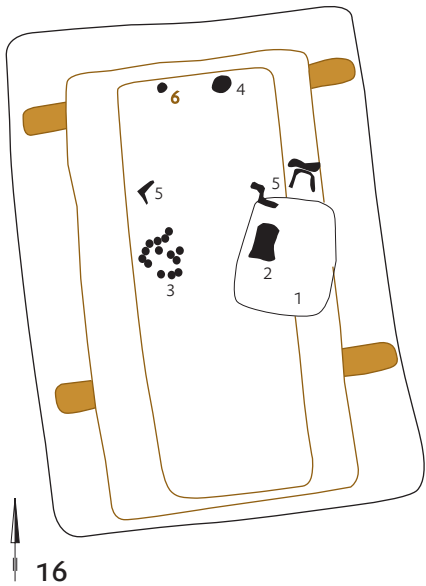
Mount, iron
Find number: 16-5-3.2
Find depth: 55.90/55.95
Probably a corner fitting of a wooden box (broken, the short side missing).
Length: 7.9 cm
Type: Nieveler 2003; wooden boxes with iron fittings
Phase: 3-7
Date: 460/80-640/50
Location: PDB Limburg

Chain links, iron
Find number: 16-5-4
Find depth: 55.90/55.95
Probably a hinge or fastener of a wooden box.
Section: 0.4 cm
Type: Nieveler 2003; wooden boxes with iron fittings
Phase: 3-7
Date: 460/80-640/50
Location: PDB Limburg

Mounts, iron
Find number: 16-5-5
Find depth: 55.90/55.95
Probably a hinge of a wooden box; the two mounts each have two rivets and are attached to one another with their looped extremities.
Length: 5.5 cm
Type: Nieveler 2003; wooden boxes with iron fittings
Phase: 3-7
Date: 460/80-640/50
Location: PDB Limburg

6 Fragment, sheet copper alloy
Find number: 16-6-1
Find depth:-
Fragment of sheet copper alloy with a stamped in decoration of triangles along the edges.
Length: 2.0 cm
Location: PDB Limburg

Fragment, copper alloy
Find number: 16-6-2
Copper alloy fragment of a strap end?
Length: 1.4 cm
Location: PDB Limburg



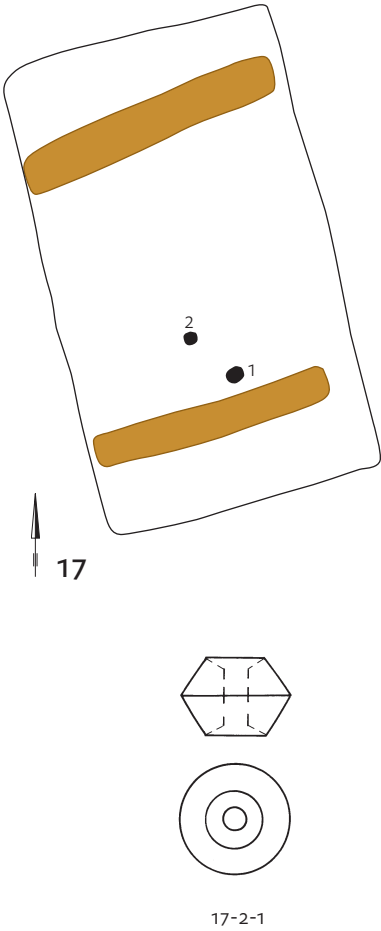
17
INHUMATION GRAVE

Trench	1
Grave structure	possible wooden container grave
Grave pit length	255
Grave pit width	149
Grave pit depth	7
Orientation	346 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained two wooden beams. The presence of beams suggests that the grave initially held a container, but its remains were not found during excavation.

GRAVE DATE
Cannot be dated

- FINDS**
- 1 Fragment, copper alloy
Find number: 17-1-1
Find depth: 56.10
Unidentifiable object (no drawing available)
Location: PDB Limburg



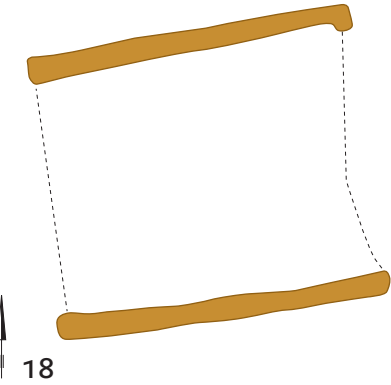
- 2 Spindle whorl/sword bead: amber?
Find number: 17-2-1
Find depth: 55.91
Biconical, symmetrical spindle whorl or sword bead with a crackled surface; it is probably of amber. The field drawing mentions that a mole pipe going through the grave moved the spindle whorl from its original location.
Diameter: 2.8 cm.
Location: PDB Limburg

18
INHUMATION GRAVE

Trench	1
Grave structure	possible wooden container grave
Grave pit length	177
Grave pit depth	2
Orientation	352 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The outline of a burial pit or container was not observed, but the outlines of two wooden beams suggest the grave contained a wooden container placed on two wooden beams.

GRAVE DATE
Cannot be dated



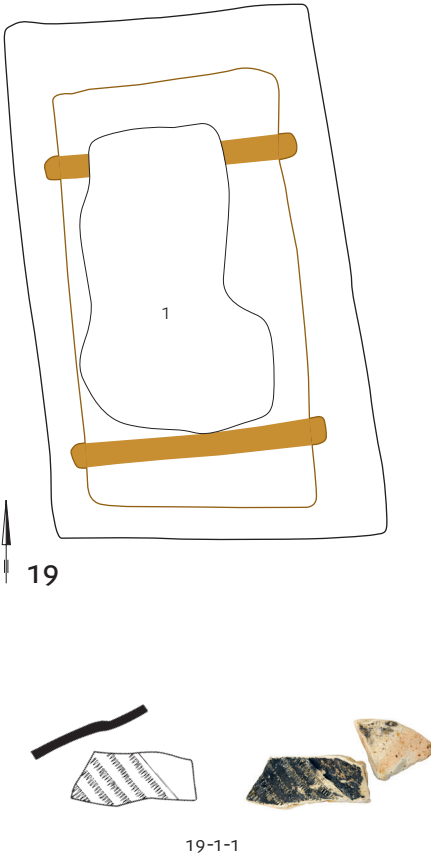
19
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	277
Grave pit width	177
Grave pit depth	16
Orientation	354 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. A reopening pit was dug in the centre of the grave; it was first seen 7.0 cm above the lowest recorded point of the container. The reopening pit disturbed most of the interior of the wooden container; a pottery fragment was found inside the reopening pit. The grave is dated on the basis of this fragment alone, which, however, might have entered the grave when the reopening pit was dug.

GRAVE DATE
SK IIb: 565-640/50
FAG phases 5-7: 565-640/50

- FINDS**
- 1 Pottery, fragment
Find number: 19-1-1
Wall fragment (can be of a biconical pot) with a light yellow/grey core and a dark grey surface. It is

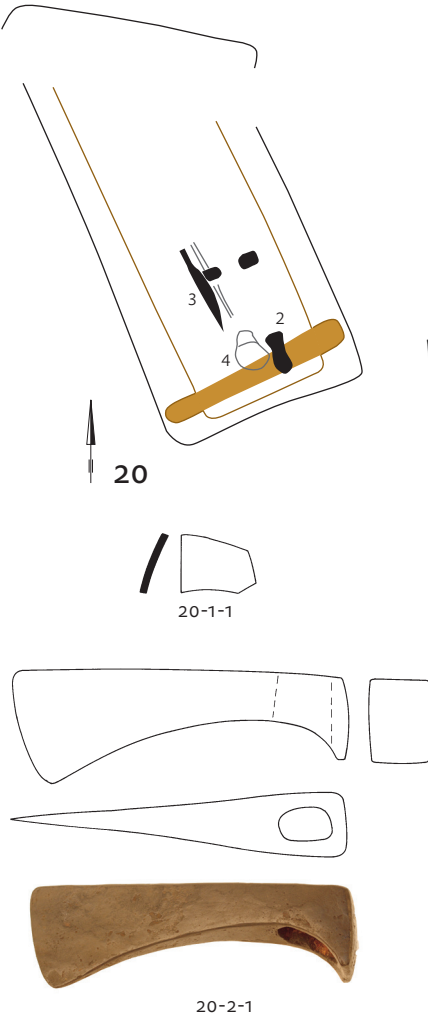


decorated with single lines of short vertical stripes or slim triangular roulette stamp impressions.
Type: FAG-Kwt5E
FAG phase: 5-7
FAG date: 565-630/40
Alternative type decoration: L/P/V 415 (520-640)
Location: PDB Limburg

20
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	225
Grave pit width	104
Grave pit depth	27
Orientation	337 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was south-north. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on at least one wooden beam. A skull imprint was visible in the grave’s southern end. Grave 20 was excavated in two separate trenches within large trench 1. One of the trenches (with graves 14 - 21) only contained a small part of the grave’s northern end. The other



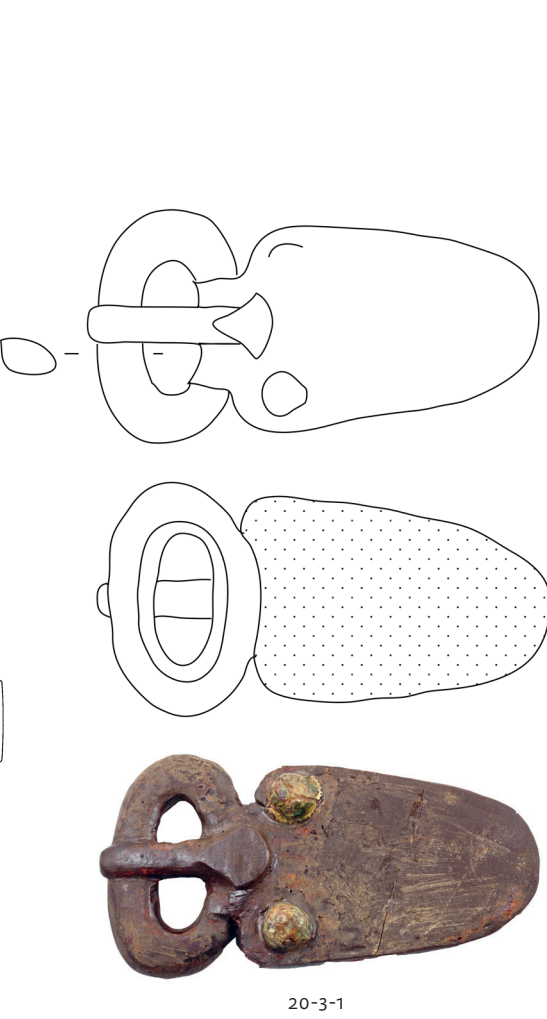
trench contained the larger remaining part with the wooden container and the single surviving beam. The second beam was probably overlooked and dug away. A section drawing of the southern end shows that the wooden container had straight walls and a flat bottom (see chapter 3).

PHYSICAL ANTHROPOLOGY
Not suitable for examination.

GRAVE DATE
SK IId: 610/20-640/50
FAG phases 5-7: 565-640/50

- FINDS**
- 1 Fragment, pottery.
Find number: 20-1-1
Small, thin pottery fragment with a brown surface and tempered with pottery grid and quartz.
Location: PDB Limburg

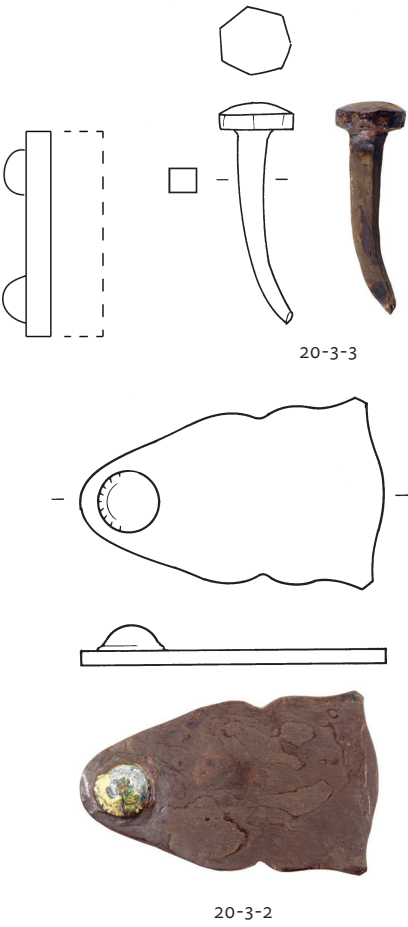
- 2 Axe, iron
Find number: 20-2-1
Find depth: 56.65
Axe blade with a straight upper edge.
Length blade: 17.3 cm
Type: FAG S-FBA2.1
FAG phases: 5-6
FAG date: 565-610/20
Alternative type: Siegmund FBA2.1 (570-610)
Alternative type: L/P/V 4 (520/30-600/610)
Location: PDB Limburg



- 3 Belt fitting, iron
Find number: 20-3-1
Find depth: 56.60
Iron plate buckle with a tongue shaped plate with two (of originally three) domed copper alloy rivets with a carved/dentaded rim. Textile remains are preserved on the back side of the plate.
Length plate: 8.0 cm
Length loop: 6.0 cm
Type: Siegmund Gür4.5
Rhineland phase: 8A
Rhineland date: 610-625
Location: PDB Limburg

- Belt fitting, iron
Find number: 20-3-2
Find depth: 56.60
Iron counter plate or plate of a plate buckle with one domed copper alloy rivet (of originally three) with a carved/dentaded rim. Its current shape is the result of rigorous restoration and does not necessarily represent its original shape.
Length plate: 8.1 cm
Type: Siegmund Gür4.5
Rhineland phase: 8A
Rhineland date: 610-625
Location: PDB Limburg

- Nail, iron
Find number: 20-3-3
Find depth: 56.60



Iron nail, large, with a bent shank and a domed head.
The tip is missing.
Diameter head: 1.7 cm
Length: 5.9 cm
Location: PDB Limburg.

Knife, iron
Find number: 20-3-4
Find depth: 56.60
Iron knife with a curved back and wood remains of the hilt.
Length blade: 12.9 cm
Location: PDB Limburg

Knife, iron
Find number: 20-3-5
Find depth: 56.60
Fragment of an iron knife: hilt and part of the blade.
Length blade: 3.3 cm
Location: PDB Limburg

Seax, iron
Find number: 20-3-6.1
Find depth: 56.60
Iron seax with the remains of the scabbard (leather and wood?) attached to one side of the seax.
Length blade: 35.0 cm
Type: FAG Sax2.2
FAG phases: (6)7-8 (9)
FAG date: (580) 640-670/80 (710)
Alternative type: Siegmund Sax2.2 (640-705)
Location: Museum Het Domein

Seax, scabbard
Find number: 20-3-6.2
Find depth: 56.60
Wood and leather remains of the seax scabbard which cover one side of the seax completely.
Type: FAG Sax2.2
FAG phases: (6)7-8 (9)
FAG date: (580) 640-670/80 (710)
Alternative type: Siegmund Sax2.2 (640-705)
Location: Museum Het Domein

Bead, glass
Find number: 20-3-7
Find depth: 56.60
Black, opaque, globular compressed.
Number: 1
Type: BLO30 / S-Per 31.1
Kombinationsgruppe: C-D
Rhineland phase: 3-6
Rhineland date: 485-585
Location: missing

Stone
Find number: 20-3-8
Find depth: 56.60
Black stone, triangular.
Length: 3.4 cm
Location: PDB Limburg

4 Human remains
Find number: 20-4-1
Find depth: 56.58
Imprint of a skull recorded on the field drawing.
Location: not relevant

21 POSSIBLE INHUMATION GRAVE

Trench	1
Grave structure	trench grave?
Grave pit length	205
Grave pit width	93
Grave pit depth	32
Orientation	11 (SW-NE)

DESCRIPTION
Possible Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners, but its features were very vague. Apart from the fact that this vague pit outline has a grave-like shape, there are no indications for it actually having been a grave. Traces of a wooden container were not found and neither were any grave objects.

GRAVE DATE
Cannot be dated

22 INHUMATION GRAVE

Trench	1
Grave structure	possible wooden container grave
Grave pit length	236
Grave pit width	164
Grave pit depth	12
Orientation	345 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained two wooden beams, which were only partly observed. The presence of beams suggests that the grave initially held a container, but its remains were not found during excavation.

GRAVE DATE
Cannot be dated

23 INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	237
Grave pit depth	26
Orientation	355 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The beads in the southern section of the grave, however, indicate the initial location of the head. The burial pit was rectangular with slightly rounded corners. A body silhouette was not present, but traces of the eastern wall of a wooden container were visible in between the extremities of the two beams.

GRAVE DATE
SK IIIB: 640/50-c.750
FAG phases 8-9: 640/50-710

FINDS
1 Bead, glass
Find number: 23-1-1.1
White, opaque, cylindrical.
Number: 5
Type: WO11 / S-Per32.3?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 23-1-1.2
Yellow, opaque, small, globular compressed.
Type: YO30
Number: 16
Type: YO30 / S-Per33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: PDB Limburg

Bead, glass
Find number: 23-1-1.3
Blue, transparent, small, globular compressed.
Type: BT30
Number: 5
Location: PDB Limburg

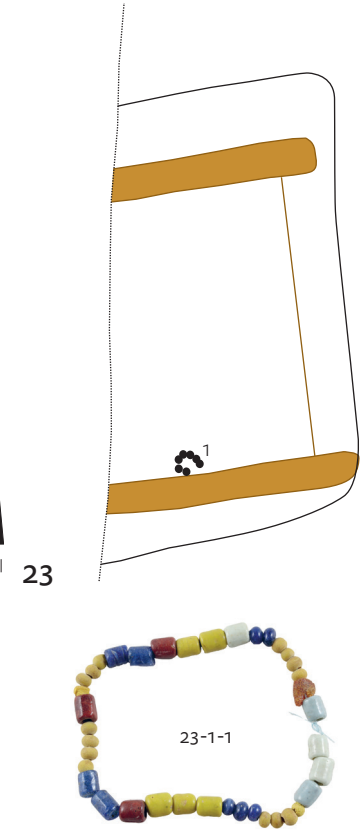
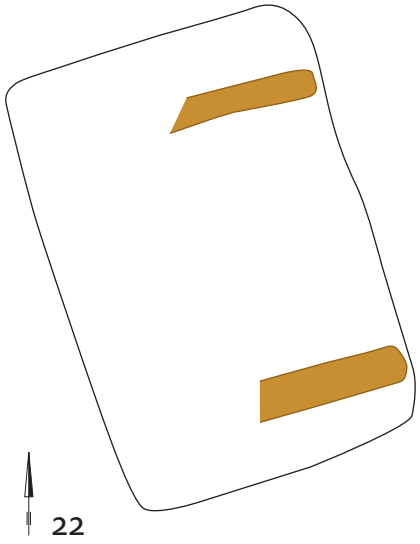
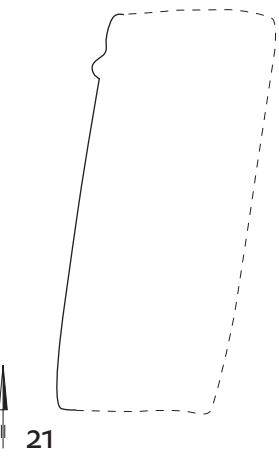
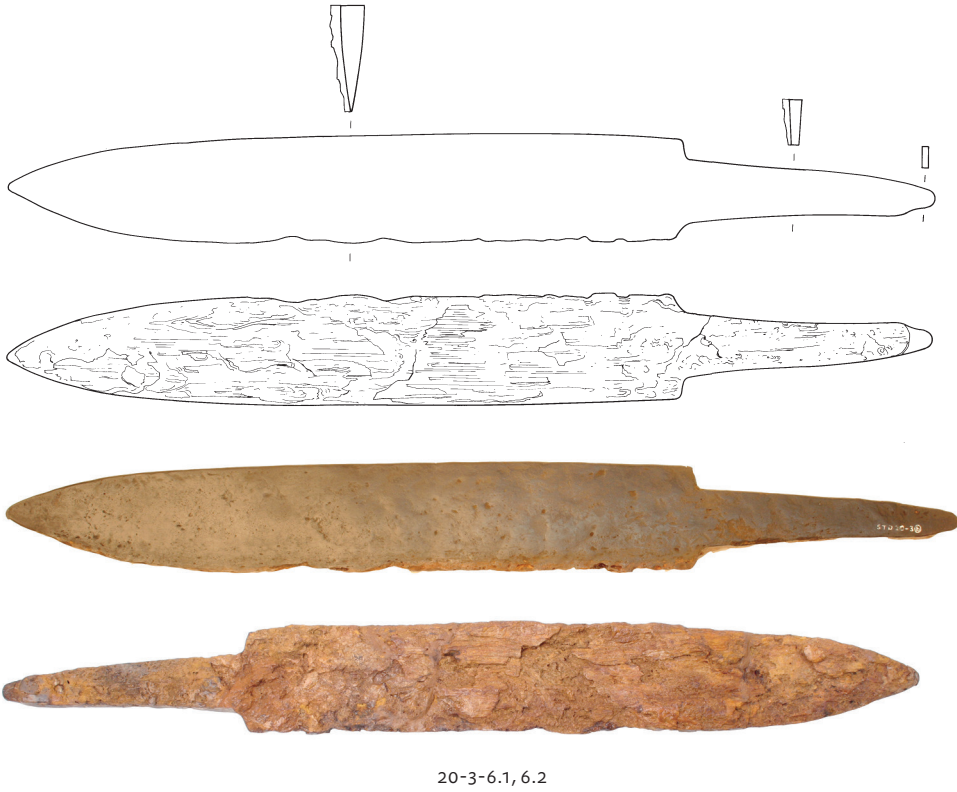
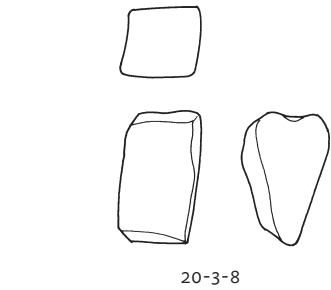
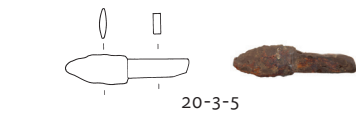
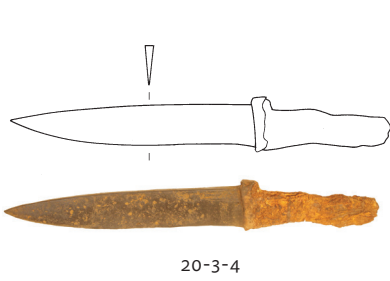
Bead, glass
Find number: 23-1-1.4
Yellow, opaque, cylindrical.
Type: YO11
Number: 5

Type: YO11 / S-Per33.5?
Kombinationsgruppe: G-I
Rhineland phase: 6-10
Rhineland date: 570-705
Location: PDB Limburg

Bead, glass
Find number: 23-1-1.5
Red/brown, opaque, small, cylindrical.
Number: 3
Type: RO35 / Per35.6?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 23-1-1.6
Blue, opaque, cylindrical.
Number: 4
Type: BO11 / S-Per37.1?
Kombinationsgruppe: (H) I
Rhineland phase: (8) 10
Rhineland date: (610) 670-(640) 705
Location: PDB Limburg

Bead, amber
Find number: 23-1-1.7
Damaged, drop-shaped, diameter: 0.66 cm
Type: A22
Number: 1
Location: PDB Limburg



24

INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	208
Grave pit width	153
Grave pit depth	2
Orientation	351 (S-N)

DESCRIPTION

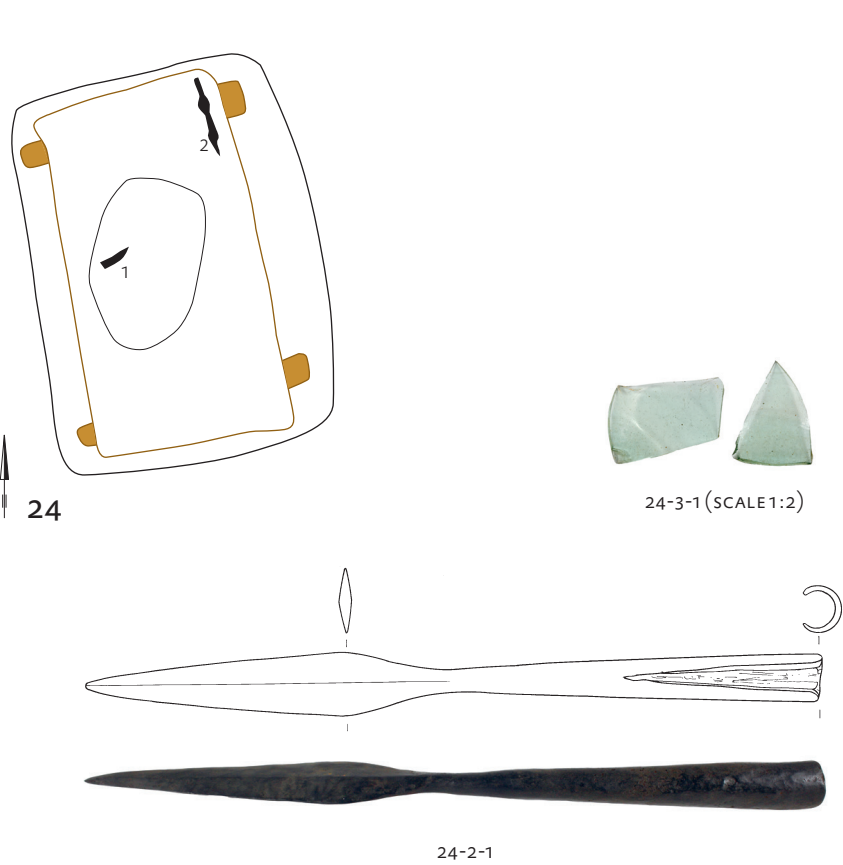
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. A reopening pit was dug in the centre of the grave, without disturbing the walls of the wooden container. The fragments of the spouted pot, found in the middle of the reopening pit, may have entered the grave when the pit was dug. The grave is part of a cluster of graves (24, 25 and 26), which show traces of reopening pits.

GRAVE DATE

SK IIa: 565- 610/20
FAG phases 5-6: 565-610/20

FINDS

1 Pottery vessel
Find number: 24-1-1
Find depth: 56.47
Spouted pot: rim fragments with remnants of a spout. The fragments have an orange surface and are decorated with two zones of horizontal grooves.



Height: could not reconstructed
Type: Siegmund Kwt2.33
Rhineland phases: 6-8
Rhineland date: 570-640
Alternative type: Siegmund Kwt2.32 (530-570)
Alternative types: Siegmund Kwt2.31 (555-570)
Location: PDB Limburg

2 Lance head, iron
Find number: 24-2-1
Find depth: 56.48
Iron lance head with a long oval blade and an open socket with wood remains in its upper part and soil remains in its lower part.
Length blade: 19.1 cm
Type: Siegmund Lan1.4
Rhineland phases: 6-8A
Rhineland date: 570-625
Alternative type: L/P/V 33 (470/80-600/610)
Alternative type: FAG S-Lan1.4 (565-620)
Location: PDB Limburg

3 Glass vessel
Find number: 24-3-1
Two fitting wall fragments of a glass vessel; light green with small air bubbles. Type identification not possible; they might have belonged to a shallow bowl.
Length: 3.7 cm
Location: PDB Limburg

25

INHUMATION GRAVE

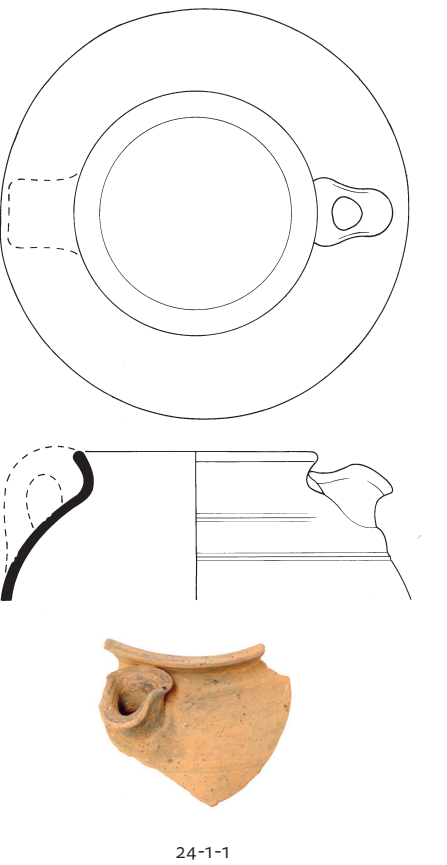
Trench	1
Grave structure	wooden container grave
Grave pit length	224
Grave pit width	159
Grave pit depth	56
Orientation	355 (S-N)

DESCRIPTION

Merovingian inhumation grave. The location of beads suggests that the grave's orientation was south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. A reopening pit was dug in the middle and northern part of the grave, but left the walls of the wooden container undisturbed. The grave is part of a cluster of graves (24, 25 and 26) showing traces of reopening pits. The bottom pottery fragment found in this grave probably moved from its original location and might have been of a pot of which the other parts were taken when the grave was reopened. The beads appear to be at their original location, but the brooch, found in the middle of the reopening pit, may have entered the grave when the pit was dug or moved from its original location.

GRAVE DATE

SK IIIa: 640/50-670/80
FAG phases 7-8: 610/20-670/80



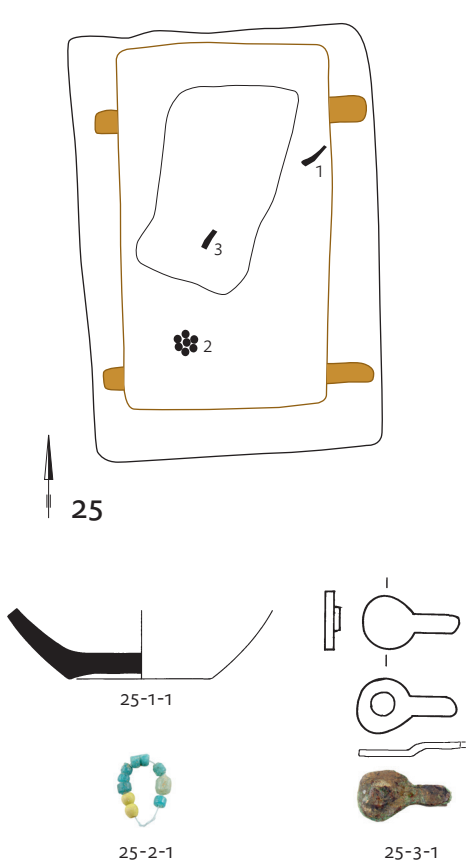
FINDS

1 Fragment, pottery
Find number: 25-1-1
Find depth: 56.22
Base fragment with a grey surface. Approximately 5% of the complete vessel.
Diameter base: 7.5 cm
Location: PDB Limburg

2 Bead, glass
Find number: 25-2-1.1
Find depth: 56.02
Yellow, opaque, double connected.
Number: 1
Type: YO25 / S-Per 33.6
Kombinationsgruppe: G-H
Rhineland phase: 6-10
Rhineland date: 570-705
Location: PDB Limburg

Bead, glass
Find number: 25-2-1.2
Find depth: 56.02
Blue, opaque, barrel shaped.
Number: 3
Type: BO19/35 / S-Per 37.1
Kombinationsgruppe: (H) I
Rhineland phase: (8) 10-(8) 10
Rhineland date: (610) 670-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 25-2-1.3
Find depth: 56.02
Blue, opaque, double connected.
Number: 2
Type: BO25 / S-Per 37.2



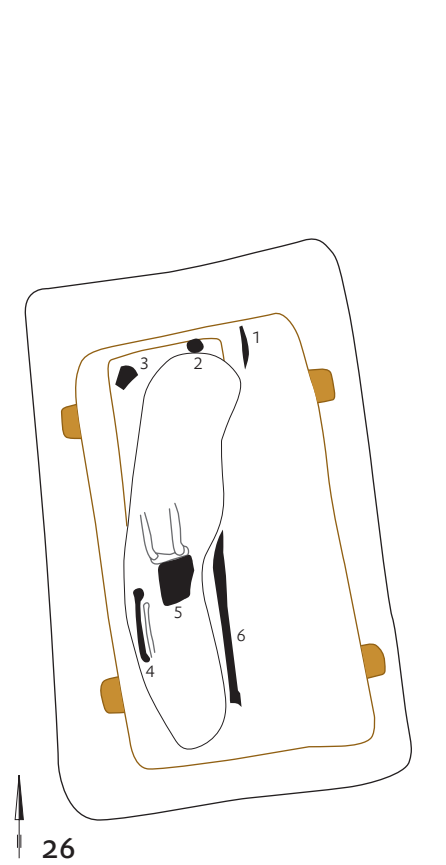
Kombinationsgruppe: F-I
Rhineland date: 5-10
Rhineland date: 555-705
Bead, glass
Find depth: 56.02
Find number: 25-2-1.4
Green, opaque, small, barrel shaped.
Type: GO19
Number: 1
Location: PDB Limburg

3 Equal armed brooch, copper alloy
Find number: 25-3-1
Find depth: 56.02
One arm of a copper alloy equal armed brooch.
Length: 2.5 cm
Diameter end plate: 1.5 cm
Type: Thörle 2001; small undecorated equal armed brooches
Phases Thörle: JMII
Date Thörle: 630/40-670/80
Location: PDB Limburg

26

INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	282
Grave pit width	187
Grave pit depth	32
Orientation	353 (S-N)



DESCRIPTION

Merovingian inhumation grave. The locations of the silhouettes of a few body parts indicate that the grave's orientation was south-north, but we cannot be certain of this since a reopening pit disturbed the grave. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was the wooden coffin that held the body. The silhouettes of the pelvis, parts of the upper legs and the left upper arm were still visible. It is however not certain whether these indicate the original location and orientation of the body since the majority of the grave was disturbed by a reopening pit. The reopening pit covered most of the inner container (coffin) and left only the northern end visible for the excavators. The outer wooden container remained undisturbed. The grave is part of a cluster of graves (24, 25 and 26) showing traces of reopening pits.

GRAVE DATE

SK IIa: 565- 610/20
FAG phases 5-7: 565-640/50

PHYSICAL ANTHROPOLOGY

Not suitable for examination.

FINDS

1 Knife, iron
Find number: 26-1-1
Find depth: 56.22
Knife, iron
Location: missing



- 2 Pottery vessel, lid
Find number: 26-2-1
Find depth: 56.21
Lid of a pot of coarse ware with a light brown/ grey surface. A mineralised fragment can be found attached to its interior, and one side of its exterior is slightly darker (caused by the smoke of a cooking fire?). The top is flat, and has a diameter of 3.6-40 cm. The maximum diameter of the complete lid is 12.8 cm and its height is 3.8 cm. The base is narrower (10.8 cm): made to fit in a rim groove of a matching pot. This matching pot might have been taken from the grave by the diggers of the reopening pit.
Location: Museum Het Domein
- 3 Glass vessel
Find number: 26-3-1
Find depth: 56.19
Palm cup of brown/yellow glass with 12 vertical ribs, covering the lower wall, of which four are prolonged forming a cross on the bottom of the cup. Air bubbles are visible and a fragment of the rim and wall are missing. The vessel seems to have been left at its original location.
Height: 8.4 cm
Type: Maul A1b
Date: 560/70-630/40
Alternative type: Feyeux 55.3k (550-600)
Alternative type: Siegmund Glaz.1 (585-610)
Location: Museum Het Domein

- 4 Lance head, iron
Find number: 26-4-1
Find depth: 56.09
- 5 Belt fitting, iron
Find number: 26-5-1
Find depth: 56.10
Simple buckle
Location: missing

Iron lance head with a small oval blade with mid rib and a closed socket.
Length blade: 10.3 cm
Type: FAG S-Lan2.1
FAG phase: 5-6
FAG date: 565-620
Alternative type: L/P/V 38 (520/30-600/10)
Alternative type: Type: S-Lan2.1 (7-8A: 585-640)
Location: PDB Limburg

Seax, iron
Find number: 26-4-2
Find depth: 56.09
Iron seax with a curved back and mineralised leather remains of the scabbard attached to the blade.
Length blade: 30.8 cm
Type: FAG Sax1
FAG phases: (end 3) 4-5 (7)
FAG date: (510) 510/25-580/90 (640/50)
Alternative type: S-Sax1 (530-610)
Alternative type: L/P/V 57 (470-640)
Location: PDB Limburg

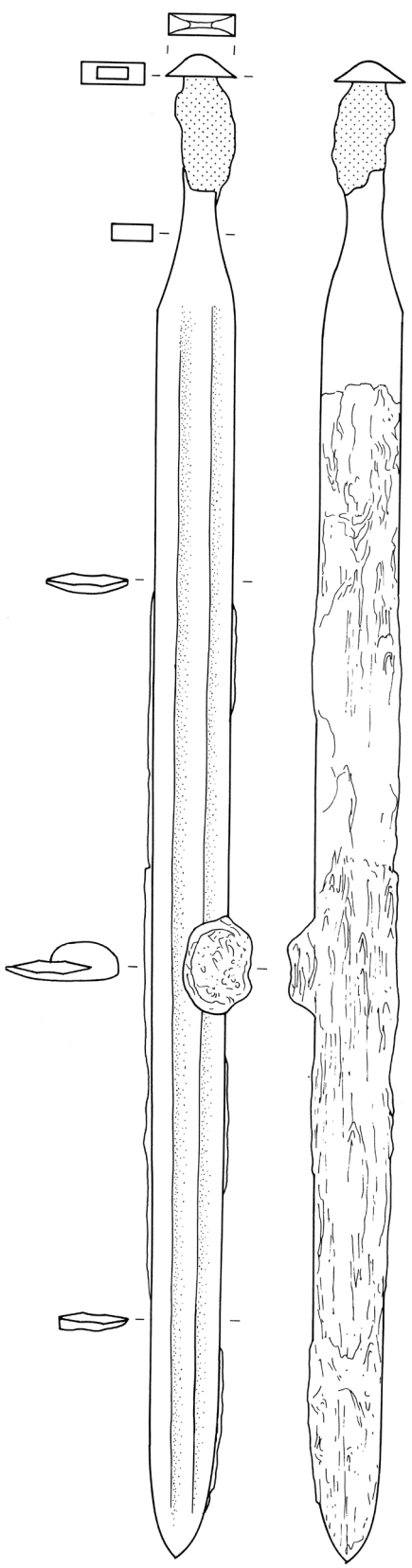
Belt fitting, iron
Find number: 26-5-2
Find depth: 56.10
Iron plate buckle with a round plate and three domed copper alloy rivets. The pins of the rivets are visible at the back side of the plate.
Length plate: 4.9 cm

Length loop: 5.3 cm
Type: Siegmund Gür4.1
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Gür4.1/2 (565-610/20)
Alternative type: Koch-Schretzheim 1977: (580/90-620/30)
Alternative type: L/P/V 149 ((560/70) 600/10-630/40)
Location: Museum het Domein

Belt fitting, iron
Find number: 26-5-3
Find depth: 56.10
Iron counter plate with a round/oval plate and three copper alloy rivets. Textile or leather remains are attached to the back side of the plate.
Length plate: 4.8 cm
Type: Siegmund Gür4.1
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Gür4.1/2 (565-610/20)
Alternative type: Koch-Schretzheim 1977: (580/90-620/30)
Alternative type: L/P/V 149 ((560/70) 600/10-630/40)
Location: Museum Het Domein

Belt fitting, iron
Find number: 26-5-4
Find depth: 56.10
Iron rectangular back plate with three (of originally four) domed copper alloy rivets. The pins of the rivets are still visible at the back side of the plate.
Length: 5.1 cm
Width: 4.0 cm

Type: S-Gür4.1
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Gür4.1/2 (565-610/20)
Alternative type: Koch-Schretzheim 1977: (580/90-620/30)
Alternative type: L/P/V 149 ((560/70) 600/10-630/40)
Location: Museum Het Domein



Plate, iron
Find number: 26-5-5
Find depth: 56.10
Small rectangular iron plate, corroded and broken, with two (of originally four?) small copper alloy rivets.
Length: 2.5 cm
Width: 2.3 cm
Location: Museum het Domein

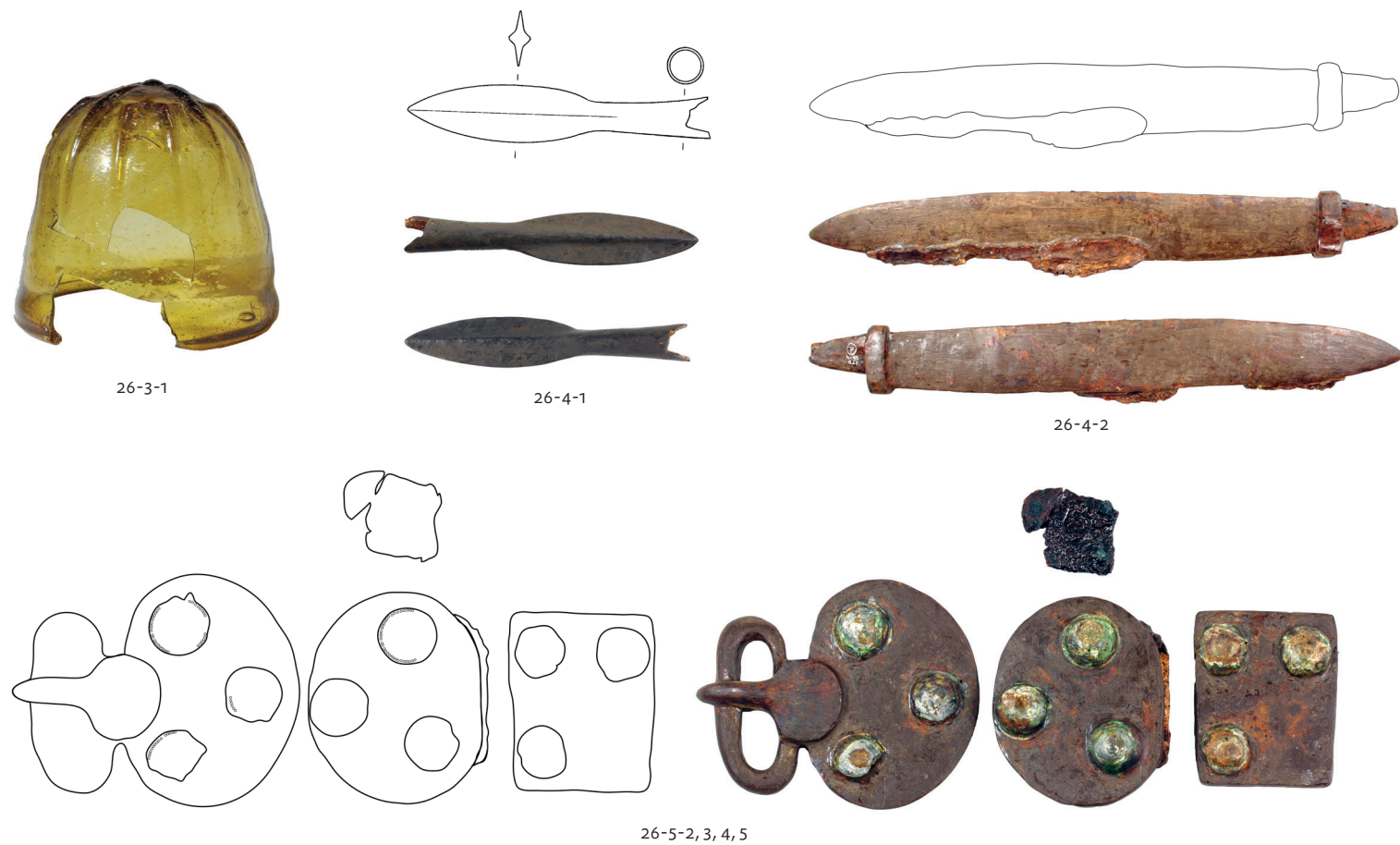


- 6 Sword, iron
Find number: 26-6-1
Find depth: 56.10
Iron sword with copper alloy trapezium shaped pommel, wood/bone remains around the iron hilt core, and wood/leather scabbard remains on the blade.
Length blade: 72.0 cm
Height pommel: 1.3 cm
Length pommel: 3.8 cm
Type: FAG Spa7E
FAG phases: 5-6
FAG date: 565-610/20
Alternative type: Menghin 1983 (c. 520-610)
Location: PDB Limburg

27 DISCARDED CONTEXT

Trench 1

DESCRIPTION
Discarded context. A possible burial pit is displayed on drawing number 18515. From drawing number 18512, which contains the complete cemetery plan, grave 27 is removed. According to Zoetbrood the feature seemed to be a grave at first sight, but turned out to be only a slight soil discoloration during further investigations.



28
INHUMATION GRAVE

Trench	1 and 6
Grave structure	trench grave?
Grave pit length	219
Grave pit width	118
Grave pit depth	29
Orientation	352 (S-N) / 12 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners. Grave 28 was excavated in trench 1 and trench 6. Signs of grave structures or skeletal remains were not found in both excavated parts.

GRAVE DATE
SK IIa: 565- 610/20
FAG phases 5-6: 565-610/20

FINDS
1 Pottery vessel
Find number: 28-1-1
Find depth: 56.94
Biconical pot with a grey surface and a red/ orange wall core. The upper wall is decorated with c. 6 single lines of rectangular roulette stamp impressions. The pot was found in fragmented condition; the fragments are glued together, the

missing parts are not completed. Approximately 85% of the pot is present.
Height: 11.2
Type: S-Kwt3.13
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5A (565-610/20)
Alternative type decoration: L/P/V 414 (470-670)
Alternative type: Siegmund Kwt3.13 (570-610)
Location: PDB Limburg

2 Belt fitting, iron
Find number: 28-2-1
Find depth: 56.90
Iron rectangular back plate with two (of originally four) domed copper alloy rivets. It is heavily restored and supplemented.
Length: 6.2 cm
Width: 5.1 cm
Location: PDB Limburg

Plate, iron
Find number: 28-2-2
Find depth: 56.90
Fragment of an iron plate.
Length: 6.0 cm
Location: PDB Limburg.

3 Lance head, iron
Find number: 28-3-1
Find depth: 57.00
Iron lance head with a long oval to diamond shaped blade and a closed socket with wood remains of the shaft.
Length blade: 22.0 cm
Type: Siegmund Lan2.2
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: L/P/V 36 ((MA3-MR1 (520/30-630/40)) MR2: 630/40-660/70)
Alternative type: FAG S-Lan2.2 (565-640/50)
Location: PDB Limburg

29
POSSIBLE GRAVE

Trench	1
--------	---

DESCRIPTION
Possible grave. Context 29 consists only of a cluster of finds. The finds seem to be part of a grave's inventory, but traces of a burial pit or other grave features were not found. The fact that the finds were not found in situ suggests that the associated grave was either disturbed, which caused the absence of grave structures and the movement of the finds from their initial location, or that the finds were deposited in a small pit, for a number of reasons now unknown to us.

GRAVE DATE
SK IIId: 610/20-640/50
FAG phases 5-7: 565-640/50

FINDS
1 Lance head, iron
Find number: 29-1-1
Find depth: 56.37
Iron lance head of which the blade is missing. It has a closed socket with one (copper alloy?) rivet and wood remains of the shaft.
Length blade: unknown
Location: PDB Limburg
Type: S-Lan2.1-2.5
Rhineland phase: 7-10
Rhineland date: 585-705

Lance head, iron
29-1-2
Find depth: 56.37
Iron lance head with a small oval blade and a closed socket with wood remains of the shaft.
Length blade: 14.3
Type: Siegmund Lan2.2
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: L/P/V 35 (MA3-MR2: 560/70-660/70)
Alternative type: FAG S-Lan2.2 (5-7: 565-640/50)
Location: PDB Limburg

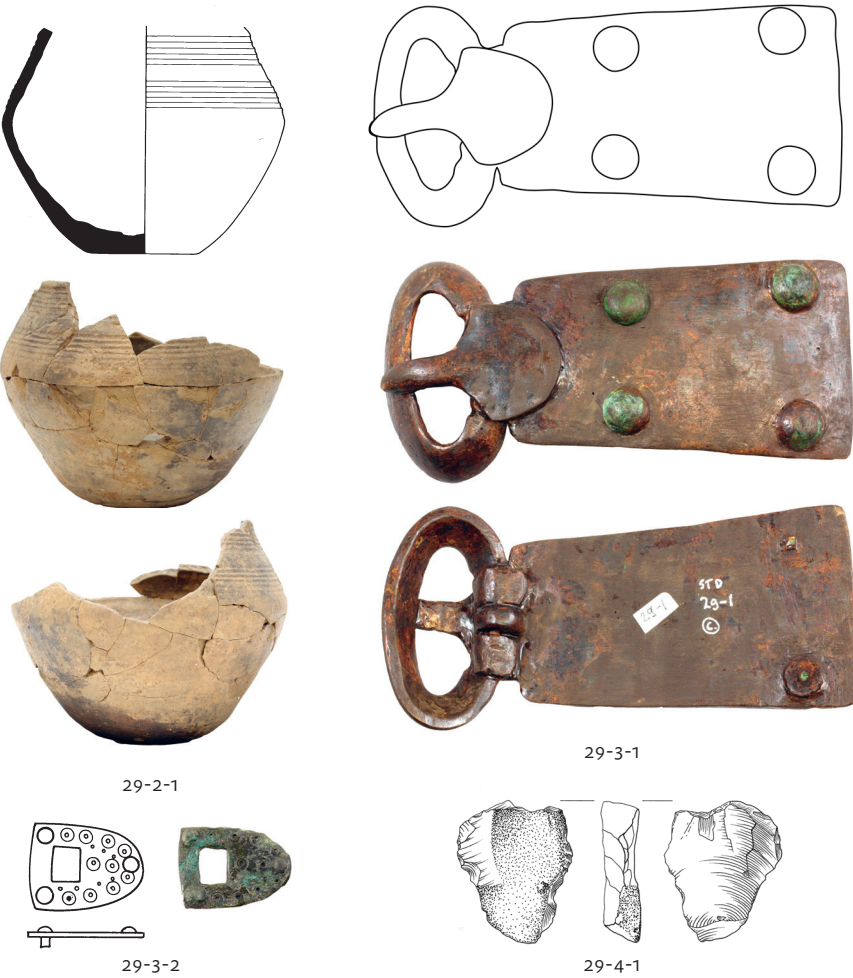
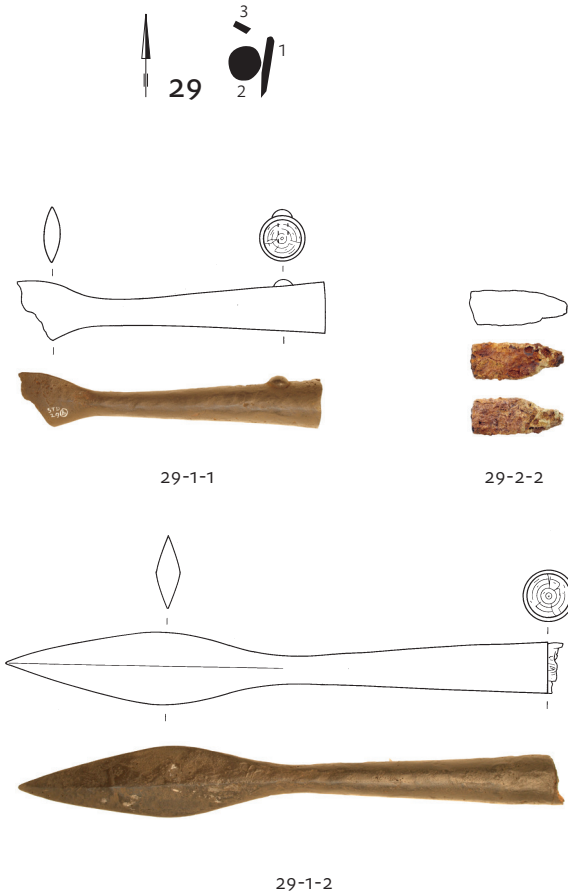
2 Pottery vessel
Find number: 29-2-1
Find depth: 56.37
Biconical pot with a grey surface. The upper wall is decorated with two zones of horizontal grooves. The rim and neck are nearly completely missing. The pot was found in fragmented condition; the fragments are glued together, approximately 55% of the pot is present.
Height: could not be reconstructed
Base diameter: 6.0 cm
Type: Siegmund Kwt2.31
Rhineland phase: 5
Rhineland date: 555-570
Alternative type: FAG-Kwt3A (510/25-580/90)
Alternative type: Siegmund Kwt2.32 (530-570)
Alternative type: Siegmund Kwt2.33 (570-640)
Location: PDB Limburg

Knife, iron
Find number: 29-2-2
Find depth: 56.37
Tip of the blade of an iron knife.
Length blade: 5.1 cm
Location: PDB Limburg

3 Belt fitting, iron.
Find number: 29-3-1
Find depth: 56.37
Iron plate buckle with a rectangular plate with four domed copper alloy rivets. The buckle loop with iron shield tongue is not complete. Loops of the plate are bent around buckle loop.
Length plate: 8.8 cm
Type: Siegmund Gür4.3
Rhineland phase: 8
Rhineland date: 610-640
Location: Museum Het Domein

Belt fitting, copper alloy
Find number: 29-3-2
Find depth: 56.37
Copper alloy tongue shaped slotted plate with three domed copper alloy rivets and a stamped-in decoration of dots-in-circles covering its entire surface.
Length: 3.0 cm
Type: Siegmund Gür4.3
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg

4 Stone
Find number: 29-4-1
Find depth: 56.37
Flint
Length: 3.7 cm
Location: PDB Limburg



30
INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	213
Grave pit width	121
Grave pit depth	43
Orientation	352 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was south-north, identified as such on the basis of the presence of only vague bone silhouettes of the deceased's arms in the southern half of the grave. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was the wooden coffin that held the body.

PHYSICAL ANTHROPOLOGY
Not suitable for examination.

GRAVE DATE
SK IIc: 580/90-640/50
FAG phases 6-7: 580/90-640/50

FINDS
1 Lance head, iron
Find number: 30-1-1
Find depth: 55.92
Iron lance head with a small oval blade and a closed socket with wood remains of the shaft. The base of the socket has two lozenge-shaped indentations.
Length blade: 14.5
Type: Siegmund Lan2.2
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: L/P/V 35 (MA3-MR2: 560/70-660/70)
Alternative type: FAG S-Lan2.2 (565-640/50)
Location: PDB Limburg

2 Pottery vessel
Find number: 30-2-1
Find depth: 55.96
Biconical pot with a brown surface, found in fragmented condition. The upper wall is decorated with multiple lines of rectangular roulette stamp impressions. The pot was found in fragmented condition and is partly restored but not completed: approximately 25% of the pot is missing.
Height: 16.7
Type: Siegmund Kwt3.22
Rhineland phases: end 7- begin 8
Rhineland date: 600-620
Alternative type: FAG Kwt5B (565-640/50)
Location: PDB Limburg

3 Belt fitting, iron
Find number: 30-3-1
Find depth: 55.96
Iron slotted plate with two domed copper alloy rivets. The narrow base of the plate is split.
Length: 3.5 cm
Location: PDB Limburg
Type: S-Gür4.3/4.5
Rhineland phase: 8
Rhineland date: 610-640
Alternative date: FAG S-Gür4.3 (610/20-640/50)

Belt fitting, iron
Find number: 30-3-2
Find depth: 55.96
Iron counter plate or plate of a plate buckle with four (of originally five?) copper alloy rivets, of which two are small and two are large. The edges of the plate are severely damaged.
Length: 7.6 cm
Type: S-Gür 4.3/4.5
Rhineland phase: 8
Rhineland date: 610-640
Alternative date: FAG S-Gür4.3 (610/20-640/50)
Location: PDB Limburg

Belt fitting, iron
Find number: 30-3-3
Find depth: 55.96
Iron slotted plate with two domed copper alloy rivets.

Length: 5.6 cm
Type: S-Gür 4.3/4.5
Rhineland phase: 8
Rhineland date: 610-640
Alternative date: FAG S-Gür4.3 (610/20-640/50)
Location: PDB Limburg

Fragment, iron
Find number: 30-3-4
Find depth: 55.96
Band shaped iron fragment, slightly bent.
Length: 5.1 cm
Location: PDB Limburg
Knife, iron
Find number: 30-3-5
Find depth: 55.96
Iron knife with grooves; the tip is missing.
Length blade: 11.5 cm
Location: PDB Limburg

Knife, iron
Find number: 30-3-5
Find depth: 55.96
Iron knife with grooves; the tip is missing.
Length blade: 11.5 cm
Location: PDB Limburg

Seax, iron
Find number: 30-3-6
Find depth: 55.96

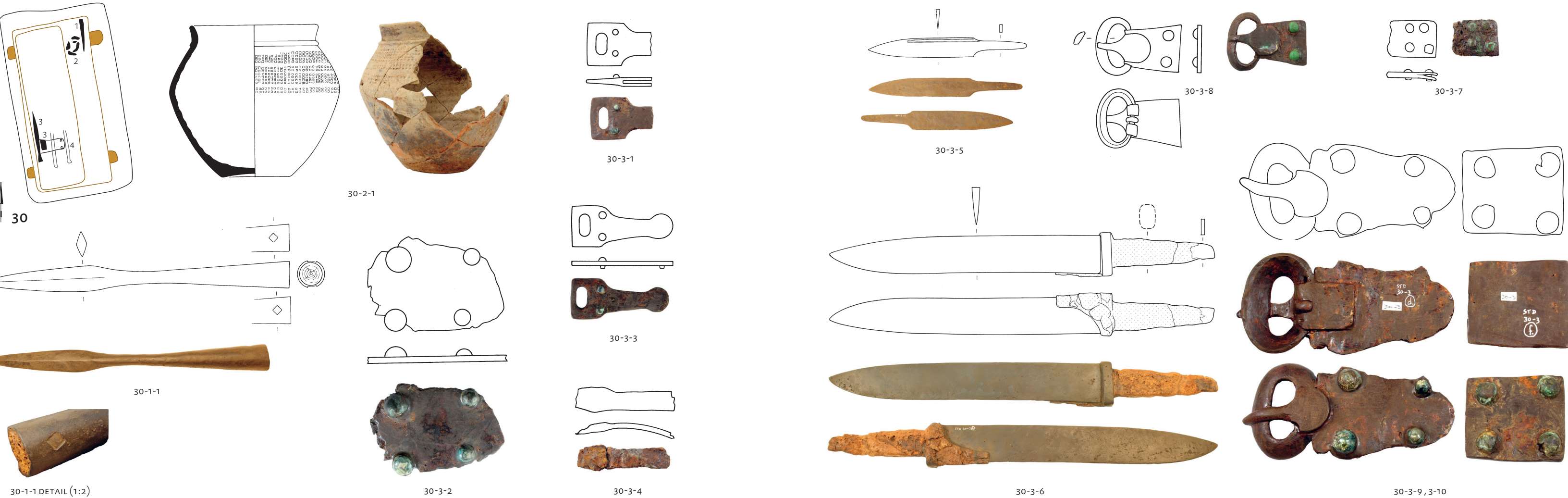
Iron seax with wood remains of the hilt and leather remains of the scabbard.
Length blade: 30.0 cm
Type: FAG Sax2.1
FAG phase: (5) 6-7 (8)
FAG date: (565) 580/90-640/50 (680)
Alterative type: Siegmund Sax2.1 (585-655)
Alternative type: L/P/V 57 (470-640)
Location: PDB Limburg

Belt fitting, iron
Find number: 30-3-7
Find depth: 55.96
Split base fragment of an iron strap end with four copper alloy domed rivets.
Length: 2.7 cm
Type: S-Gür4.3/4.5
Rhineland phase: 8
Rhineland date: 610-640
Alternative date: FAG S-Gür4.3 (610/20-640/50)
Location: PDB Limburg

Belt fitting, iron
Find number: 30-3-8
Find depth: 55.96
Iron plate buckle with a trapezoid shape and two domed copper alloy rivets. The oval buckle loop has an iron shield tongue.
Length plate: 2.4 cm
Maximum length loop: 3.2 cm
Location: PDB Limburg

Belt fitting, iron
Find number: 30-3-9
Find depth: 55.96
Iron plate buckle with a triangular plate with undulating outline and four domed copper alloy rivets. The oval buckle has a shield tongue.
Length plate: 7.6 cm
Maximum length loop: 5.3
Type: S-Gür4.3/4.5
Rhineland phase: 8
Rhineland date: 610-640
Alternative date: FAG S-Gür4.3 (610/20-640/50)
Location: Museum Het Domein

Back plate, iron
Find number: 30-3-10
Find depth: 55.96
Iron back plate, rectangular, with four domed copper alloy rivets.
Length: 5.6 cm
Width: 4.8 cm
Type: S-Gür4.3/4.5
Rhineland phase: 8
Rhineland date: 610-640
Alternative date: FAG S-Gür4.3 (610/20-640/50)
Location: PDB Limburg

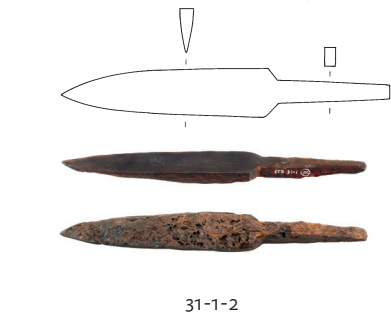
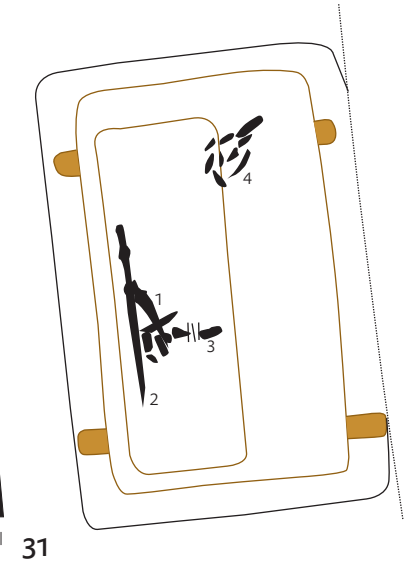


31
INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	245
Grave pit width	165
Grave pit depth	74
Orientation	354 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was probably the wooden coffin that held the body. Body silhouettes or human remains were not observed inside the coffin, but the locations of the finds suggest that the orientation of the body was south-north.

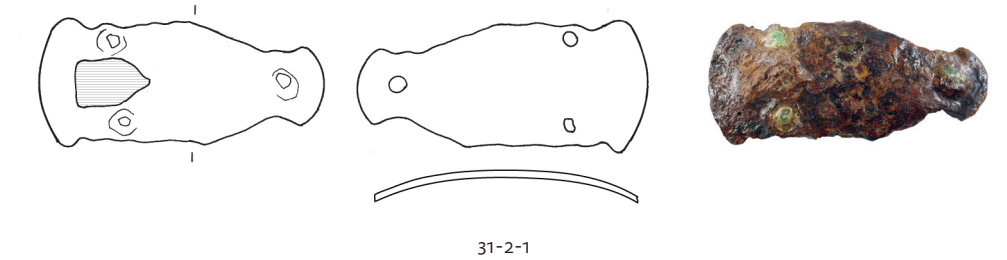
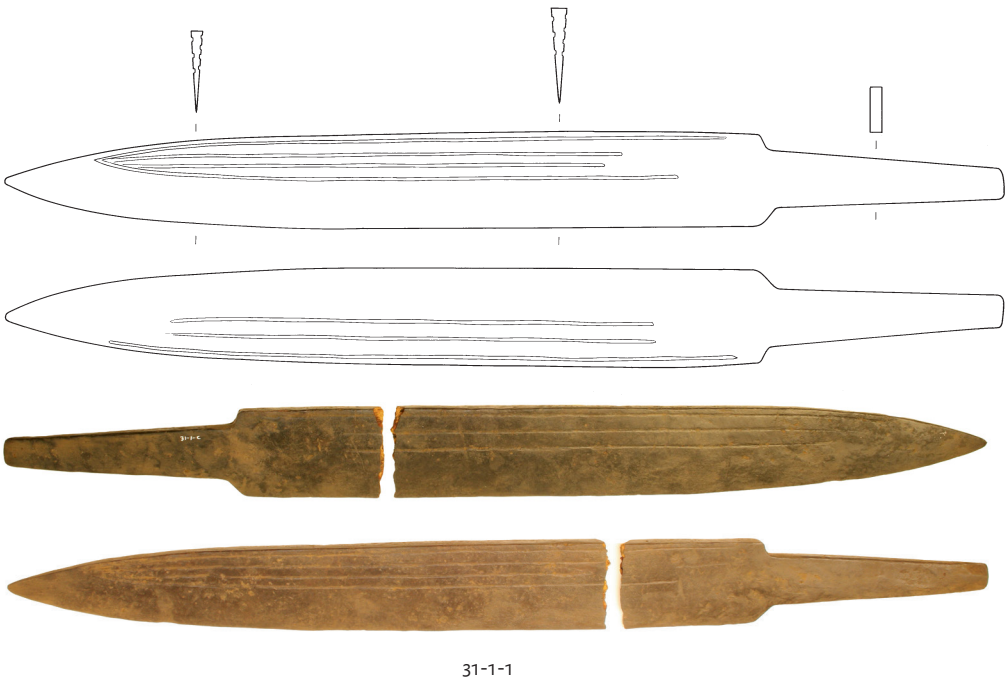
GRAVE DATE
SK IId: 610/20-640/50
FAG phases 7-8: 610/20-670/80



FINDS
1 Seax, iron
Find number: 31-1-1
Find depth: 55.63
Iron seax with grooves on both sides of the blade.
Length blade: 39.5 cm
Type: FAG Sax2.2
FAG phases: (6)7-8 (9)
FAG date: (580) 640-670/80 (710)
Alternative type: Siegmund Sax2.2 (640-705)
Alternative type: L/P/V 61 (600-710)
Location: PDB Limburg

Knife, iron
Find number: 31-1-2
Find depth: 55.63
Iron knife with a curved back.
Length blade: 11.5 cm
Location: PDB Limburg

2 Mount, iron
Find number: 31-2-1
Find depth: 55.68
Iron mount with a fixed plate and three domed copper alloy rivets. It was found in association with a sword and might have been attached to its scabbard: it is slightly convex, matching the curve of the scabbard and sword.
Length: 7.6 cm
Location: PDB Limburg



Sword, iron
Find number: 31-2-2
Find depth: 55.68
Iron sword, severely corroded, with mineralised leather or wood of the scabbard covering the entire surface and wood remains preserved around the iron hilt core.
Length blade: 79.6 cm
Location: Museum Het Domein

Belt fitting, iron
Find number: 31-2-2.1
Find depth: 55.68
Iron plate buckle with a tongue shaped plate and textile/leather remains attached to it. Two rivets (of originally three?) are visible. Corrosion connected a strap end and the plate buckle. The fittings seem to be part of a sword belt.
Length plate: 5.8 cm
Length loop: 4.0 cm
Type: Siegmund Gür3.3 (on the basis of the main belt fittings: 31-3-2, 31-3-4 and 31-3-5)
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: L/P/V 172 (600/10-660/70)
Location: PDB Limburg

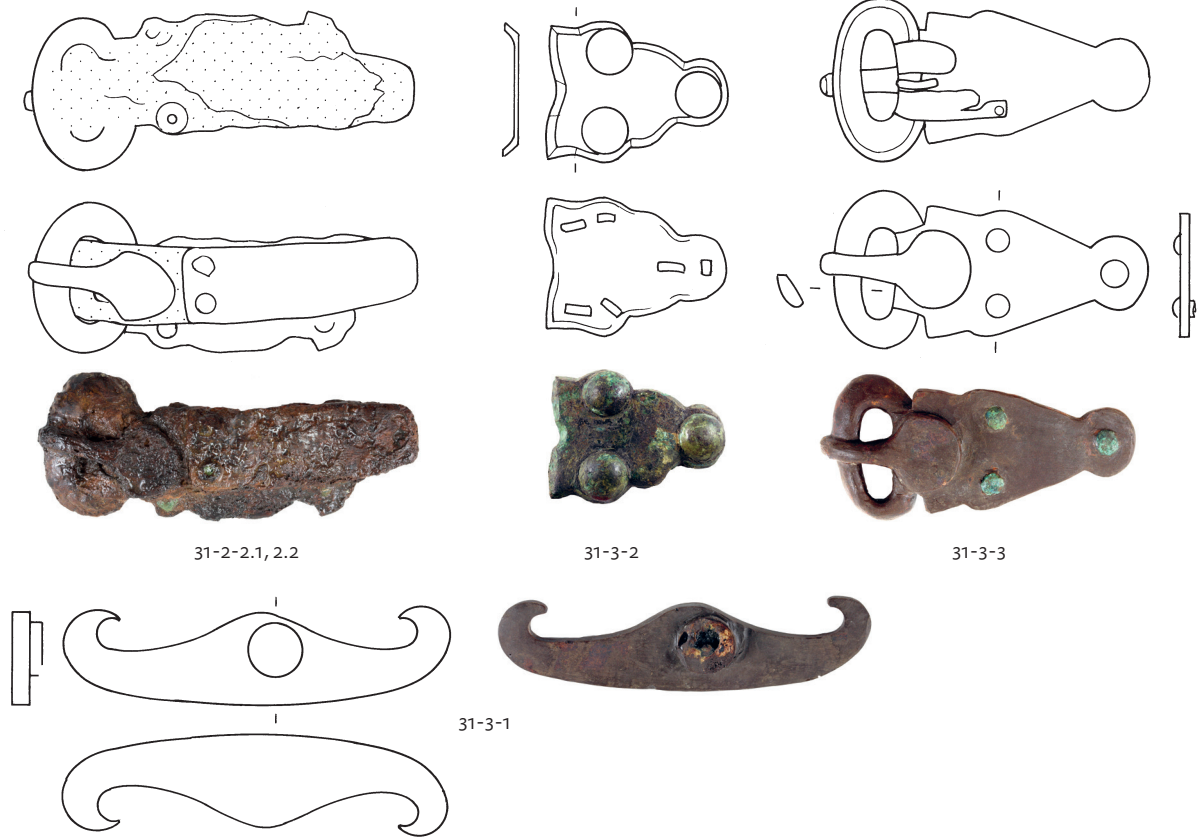
Strap end, iron
Find number 31-2-2.2
Find depth: 55.68
Iron strap end with two domed copper alloy rivets, attached to the plate buckle (31-2-2.1).
Length: 6.1 cm

Type: Siegmund Gür3.3 (on the basis of the main belt fittings: 31-3-2, 31-3-4 and 31-3-5)
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: L/P/V 172 (600/10-660/70)
Location: PDB Limburg

3 Fire steel, iron
Find number: 31-3-1
Find depth: 55.54
Iron fire steel, triangular base shape with curved extremities.
Length: 10.3 cm
Location: PDB Limburg

Belt fitting, copper alloy
Find number: 31-3-2
Find depth: 55.54
Triangular hollow belt fitting with three 'fake' copper alloy rivets and three loops on its back side.
Length: 4.8 cm
Type: Siegmund Gür3.3
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: L/P/V 172 (600/10-660/70)
Location: PDB Limburg

Belt fitting, iron
Find number: 31-3-3
Find depth: 55.54
Iron plate buckle with triangular plate and three domed copper alloy rivets. The oval buckle loop has an iron shield tongue. The fitting seems to be part of the sword belt.



Length plate: 6.0 cm
Maximum length buckle loop: 4.1 cm
Type: Siegmund Gür3.3 (on the basis of the main belt fittings: 31-3-2, 31-3-4 and 31-3-5)
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: L/P/V 172 (600/10-660/70)
Location: PDB Limburg

Belt fitting, copper alloy
Find number: 31-3-4
Find depth: 55.54
Triangular hollow counter plate with protruding end and three domed copper alloy rivets. Leather/textile remains are attached to its back side.
Restored; the middle of the plate is supplemented.
Type: Siegmund Gür3.3
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: L/P/V 172 (600/10-660/70)
Length: 8.4 cm
Location: PDB Limburg

Belt fitting, copper alloy
Find number: 31-3-5
Find depth: 55.54
Plate buckle, hollow, of which a part is broken off; this part is known as 31-3-6. The plate has two (of originally three?) 'fake' rivets. The remains of leather and probably two eyes are attached to its back side. The buckle loop is decorated with stamped in dots-in-circles.
Length plate: 5.5 cm
Maximum length loop: 5.0 cm

Type: Siegmund Gür3.3
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: L/P/V 172 (600/10-660/70)
Location: PDB Limburg



Belt fitting, copper alloy
Find number: 31-3-6.1
Find depth: 55.54
Slotted rectangular plate with three domed copper alloy rivets and stamped in dot-in-circle decoration. The plate is attached to the detached protruding end of plate buckle 31-3-5. A leather fragment (of a strap or the waist belt) connects the end of the plate buckle and slotted plate.
Length: 2.6 cm
Type: Siegmund Gür3.3 (on the basis of the main belt fittings: 31-3-2, 31-3-4 and 31-3-5)
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: L/P/V 172 (600/10-660/70)
Location: PDB Limburg

Belt fitting (fragment), copper alloy
Find number: 31-3-6.2
Find depth: 55.54
Protruding end of plate buckle 31-3-5; attached to slotted plate 31-3-6.1. A leather fragment connects the plate buckle and the slotted plate.
Type: Siegmund Gür3.3 (on the basis of the main belt fittings: 31-3-2, 31-3-4 and 31-3-5)
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: L/P/V 172 (600/10-660/70)
Location: PDB Limburg

Shears, iron
Find number: 31-3-7
Find depth: 55.54
Pair of iron shears, restored.
Length: 17.9 cm
Type: L/P/V 355
L/P/V phase: MA1-MR3
L/P/V date: 470/80-700/10
Location: PDB Limburg

4 Pottery vessel
Find number: 31-4-1
Find depth: 55.68
Biconical pot with a grey surface, found in fragmented condition. The fragments are glued together, except for 28 fragments which were not added to the reconstructed pot. The missing parts were not completed. Approximately 25% of the pot is missing.
Height: 20.3 cm
Type: Siegmund Kwt2.41
Rhineland phase: 4
Rhineland date: 530-555
Alternative type: FAG S-Kwt4A: 510/25-640/50
Alternative type: L/P/V 390 (520-640)
Location: PDB Limburg



32 INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin) or partition wall
Grave pit length	253
Grave pit width	152
Grave pit depth	50
Orientation	343 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The location of beads suggests that the grave's orientation was south-north, but this remains uncertain since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden chamber with a possible partition wall. The location of the beads implies that the body of the deceased was placed in the western part of the grave. The wooden chamber is supported by two wooden beams. The northern beam was dug into the burial pit's eastern wall. There is a possibility that the wooden chamber was not divided by a partition wall but that these traces indicate the initial presence of a second wooden container, probably the coffin, which held the body.



GRAVE DATE
SK IIb: 565-640/50
FAG phases 5-7: 565-640/50

FINDS
1 Bead, amber
Find number: 32-1-1.1
Find depth: 55.76
Almond shaped, diameter: 2.3 cm
Type: A15
Number: 1
Location: PDB Limburg

Bead, amber
Find number: 32-1-1.2
Find depth: 55.76
Irregular shaped, diameter: 1.2 cm
Type: A40
Number: 1
Location: PDB Limburg

Bead, amber
Find number: 32-1-1.3
Find depth: 55.76
Irregular shaped, diameter: 1.4 cm
Type: A40
Number: 1
Location: PDB Limburg

Bead, amber
Find number: 32-1-1.4
Find depth: 55.76
Irregular shaped, diameter: 0.8 mm
Type: A40
Number: 1
Location: PDB Limburg

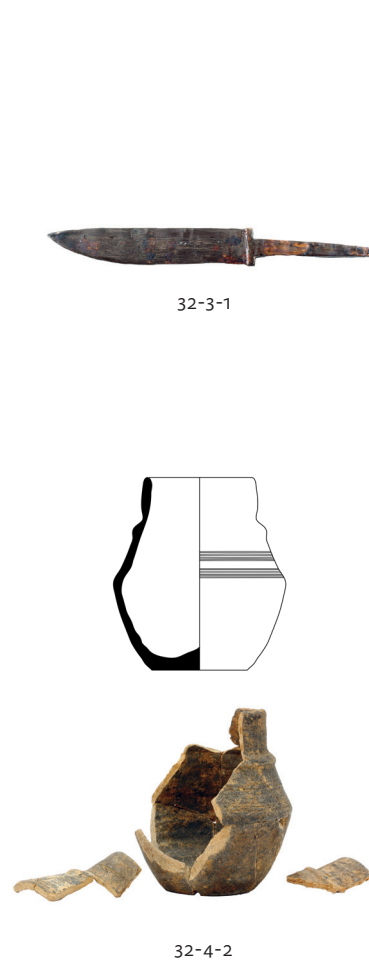


Bead, glass
Find number: 32-1-1.5
Find depth: 55.76
Green, opaque, thick, long cylindrical. Decoration: white opaque waves.
Number: 1
Location: PDB Limburg

Glass vessel
Find number: 32-1-2
Find depth: 55.76
Glass fragments; the vessel shape cannot be reconstructed. The thesis of Zoetbrood mentions seven fragments of yellow/brown glass.
Location: missing

2 Bead, glass
Find number: 32-2-1.1
Find depth: 55.80
Yellow, opaque, ring shaped.
Number: 1
Type: YO3 / S-Per 33.1
Kominationsgruppe: D-G
Rhineland phases: 3-8
Rhineland date: 485-640
Location: PDB Limburg

Bead, glass
Find number: 32-2-1.2
Find depth: 55.80
Blue, opaque, barrel shaped.
Number: 1
Type: BO19
Location: PDB Limburg



Bead, glass
Find number: 32-2-1.3
Find depth: 55.80
Red/brown, transparent, barrel shaped, ribbed.
Number: 1
Type: RT28
Location: PDB Limburg

3 Knife, iron.
Find number: 32-3-1
Find depth: 55.76
Iron knife with a straight back.
Length blade: 11.7 cm
Location: PDB Limburg

4 Pottery vessel
Find number: 32-4-1
Find depth: 55.76
Spouted pot with a dark grey surface and orange wall core. The upper wall is decorated with multiple lines of rectangular roulette stamp impressions. The pot is partly restored: 3 restored parts + 74 loose fragments.
Height: 20.0 cm
Type: Siegmund Kwt3.23
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: S-Kwt3.13 (570-610)
Alternative type decoration: L/P/V 414 (470-670)
Location: PDB Limburg

Pottery vessel
Find number: 32-4-2
Find depth: 55.76
Biconical pot/beaker with a black surface and a light brown wall core. The upper wall is decorated with

two zones of four grooves. The pot is complete for approximately 85%; some of the wall fragments are missing.
Height: 10.1 cm
Type: Siegmund Kwt2.33
Rhineland phases: 6-8
Rhineland date: 570-640
Alternative type: FAG-Kwt3A (510/25-565)
Location: PDB Limburg

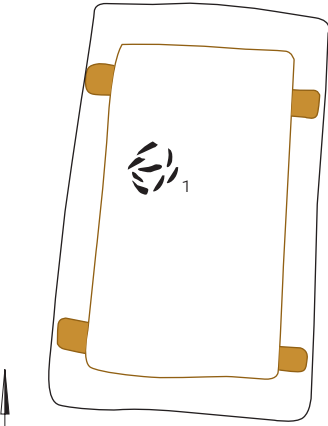
33
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	216
Grave pit width	140
Grave pit depth	12
Orientation	5 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams.

GRAVE DATE
SK IIc: 580/90-640/50
FAG phases 6-7: 580/90-640/50

FINDS
1 Pottery vessel
Find number: 33-1-1
Find depth: 56.30
Biconical pot/beaker with a grey surface and a light brown/orange wall core. The upper wall is

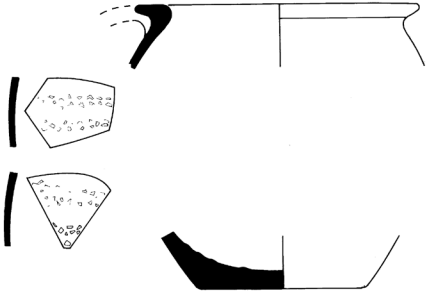


33-1-1

decorated with two ridges. Approximately 75% of the pot is present; parts of the wall and rim are missing.
Height: 6.7 cm
Type: Siegmund Kwt2.33
Rhineland phases: 6-8
Rhineland date: 570-640
Alternative type: FAG-Kwt3A (510/25-580/90 (610/20))
Location: PDB Limburg

Pottery vessel
Find number: 33-1-2
Find depth: 56.30
Spouted pot with a grey surface and lighter wall core, tempered with pottery grid. The upper wall is decorated with multiple lines of triangular roulette stamp impressions. The pot was restored with a number of 58 available fragments, of which 5 rim fragments, 3 base fragments, and 6 decorated wall fragments. It is identified as a spouted pot on the basis of the remnants of a handle and the roulette stamp decoration.
Height: not reconstructed
Outer mouth diameter: 15.1 cm
Type: FAG Kwt5D
FAG phases: 6-7
FAG date: 580/90-640/50
Location: PDB Limburg

Pottery, fragments
Find number: 33-1-3
Find depth: 56.30
Two fragments of spouted pot 33-1-2.
Type: FAG Kwt5D
FAG phases: 6-7
FAG date: 580/90-640/50
Location: PDB Limburg



33-1-2, 1-3

34
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	246
Grave pit width	150
Grave pit depth	30
Orientation	344 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams.

GRAVE DATE
SK IIb: 565-640/50
FAG phases 5-7: 565-640/50

FINDS
1 Lance head, iron
Find number: 34-1-1
Find depth: 56.15
Iron lance head with a long oval blade with mid rib and a closed shaft with wood remains inside it and leather remains covering it.
Length blade: 15.5 cm
Type: Siegmund Lan2.1
Rhineland phase: 7-8A
Rhineland date: 585-640
Alternative type: L/P/V 38 (520/30-600/10)
Alternative type: FAG S-Lan2.1 (565-620)
Location: PDB Limburg

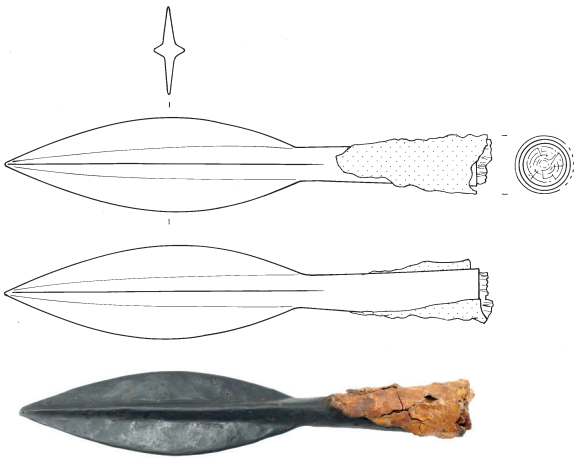


34-1-1

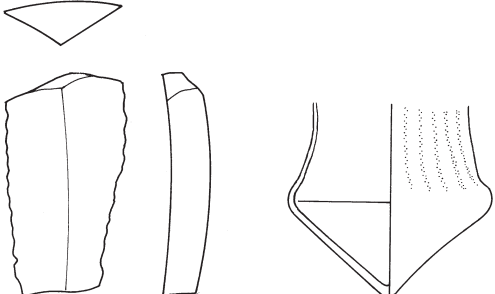
2 Pottery vessel
Find number: 34-2-1
Biconical pot with a rounded carination and a brown surface and orange wall core. The upper wall is decorated with single stamp impressions of vertical undulating (z-like) lines in between two zones of grooves. The pot was found in fragmented condition; the fragments are glued together and missing parts are partly completed. Approximately 55% of the pot is present.
Height: 16.4
Type: Siegmund Kwt4.11
Rhineland phases: end 7-8
Rhineland date: 600-640
Type: Siegmund Kwt2.12
Rhineland phase : 4
Rhineland date : 530-555
Alternative type: FAG Kwt2A (4-5: 510/25-580/90)
Location: PDB Limburg

Iron, fragments
Find number: 34-2-2
Four iron fragments, indeterminate
Location: PDB Limburg

Iron, fragment
Find number: 34-2-3
Iron fragment with a copper alloy rivet.
Location: PDB Limburg



34-1-1



34-2-6

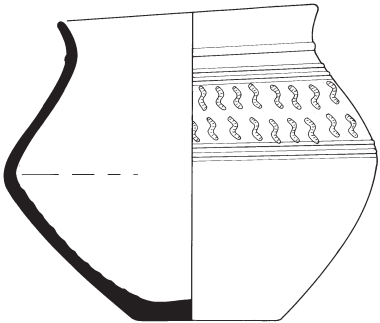
34-3-1

Rivet/nail
Find number: 34-2-4
Rivet
Diameter: 2.1 cm
Location: PDB Limburg

Rivet, iron, plated with copper alloy
Find number: 34-2-5
Iron rivet covered with copper alloy sheet metal and wood remains visible at its backside: probably of a wooden box or shield.
Location: PDB Limburg

Fragment, iron
Find number: 34-2-6
Iron fragment, indeterminate.
Location: PDB Limburg.

3 Glass vessel
Find number: 34-3-1
Find depth: 56.00
Bell beaker of olive green glass with vertical ribs. The upper part of the beaker is missing, as is the bottom knob. The beaker was found in fragmented condition; 8 wall and 4 bottom fragments are now glued together.
Height: not reconstructed
Type: Maul 2002 Sturzbecher B2, Type Rosmeer
Maul Sturzbecher B2 date: (500) 510 - 560 (600)
Maul type Rosmeer date: (540) 550 - 610 (650)
Location: PDB Limburg.



34-2-1

35
INHUMATION GRAVE

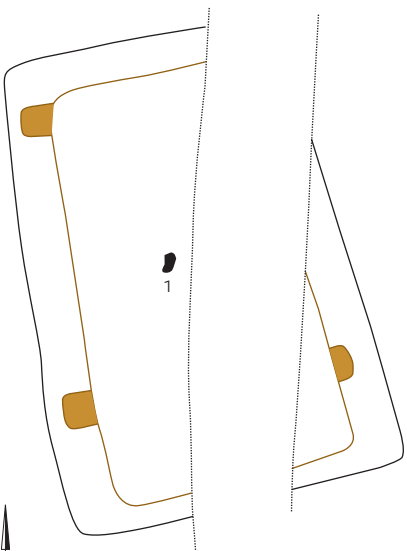
Trench	1
Grave structure	wooden container grave
Grave pit length	250
Grave pit width	179
Grave pit depth	12
Orientation	346 (SE-NW)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. Both the burial pit and wooden container are slightly trapezoid-shaped. The northern part of the grave is narrower although its width is difficult to establish since it was cut by a recent disturbance.

GRAVE DATE
Cannot be dated

FINDS
1 Knife, iron
Find number: 35-1-1
Find depth: 56.20
Fragments of what was probably an iron knife. Length blade: not reconstructed
Location: PDB Limburg.

Stone, black
Find number: 35-1-2
Find depth: 56.20
Flat black stone with iron corrosion at one side.
Length: 2.3 cm
Location: PDB Limburg.



35



35-1-2

36

INHUMATION GRAVE

Trench	1
Grave structure	possible wooden container grave
Grave pit length	251
Grave pit width	143
Grave pit depth	31
Orientation	338 (SE-NW)

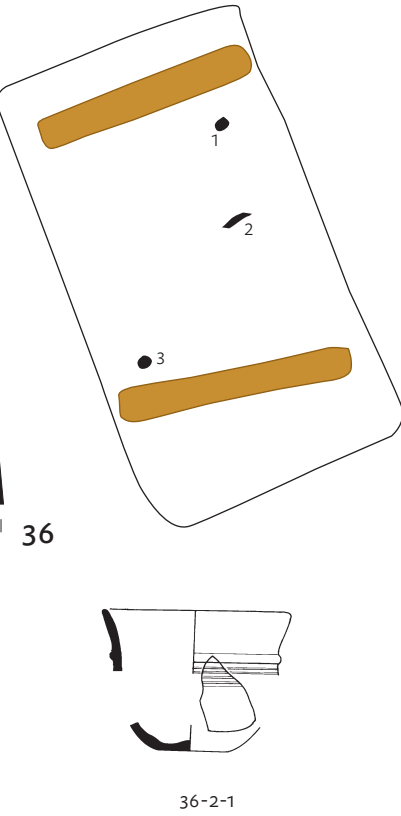
DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained two wooden beams. The presence of beams suggests that the grave initially held a container, but its remains were not found during excavation.

GRAVE DATE

SK IIb: 565-640/50
FAG phases 5-7: 565-640/50

- FINDS**
- 1 Belt fitting, iron
Find number: 36-1-1
Iron rectangular back plate with one domed copper alloy rivet (of originally four) and textile/leather/iron remains at its back side.
Length: 5.0 cm
Width: 4.5 cm
Type: Siegmund Gür4.1/4.2/4.3
Rhineland phases: 7-8
Rhineland date: 585-640
Location: PDB Limburg



36-2-1

- 2 Pottery vessel
Find number: 36-2-1
Fragments of a grey biconical pot decorated with grooves. Found in fragmented condition; a complete reconstruction was not possible.
Outer mouth diameter: 10.0 cm
Type: FAG Kwt3A
FAG phases: 4-5
FAG date: 510/25-580/90
Alternative type: Siegmund Kwt2.31 (555-570)
Alternative type: Siegmund Kwt2.32 (530-570)
Alternative type: Siegmund Kwt2.33 (570-640)
Location: PDB Limburg

- 3 Indeterminate fragment, iron
Find number: 36-3-1
Iron fragment.
Location: missing

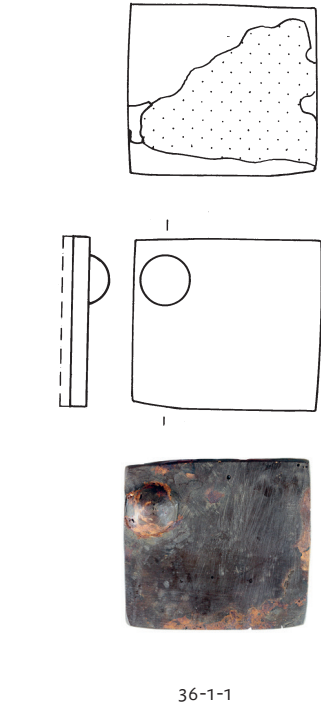
37

INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit width	136
Grave pit depth	40
Orientation	353 (S-N)

DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since the grave was only partly excavated and no human remains were found. Only the southern part of the grave was preserved. The complete burial pit was rectangular



36-1-1

with slightly rounded corners and held a wooden container placed on at least one wooden beam. The northern half of the grave was dug away by construction work preceding the archaeological excavation.

GRAVE DATE

SK IIa: 565- 610/20
FAG phases 5-6: 565-610/20

- FINDS**
- 1 Axe, iron
Find number: 37-1-1
Find depth: 55.92
Iron axe with a straight upper blade edge and wood remains in the shaft opening.
Length blade: 20.7 cm
Type: Siegmund FBA2.1
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG S-FBA2.1 (565-610/20)
Alternative type: L/P/V 4 (520/30-600/610)
Location: Museum Het Domein

- 2 Belt fitting, iron
Find number: 37-2-1
Find depth: 55.92
Fragment of an iron plate buckle; the plate is for the larger part missing. The buckle has an oval loop with iron shield tongue. The three domed copper alloy rivets that were found apart were probably part of this plate buckle.
Length plate: not reconstructed
Maximum length loop: 5.1 cm
Type: Siegmund Gür4.1
Rhineland phase: 7
Rhineland date: 585-610

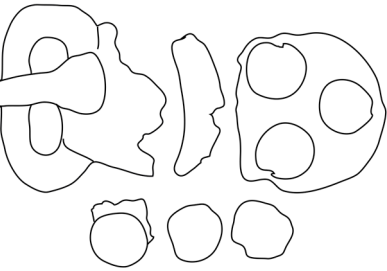


37-1-1

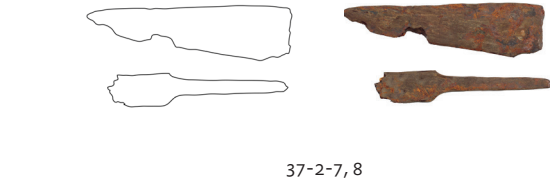
Alternative type: FAG Gür4.1/4.2 (565-610/20)
Alternative type: Koch-Schretzheim 1977 (580/90-620/30)
Alternative type: L/P/V 149 ((560/70) 600/10-630/40)
Location: Museum Het Domein

Belt fitting, iron
Find number: 37-2-2
Find depth: 55.92
Round/D-shaped iron counter plate with three domed copper alloy rivets.
Length plate: 3.9 cm
Type: Siegmund Gür4.1
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Gür4.1/4.2 (565-610/20)
Alternative type: Koch-Schretzheim 1977 (580/90-620/30)
Alternative type: L/P/V 149 ((560/70) 600/10-630/40)
Location: Museum Het Domein

Rivets, copper alloy
Find number: 37-2-3
Find depth: 55.92
Three domed copper alloy rivets with comparable diameters; they are probably of plate buckle 37-2-1.
Diameter: 1.8 cm
Type: Siegmund Gür4.1
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Gür4.1/4.2 (565-610/20)
Alternative type: Koch-Schretzheim 1977 (580/90-620/30)



37-2-5



37-2-7, 8

Alternative type: L/P/V 149 ((560/70) 600/10-630/40)
Location: Museum Het Domein

Iron, indeterminate fragment
Find number: 37-2-4
Find depth: 55.92
Indeterminate iron fragment.
Length: 3.8 cm
Location: PDB Limburg

Fire steel, iron
Find number: 37-2-5
Find depth: 55.92
Iron fire steel with a slight triangular base shape and looped extremities.
Length: 7.9 cm
Location: PDB Limburg

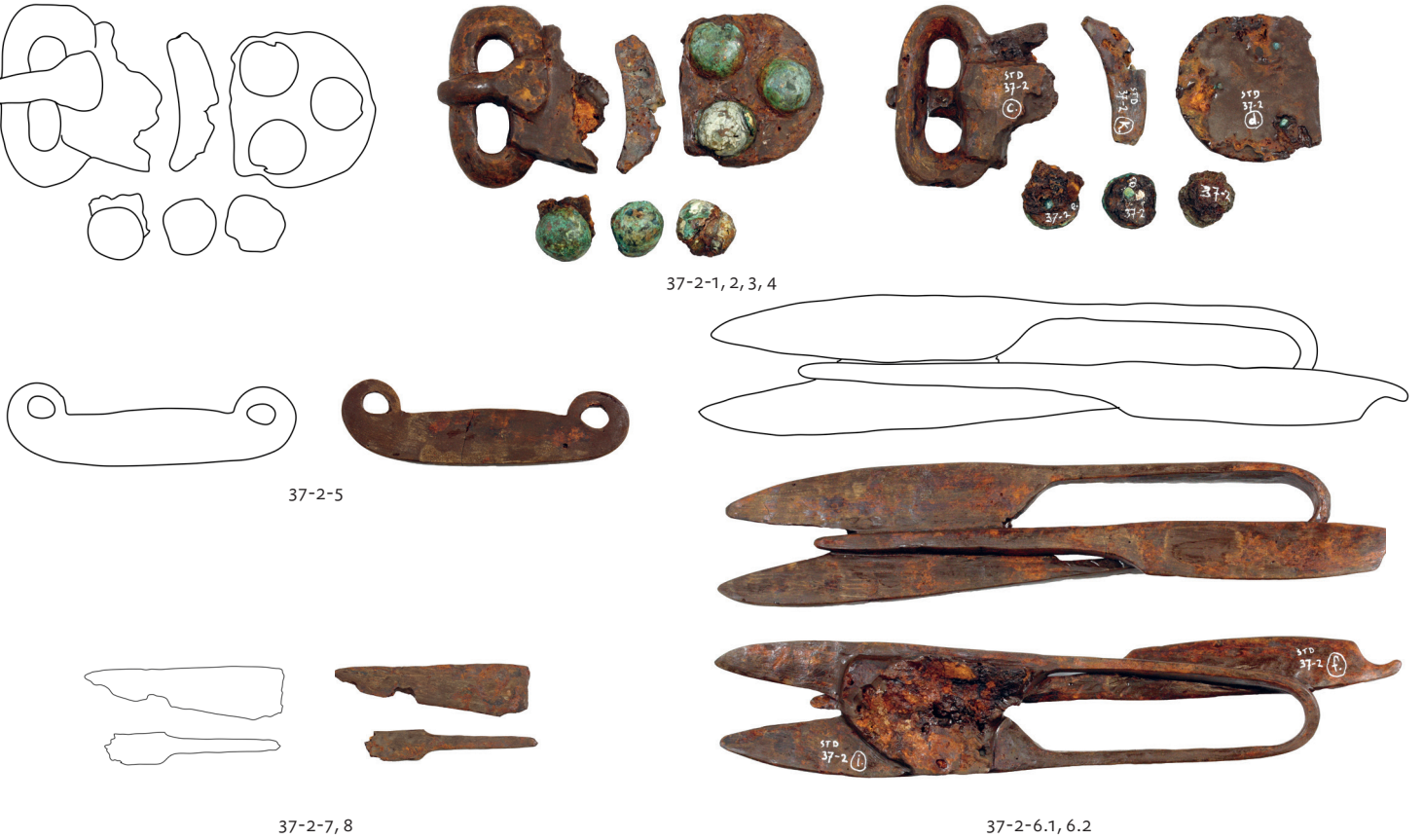
Shears, iron
Find number: 37-2-6.1
Find depth: 55.92
Iron shears with a fragment of an iron plate (indeterminate) and a blade (of second pair of shears or a knife) attached to them.
Length: 16.5 cm
Type: L/P/V 355
L/P/V phases: MA1-MR3
L/P/V date: 470/80-700/10
Location: PDB Limburg

Blade (of shears/knife), iron
Find number: 37-2-6.2
Find depth: 55.92

The arm of an iron pair of shears or the blade of a knife (attached to pair of shears 37-2-6.1.)
Length: 16.6
Type (shears): L/P/V 355
L/P/V phases: MA1-MR3
L/P/V date: 470/80-700/10
Location: PDB Limburg

Knife, iron
Find number: 37-2-7
Find depth: 55.92
Fragment of an iron knife: fragment of the blade and hilt.
Length: 9.2
Location: PDB Limburg

Fragment, iron
Find number: 37-2-8
Find depth: 55.92
Tip of an iron seax?
Length: 10.8 cm
Location: PDB Limburg



37-2-6.1, 6.2

38

INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	211
Grave pit width	144
Grave pit depth	13
Orientation	345 (SE-NW)

DESCRIPTION

Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams.

GRAVE DATE

SK: chronological indifferent

FAG phases 3-9: 460/80-700/10

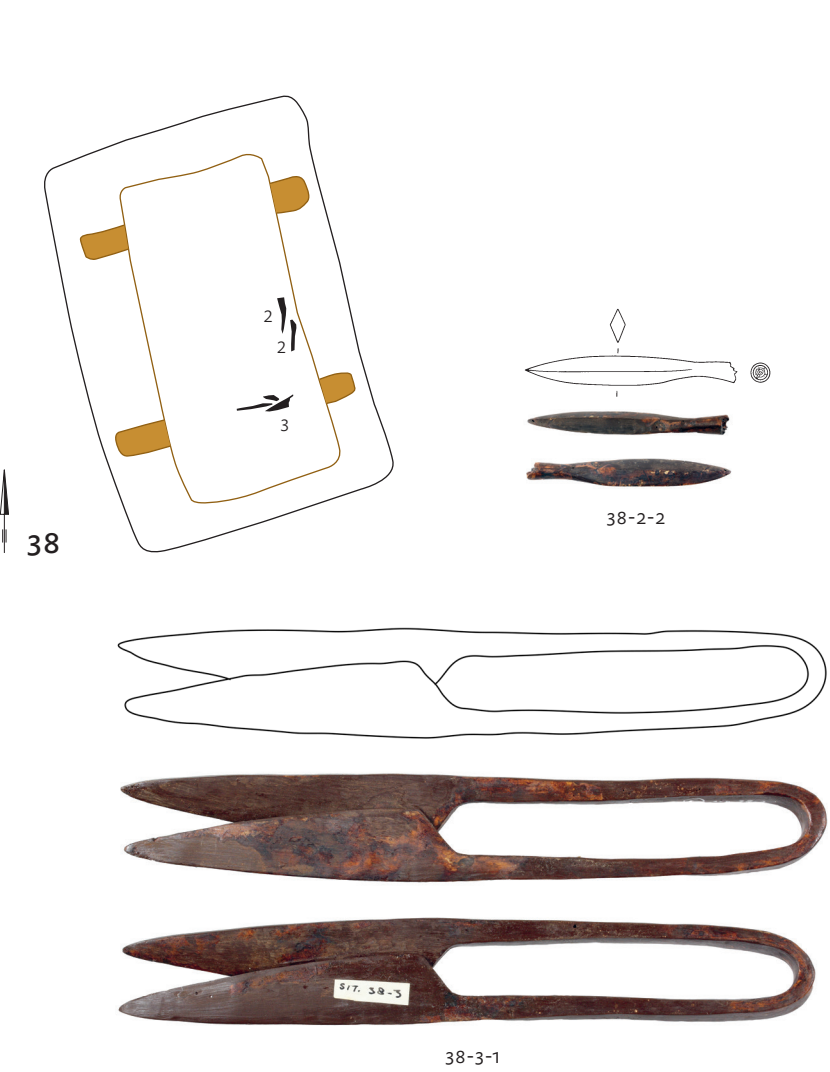
FINDS

2 Arrow head, iron

Find number: 38-2-1

Find depth: 56.24

No drawing/object available. The two arrow heads assigned to grave 38 are recorded on the field drawing as find number 38-2. The missing arrow



head is in the thesis of Zoetbrood described as having an open socket.

Type: L/P/V 23/24

L/P/V phases: PM-MA3

L/P/V date: 440/50-600/10

Location: missing

Arrow head, iron

Find number: 38-2-2

Find depth: 56.24

Iron arrow head with a closed socket with wood remains of the shaft and an oval blade with faint mid rib (which might be a result of its restoration). The two arrow heads from grave 38 are recorded on the field drawing as find number 38-2.

Blade length: 9.0 cm

Type: L/P/V 26

L/P/V phases: MA1-MR1

L/P/V date: 470/80-630/40

Location: PDB Limburg

3 Shears, iron

Find number: 38-3-1

Find depth: 56.20

Iron pair of shears.

Length: 18.5 cm

Type: L/P/V 355

L/P/V phases: MA1-MR3

L/P/V date: 470/80-700/10

Location: Museum Het Domein

39

INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	119
Grave pit width	116
Grave pit depth	18
Orientation	358 (S-N)

DESCRIPTION

Merovingian inhumation grave. The burial pit was square with slightly rounded corners and held a square wooden container. The size and shape of the grave indicate that it could not have contained a body in extended position. It is therefore assumed that this grave was either the grave of a child or a burial pit containing reburied remains. It contained finds that can be associated with both the burial of a child and adult. The grave was placed at the possible head-end of grave 47.

GRAVE DATE

SK IIc: 580/90-640/50

FAG phases 6-7: 580/90-640/50



FINDS

1 Pottery vessel

Find number: 39-1-1

Find depth: 56.37

Orange bottle found in fragmented condition. The fragments are glued together and missing parts completed. The result is a rather asymmetric bottle which, however, represents its original shape.

Height: 24.0 cm

Type: Siegmund Fla1.1

Rhineland phase: 8

Rhineland date: 610-640

Alternative type: FAG S-Fla1.1 (565-640/50)

Alternative type: Koch-Pleidelshheim 2001 form D (620-650)

Location: PDB Limburg

2 Seax, iron

Find number: 39-2-1

Find depth: 56.18

Small iron seax with a straight back.

Blade length: 18.5 cm

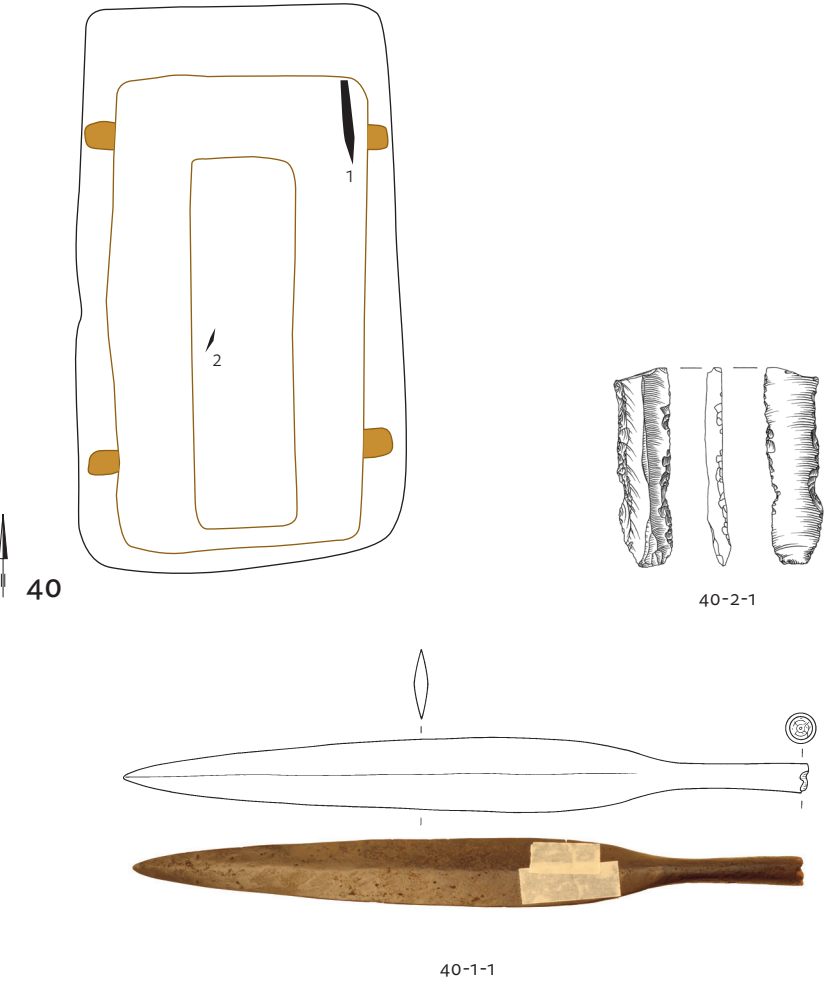
Type: FAG Sax1

FAG phases: (end 3) 4-5 (7)

FAG date: (510) 510/25-580/90 (640/50)

Alternative type: Siegmund Sax1 (530-610)

Location: PDB Limburg



40

INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	299
Grave pit width	175
Grave pit depth	25
Orientation	0 (S-N)

DESCRIPTION

Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was the wooden coffin that held the body.

GRAVE DATE

SK IIIB: 640/50-c.750

FAG phases 7-9: 610/20-710

FINDS

1 Lance head, iron

Find number: 40-1-1

Find depth: 56.38

Iron lance head with a long oval blade and a closed socket with wood remains of the shaft.

Length blade: 28.5

Type: Siegmund Lan2.4

Rhineland phases: 8B-10

Rhineland date: 635-705

Alternative type: L/P/V 36 (630/40-660/670)

Alternative type: FAG S-Lan2.4 (510/20-710)

Location: PDB Limburg

2 Stone

Find number: 40-2-1

Flint

Length: 5.3 cm

Location: PDB Limburg

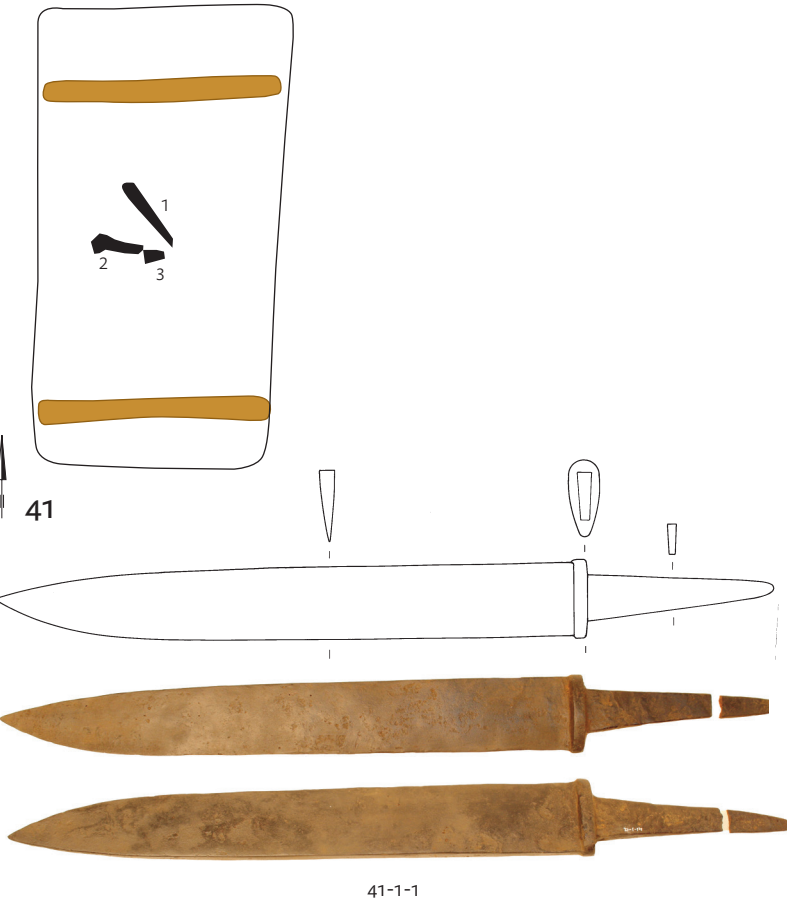
41
INHUMATION GRAVE

Trench	1
Grave structure	possible wooden container grave
Grave pit length	240
Grave pit width	135
Grave pit depth	7 (S-N)
Orientation	1

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained two wooden beams. The presence of beams suggests that the grave initially held a container, but its remains were not found during excavation.

GRAVE DATE
SK IIId: 610/20-640/50
FAG phase 7: 610/20-640/50

FINDS
1 Seax, iron
Find number: 41-1-1
Find depth: 56.54
Iron seax, with a nearly straight back.
Blade length: 31.2 cm
Type: Siegmund Sax1
Rhineland phases: 4-7
Rhineland date: 530-610
Alternative type FAG Sax1: (end 3) 4-5 (7) ((510) 510/25-580/90 (640/50))



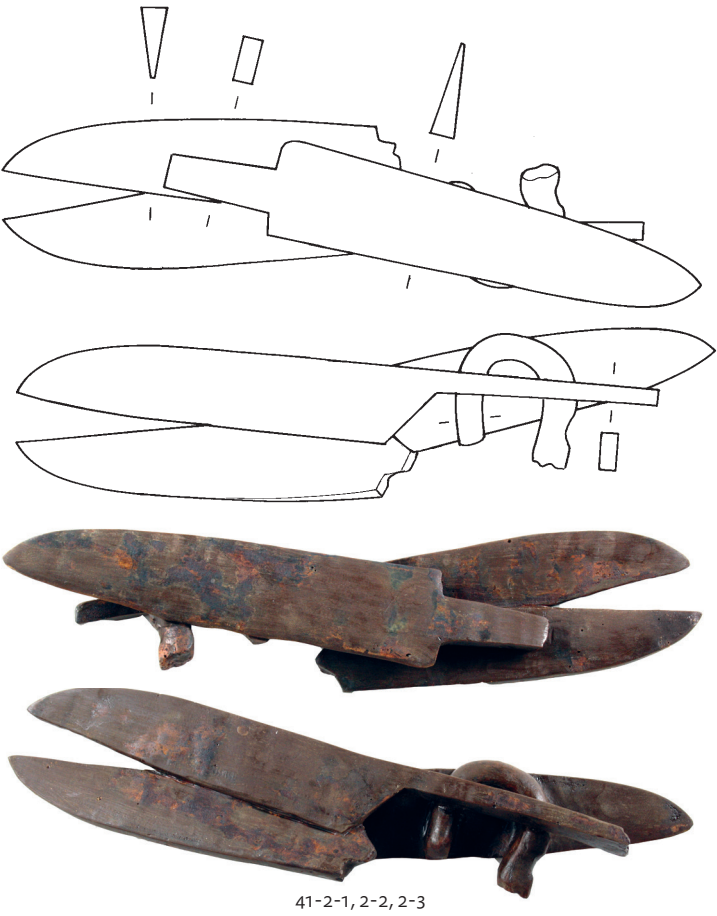
Type: Siegmund Sax2.1 (7-9: 585-655)
Alternative type: FAG Sax2.1 ((565) 580/90-640/50 (680))
Location: PDB Limburg

2 Knife, iron
Find number: 41-2-1
Find depth: 56.53
Iron knife with a curved back, found attached to a pair of shears.
Length blade: 11.7 cm
Location: PDB Limburg

Shears, iron
Find number: 41-2-2
Find depth: 56.53
The parts of two blades of an iron pair of shears. The head is gone. A knife is attached to the shears.
Length: 16.9 cm
Type: L/P/V 355
L/P/V phases: MA1-MR3
L/P/V date: 470/80-700/10
Location: PDB Limburg

Belt fitting?, iron
Find number: 41-2-3
Find depth: 56.53
Iron loop, attached to a pair of shears and a knife: it might be a part of the loop of a simple oval buckle.
Location: PDB Limburg

3 Belt fitting, iron
Find number: 41-3-1
Find depth: 56.54
Iron plate buckle with a tongue shaped plate with two (of originally three?) domed copper alloy rivets



with carved/dentated rims. The plate is for a large part completed: it is uncertain what the original shape of the plate actually was. The D-shaped buckle loop has an iron shield tongue.
Length plate: 7.0 cm
Maximum length loop: 5.1 cm
Type: Siegmund Gür4.5
Rhineland phase: 8A
Rhineland date: 610-625
Alternative type: FAG S-Gür4.5 (610/20-640/50)
Location: PDB Limburg

42
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	260
Grave pit width	101
Grave pit depth	9
Orientation	21 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular, fairly narrow, with slightly rounded corners and held a wooden container placed on two wooden beams.

GRAVE DATE
Cannot be dated

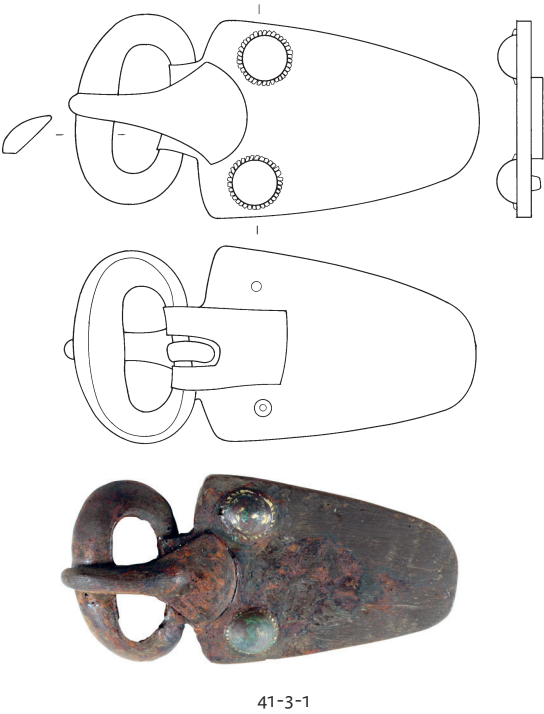
43
INHUMATION GRAVE

Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit width	135
Grave pit depth	69
Orientation	8 (S-N)
Stratigraphic relation	below context 44

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was south-north in view of the skull remnants that were recorded in the southern end of the grave. The burial pit was rectangular, fairly narrow, with slightly rounded corners and held two wooden containers and at least one wooden beam. The outer container was the wooden chamber supported by presumably two wooden beams. The second, inner container was a wooden coffin that held the body and was placed in the western half of the chamber. The northern half of the grave was disturbed by grave 44; grave 43 is older than grave 44.

PHYSICAL ANTHROPOLOGY
Not suitable for examination.

GRAVE DATE
SK IIIa: 640/50-670/80
FAG phases 7-8: 610/20-670/80



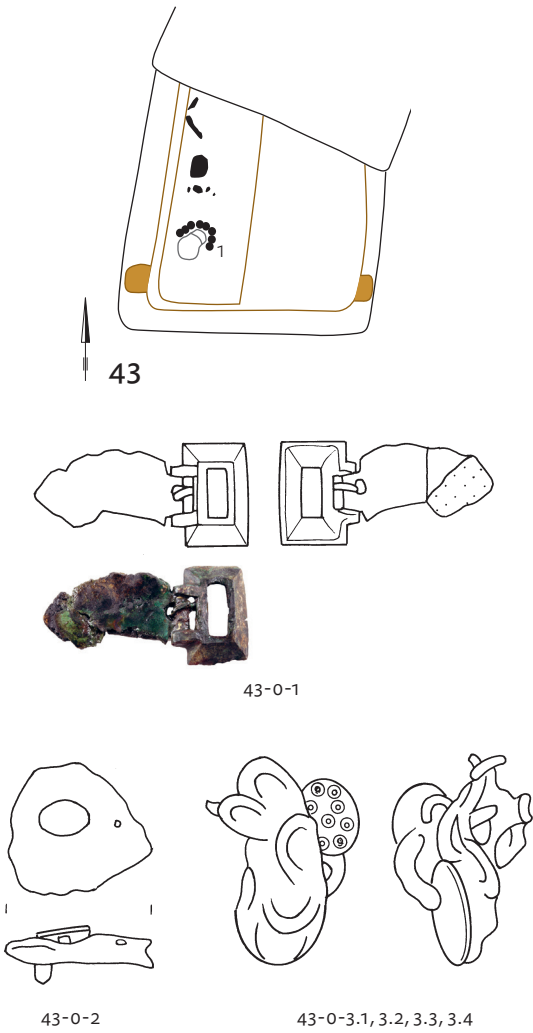
FINDS
0 Belt fitting, copper alloy
Find number: 43-0-1
Find depth: 55.91
Copper alloy plate buckle with a rectangular buckle loop (tongue is missing). The plate is considerably corroded; its shape cannot be identified. The buckle loop and plate are attached to one another with a hinged construction.
Length loop: 2.6 cm
Type: Siegmund Sna. 1.1?
Rhineland phases: 5
Rhineland date: 555-570
Alternative type: L/P/V 124/125 (MA1-MR1: 470/80-630/40)
Location: PDB Limburg

Rivet, copper alloy
Find number: 43-0-2
Find depth: 55.91
Copper alloy rivet, probably of a plate buckle (43-1-1?), with organic material at its back side.
Diameter rivet: 1.4 cm
Location: PDB Limburg

Equal armed brooch, copper alloy
Find number: 43-0-3.1
Find depth: 55.91
The extremity of a copper alloy equal armed brooch is attached to an ensemble of corroded objects. The end plate of this brooch has a stamped in dot-in-circle decoration.
Diameter end plate: 1.8 cm
Type: Thörle IIA1b
Thörle phase: JMII
Thörle date: 630/40-670/80
Location: PDB Limburg

Chain links, iron
Find number: 43-0-3.2
Find depth: 55.91
Iron links of a chain attached to an ensemble of corroded objects.
Type: Siegmund Ggh6
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: L/P/V 356 (630/40-700/10)
Alternative type: FAG S-Ggh6 (580/90-670/80)

Coin, copper alloy
Find number: 43-0-3.3
Find depth: 55.91
Copper alloy coin with a wire in its suspension hole. It is attached to an ensemble of corroded objects.
Diameter: 2.5 cm
Location: PDB Limburg



Textile remains
Find number: 43-0-3.4
Find depth: 55.91
Possible textile remains attached to an ensemble of corroded objects.
Location: PDB Limburg

Bead, glass
Find number: 43-0-4.1
Find depth: 55.91
Blue, transparent, ring shaped.
Number: 1
Type: BT4
Location: missing

1 Bead, glass
Find number: 43-1-4.2
Find depth: 55.91
Blue, transparent, double connected.
Number: 1
Type: BT25 / S-Per 37.2
Kombinationsgruppe: F-I
Rhineland phase: 5-10
Rhineland date: 555-705
Location: Museum Het Domein?

Bead, glass
Find number: 43-1-4.3
Find depth: 55.91
Blue, transparent, globular.
Type: BT1
Number: 1
Location: missing

Bead, glass
Find number: 43-1-4.4
Find depth: 55.91
Red, opaque, long cylindrical.
Type: RO27
Number: 1
Location: missing

Bead, glass
Find number: 43-1-4.5
Find depth: 55.91
Yellow, opaque, ring shaped.
Type: YO4
Number: 2
Location: missing

Bead, glass
Find number: 43-1-4.6
Find depth: 55.91
Orange, opaque, barrel shaped.
Number: 3
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein?

Bead, glass
Find number: 43-1-4.7
Find depth: 55.91
White, opaque, long cylindrical.
Type: WO27
Number: 1
Location: missing

Bead, glass
Find number: 43-1-4.8
Find depth: 55.91
Red, opaque, short cylindrical. Decoration: yellow opaque waves, crossing.
Number: 1
Type: Koch-Schretzheim 1977; 34,20
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per 35.11 (Kombinationsgruppe (D-H) F-G: (485) 555-705)
Location: Museum Het Domein?

Bead, glass
Find number: 43-1-4.9
Find depth: 55.91
Red opaque. Decoration: white and green blue swirling bands.
Number: 1
Location: missing

Glass, fragments
Find number: 43-1-5
Find depth: 55.91
Eighteen glass fragments.
Location: PDB Limburg

Human remains
Find number: 43-1-6
Find depth: 55.91
Imprint of a skull recorded on the field drawing
Location: not relevant

44 INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit width	137
Grave pit depth	69
Orientation	23 (SW-NE)
Stratigraphic relation	above context 43

DESCRIPTION
Merovingian inhumation grave. The location of beads suggests that the grave’s orientation was south-north, but we cannot be certain of this since the grave was only partially excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on at least one wooden beam. The northern end of the grave was dug away by construction work preceding the archaeological excavation. The grave cuts and disturbed the northern half of grave 43. It is clear that grave 44 is younger than grave 43 and its fill may contain finds that originally belonged to this older grave. Some of the beads in grave 44 seem to have moved from their original location.

GRAVE DATE
Cannot be dated

FINDS
1 Bead, glass
Find number: 44-1-1.1
Find depth: 55.98
Blue, transparent, ribbed.
Type: BT28/39
Number: 1
Location: missing

Bead, glass
Find number: 44-1-1.2
Find depth: 55.98
Blue, transparent, globular.
Type: BT1
Number: 2
Location: missing

Bead, glass
Find number: 44-1-1.3
Find depth: 55.98
Red, transparent, ribbed.
Type: RT28/39
Number: 1
Location: missing

Bead, glass
Find number: 44-1-1.4
Find depth: 55.98
Red, opaque, biconical
Number: 1
Type: RO20 / S-Per 35.6
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

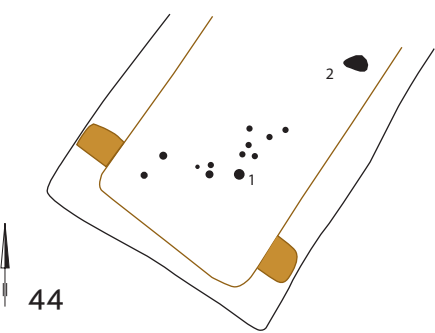
Bead, glass
Find number: 44-1-1.5
Find depth: 55.98
Red, opaque, triple connected.
Type: RO24
Number: 1
Location: missing

Bead, glass
Find number: 44-1-1.6
Blue, opaque, barrel shaped.
Type: BO19
Number: 2
Location: missing

Bead, glass
Find number 44-1-1.7
Find depth: 55.98
Blue, opaque, biconical/globular compressed.
Number: 2
Type: BO20/ S-Per 37.1
Kombinationsgruppe: (H) I
Rhineland phase: (8) 10-(8) 10
Rhineland date: (610) 670-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 44-1-1.8
Green, opaque, short cylindrical/ring shaped.
Number: 1
Type: GO3 / S-Per 36.2
Kombinationsgruppe: K-G: (F-H) I
Rhineland phase: (5) 8-(9) 10
Rhineland date: (555) 610-(670) 705
Location: Museum Het Domein

Bead, glass
Find number: 44-1-1.9
Yellow, opaque, barrel shaped.
Number: 3
Type: YO19
Location: Museum Het Domein



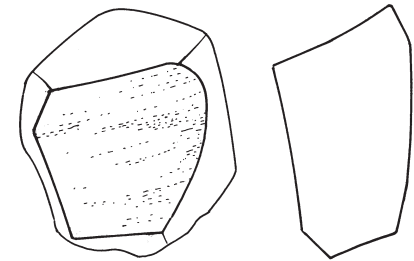
Bead, glass
Find number: 44-1-1.10
Find depth: 55.98
Orange, opaque, barrel shaped.
Number: 1
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 44-1-1.11
Find depth: 55.98
White, opaque, rounded disc shaped.
Type: WO4
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 44-1-1.12
Find depth: 55.98
White, opaque, globular compressed.
Number: 1
Type: WO18 / S-Per 32.3
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Museum Het Domein

Bead, glass
Find number: 44-1-1.13
Find depth: 55.98
Red opaque, large, biconical. Decoration: yellow opaque edge and middle bands with white, blue transparent and black swirling threads.
Number: 1
Type (on the basis of Zoetbrood’s description): Koch-Schretzheim 1977; group 58 (58,5)
Schretzheim phase: 3-4
Schretzheim date: 565-620/30
Alternative type: Koch-Pleidelsheim 2001; Group 58 (58,14)
Alternative type: S 35.27 (Kombinationsgruppe D-H: 485-705)
Location: Museum Het Domein

Bead, glass
Find number: 44-1-1.14
Yellow, opaque, ring shaped. Decoration: red waves, crossing.
Number: 1
Location: missing



Bead, glass
Find number: 44-1-1.15
Find depth: 55.98
Blue, opaque, cylindrical with four sides. Decoration: red swirling bands.
Number: 1
Location: missing

Bead, glass
Find number: 44-1-1.16
Find depth: 55.98
Black, opaque, cylindrical short. Decoration: four white dots with blue circles (polychrome eyes) and white edge bands.
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 44-1-1.17
Find depth: 55.98
White opaque, short cylindrical. Decoration: blue waves, crossing.
Number: 1
Type (on the basis of Zoetbrood’s description): Koch-Schretzheim 1977; K-S: 34,7
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per32.6 (Kombinationsgruppe F-H: 555-705)
Alternative type: S-Per32.7 (Kombinationsgruppe E-H: 530-705)
Location: Museum Het Domein

Bead, amber
Find number: 44-1-1.18
Find depth: 55.98
Almond shaped.
Type: A15
Number: 2
Location: missing

Bead, amber
Find number: 44-1-1.19
Find depth: 55.98
Irregular shaped.
Type: A40
Number: 4
Location: missing

Grinding stone
Find number: 44-2-1
Grinding stone.
Length: 6.6 cm
Location: PDB Limburg

45
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit length	232
Grave pit width	146
Grave pit depth	22
Orientation	14 (SW-NE)
Stratigraphic relation	above context 46

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. The grave cuts grave 46 and disturbed that grave's southern half. It is clear that grave 45 is younger than grave 46 and its fill may contain finds that originally belonged to the disturbed grave.

GRAVE DATE
SK IIIa: 640/50-670/80
FAG phase 8: 640/50-670/80

- FINDS**
- 1 Nail, iron
Find number: 45-1-1
Find depth: 56.32
Large iron nail with a domed head.
Diameter head: 2.1 cm
Location: PDB Limburg

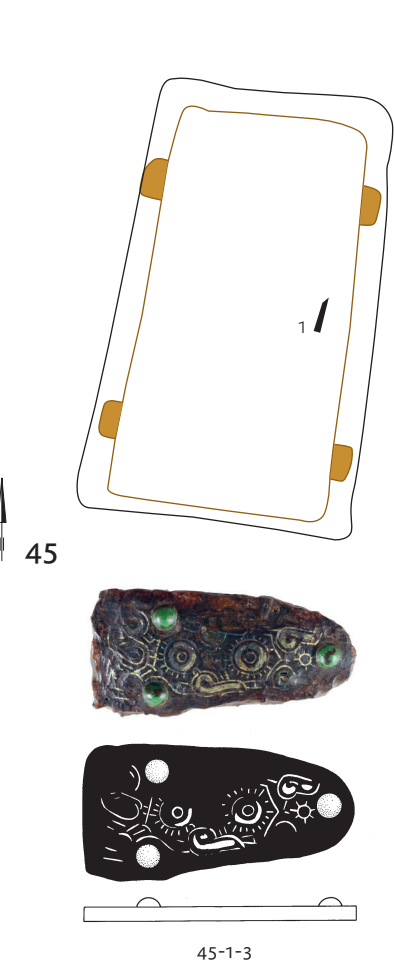
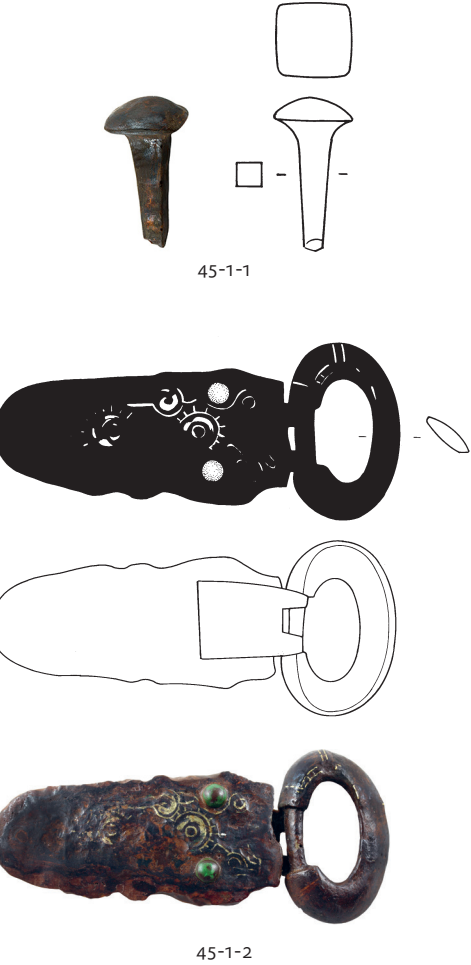


Plate buckle, iron
Find number: 45-1-2
Find depth: 56.32
Iron tongue shaped plate buckle with two (of originally three) domed copper alloy rivets. The plate is decorated with copper alloy inlays of which the original pattern cannot be identified; only some curling inlays are preserved which may have been part of an animal-style pattern. The buckle loop is oval and the tongue missing.
Length plate: 7.9 cm
Length loop: 4.7 cm
Type: Siegmund Gür4.8
Rhineland phase: 9
Rhineland date: 640-670
Location: PDB Limburg

Counter plate, iron
Find number: 45-1-3
Find depth: 56.32
Iron tongue shaped counter plate with three domed copper alloy rivets. The plate is decorated with copper alloy inlays which formed a pattern that cannot be identified; only some curling inlays are preserved which may have been part of an animal-style ornament.
Length plate: 7.2 cm
Type: Siegmund Gür4.8
Rhineland phase: 9
Rhineland date: 640-670
Location: PDB Limburg



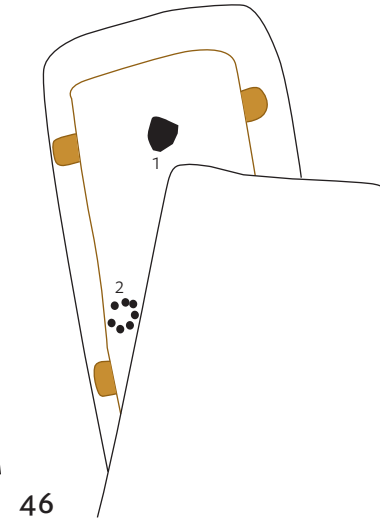
46
INHUMATION GRAVE

Trench	1
Grave structure	wooden container grave
Grave pit width	128
Grave pit depth	21
Orientation	350 (SE-NW)
Stratigraphic relation	below context 45

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. The southern half of the grave was disturbed by grave 45. It is clear that grave 46 is older than grave 45.

GRAVE DATE
SK IIa: 565-610/20
FAG phases 5-6: 565-610/20

- FINDS**
- 1 Pottery vessel
Find number: 46-1-1
Find depth: 56.55
Trefoil jug, not complete, but identified on the basis of a rim fragment which forms a small tree-foil spout. The handle is lost, but traces of its attachment to the belly can be observed. The trefoil jug is partly restored; another 20 available fragments are not included in the restored pot. The outer surface of the jug is grey, the wall core is orange/grey; it was baked under conditions with abundant smoke. Approximately 70% of the vessel is present.

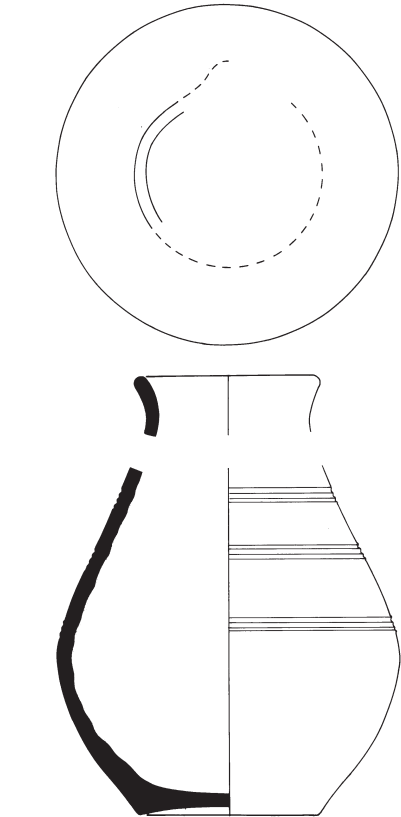


Height: 23.3
Type: Siegmund Kru1.1
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG S-Kru1.1 (510/20-580/90)
Location: PDB Limburg

Pottery, fragments
Find number: 46-1-2
Find depth: 56.55
1: Wall fragment of a big pot (biconical?) with two zones of four grooves, brown.
2: Rim fragment (of another pot, no drawing available).
Location: PDB Limburg

- 2 Bead, amber
Find number: 46-2-1.1
Find depth: 56.31
Almond shaped, diameter: 17 mm.
Type: A15
Number: 1
Location: PDB Limburg

Bead, glass
Find number: 46-2-1.2
Find depth: 56.31
Orange, opaque, barrel shaped.
Number: 4
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg



Bead, glass
Find number: 46-2-1.3
Find depth: 56.31
Orange, opaque, biconical.
Number: 1
Type: OO20 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 46-2-1.4
Find depth: 56.31
Red/brown, opaque, barrel shaped. Decoration: white waves, crossing.
Number: 2
Type: Koch-Schretzheim 1977; 34.11
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.8 (Kombinationsgruppe F-H: 5-10 (555-705)
Location: PDB Limburg

47
INHUMATION GRAVE

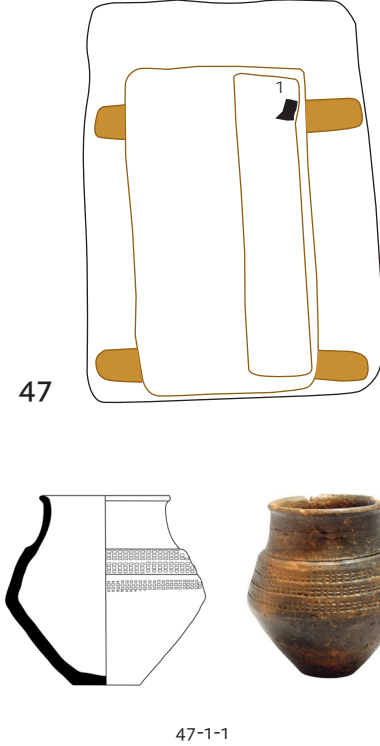
Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	213
Grave pit width	156
Grave pit depth	46
Orientation	358 (S-N)



DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was probably the wooden coffin that held the body. However, no body silhouette or human remains were discovered. The wooden container was placed in the eastern half of the chamber, which is a deviant location compared to the locations of coffins in the other chamber graves at Sittard-Kemperkoul: they were all placed in either the middle or western half of the chambers.

GRAVE DATE
SK IId: 610/20-640/50
FAG phases 7-8: 610/20-670/80

- FINDS**
- 1 Pottery vessel
Find number: 47-1-1
Find depth: 56.00
Biconical pot/beaker with a dark outer surface and a red/orange wall core. The upper wall is decorated with three zones of multiple lines (3/4) of rectangular roulette stamp impressions. The pot was found in fragmented condition but is now restored.
Height: 9.9 cm
Type: Siegmund Kwt3.23
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: FAG Kwt5C (610/20-670/80)
Location: Museum Het Domein



48

INHUMATION GRAVE

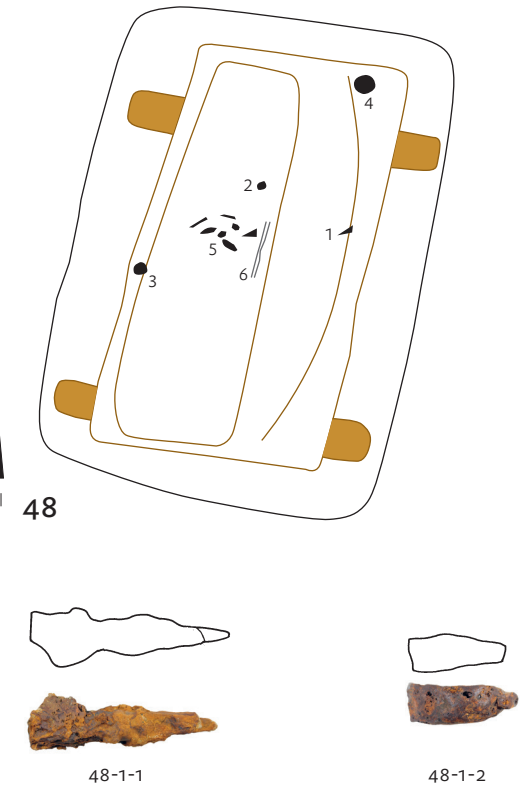
Trench	1
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	262
Grave pit width	187
Grave pit depth	25
Orientation	16 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since only one long bone silhouette was discovered during excavation. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was the wooden coffin that held the body. It contained the silhouette of a long bone, probably of the upper or lower right leg. A remark on the field drawing states that the pottery shards were found scattered throughout the grave’s fill.

PHYSICAL ANTHROPOLOGY
Not suitable for examination

GRAVE DATE
Cannot be dated

FINDS
1 Nail, fragment
Find number: 48-1-1
Find depth: 55.82
Fragment of an iron nail, probably a coffin nail
Length: 5.1 cm
Location: PDB Limburg



Nail, iron
Find number: 48-1-2
Find depth: 55.82
Fragment of an iron nail, probably a coffin nail.
Length: 2.6 cm
Location: PDB Limburg

2 Stone
Find number: 48-2-1.1
Flint
Length: 2.9
Location: PDB Limburg

Stone
Find number: 48-2-1.2
Flint
Length: 2.4 cm
Location: PDB Limburg

3 Fragment, copper alloy
Find number: 48-3-1
Find depth: 55.75
Not available anymore.
Location: missing

4 Pottery, fragments
Find number: 48-4-1
Find depth: 55.77
Fragments of a small biconical pot with a grey outer surface and brown/orange wall core. Approximately 25% of the pot is present: 3 bottom fragments and 7 fitting wall fragments of which one shows the carination of the pot.
Height: not reconstructed
Location: PDB Limburg



48-4-1

5 Pottery, fragments.
Find number: 48-5-1
Find depth: 55.77
Location: missing

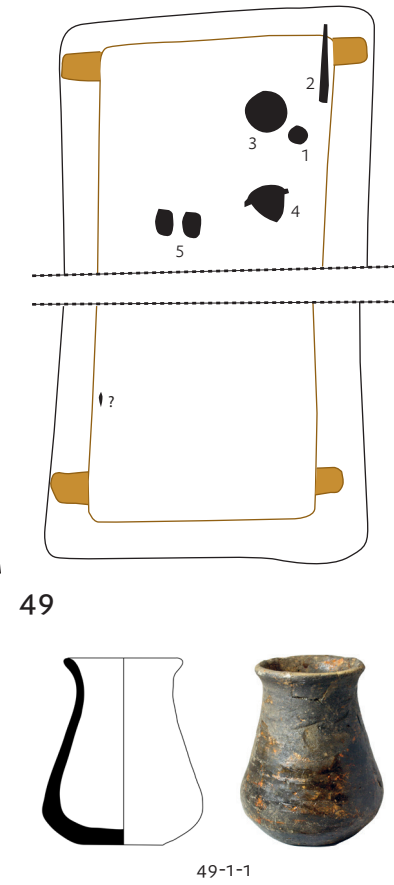
6 Human remains
Find number: 48-6-1
Find depth: 55.75
Imprint of a long bone recorded on the field drawing.
Location: not relevant

49

INHUMATION GRAVE

Trench	1 and 6
Grave structure	wooden container grave
Grave pit length	280
Grave pit width	169
Grave pit depth	37
Orientation	1 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. Grave 49 was excavated in trench 1 and trench 6. Only the part in trench 1 contained finds. These finds seem to be found in situ.



GRAVE DATE
SK IId: 610/20-640/50
FAG phases 7-8: 610/20-670/80

FINDS
1 Pottery, vessel
Find number: 49-1-1
Find depth: 56.50
Beaker with a grey, considerably weathered, surface. It was found in fragmented condition but is now restored.
Height: 8.3 cm
Location: Museum Het Domein

2 Lance head, iron
Find number: 49-2-1
Find depth: 56.65
Iron lance head, heavily restored, with a long oval blade and a closed socket with wood remains of the shaft.
Blade length: 21.0 cm
Type: Siegmund Lan2.4
Rhineland phases: 8B-10
Rhineland date: 625-705
Alternative type: L/P/V 36 (630/40-660/670)
Alternative type: FAG S-Lan2.4 (510/25-710)
Location: PDB Limburg

3 Pottery vessel
Find number: 49-3-1
Find depth: 56.53
Spouted pot with a lighter appearance than its original dark grey surface which is considerably weathered. A deep groove is applied in the rim.



The upper wall is decorated with two zones of grooves: the upper zone consists of two grooves, the lower zone of one groove. The pot was found in fragmented condition. Approximately 90% of the pot is present; the fragments are glued together and some missing parts are filled up.
Height: 20.6 cm
Type: S-Kwt4.11 (on the basis of the rounded carination)
Rhineland phase: 7B-8A
Rhineland date: 600-625
Type: S-Kwt2.32 (on the basis of the grooves)
Rhineland phase: 4
Rhineland date: 530-570
Alternative type: FAG Kwt3A (510/25-580/90)
Location: PDB Limburg

Fragment, iron
Find number: 49-3-2
Find depth: 56.53
Iron fragment (knife?) with wood remains.
Length: 4.0 cm
Location: PDB Limburg

Fragment, iron
Find number: 49-3-3
Find depth: 56.53
Fragment of an iron knife?
Length: 2.5 cm
Location: PDB Limburg

Fragment, iron
Find number: 49-3-4
Find depth: 56.53

Indeterminate flat iron fragment.
Length: 3.0 cm
Location: PDB Limburg

Fragment, iron
Find number: 49-3-5
Find depth: 56.53
Indeterminate iron fragment (fragment of a knife?)
Length: 2.9 cm
Location: PDB Limburg

Iron, fragment
Find number: 49-3-6
Find depth: 56.53
Iron fragment with a copper alloy rivet attached to it. One edge is rounded; it was probably a part of a belt plate. Leather remains seem to be present at the back of the plate.
Length: 3.0 cm
Location: PDB Limburg

4 Shield boss, iron
Find number: 49-4-1.1
Find depth: 56.43
Iron shield boss with four domed copper alloy rivets on the flange and a flattened convex cone. Height: 4.7-5.2 cm
Diameter: 17.8 cm
Type: FAG Sbu5A
FAG phase: 6-9
FAG date: 580-710
Alternative type: L/P/V 80 (600-670)
Alternative type: Siegmund Sbu5 (610-640)
Location: PDB Limburg



Grip of shield boss, iron
Find number: 49-4-1.2
Find depth: 56.43
Iron grip of shield boss 49-4-1.2. It has wood remains of the shield attached to it and was fastened to the shield with two flat copper alloy rivets.
Length: 13.2 cm
Type: FAG Sbu5A
FAG phase: 6-9
FAG date: 580-710
Alternative type: L/P/V 8o (600-670)
Alternative type: Siegmund Sbu5 (610-640)
Location: PDB Limburg

5 Belt fitting, iron
Find number: 49-5-1
Find depth: 56.53
Iron plate buckle with a triangular plate and three copper alloy domed rivets. The buckle loop is missing and the remainder of the plate buckle is heavily restored and partly damaged.
Type: Siegmund Gür4.5
Rhineland phase: 8
Rhineland date: 610-640
Length: 6.7 cm
Location: PDB Limburg

Belt fitting, iron
Find number: 49-5-2
Find depth: 56.53
Rectangular iron back plate with four domed copper alloy rivets.
Length: 4.0 cm
Width: 2.4 cm

Type: Siegmund Gür4.5
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg

Belt fitting, iron
Find number: 49-5-3
Find depth: 56.53
Iron counter plate with a tongue shaped plate and two (of originally three?) domed copper alloy rivets. The plate is heavily restored and it can be assumed that its shape was originally similar to the plate of the plate buckle in this find number.
Type: Siegmund Gür4.5
Rhineland phase: 8
Rhineland date: 610-640
Length: 5.1 cm
Location: PDB Limburg

Rivets, copper alloy
Find number: 49-5-4
Find depth: 56.53
Two domed copper alloy rivets, probably of belt fitting 49-5-1.
Diameter: 0.5 cm
Location: PDB Limburg

6 Plate, copper alloy
Find number: 49-6-1
Find depth: 56.55
Fragment of a copper alloy plate with two domed copper alloy rivets.
Length: 1.9 cm
Location: PDB Limburg

50 INHUMATION GRAVE

Trench	1
Grave structure	possible wooden container grave
Grave pit width	135
Grave pit depth	7
Orientation	352 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since it was only partially excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and contained one wooden beam. The presence of this beam suggests that the grave contained a wooden container. Its remains were, however, not found during excavation, as is also indicated on the section drawing of the southern end of the grave.

GRAVE DATE
SK IIa: 565-610/20
FAG phases 5-6: 565-610/20

FINDS
1 Pottery vessel
Find number: 50-1-1
Fragments of a biconical pot; bottom fragments, wall fragments, and rim fragments. Approximately 25% of the pot is present. The fragments have a brown outer surface. The upper wall fragments are decorated with single lines of rectangular roulette stamp impressions.

Height: 12.0 cm
Belly diameter: 15.3
Type: S-Kwt3.11
Rhineland phases: 6-begin 7
Rhineland date: 570-600
Alternative type: FAG-Kwt5A (565-610/20)
Alternative type decoration: L/P/V 414 (470-670)
Location: PDB Limburg

51 INHUMATION GRAVE

Trench	4
Grave structure	tree trunk grave
Grave pit length	244
Grave pit width	110
Grave pit depth	30
Orientation	17 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container. A section drawing of the grave was made (see chapter 3). This drawing shows that the bottom of the container was concave which indicates that the body was buried in a tree trunk coffin.

GRAVE DATE
Cannot be dated

52 INHUMATION GRAVE

Trench	4
Grave structure	wooden container grave
Grave pit width	128
Grave pit depth	43
Orientation	11 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since only a small part of the grave was excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container. Only the northern end of the grave was excavated. The digging of a gas-pipe trench disturbed the other part of the grave.

GRAVE DATE
Cannot be dated

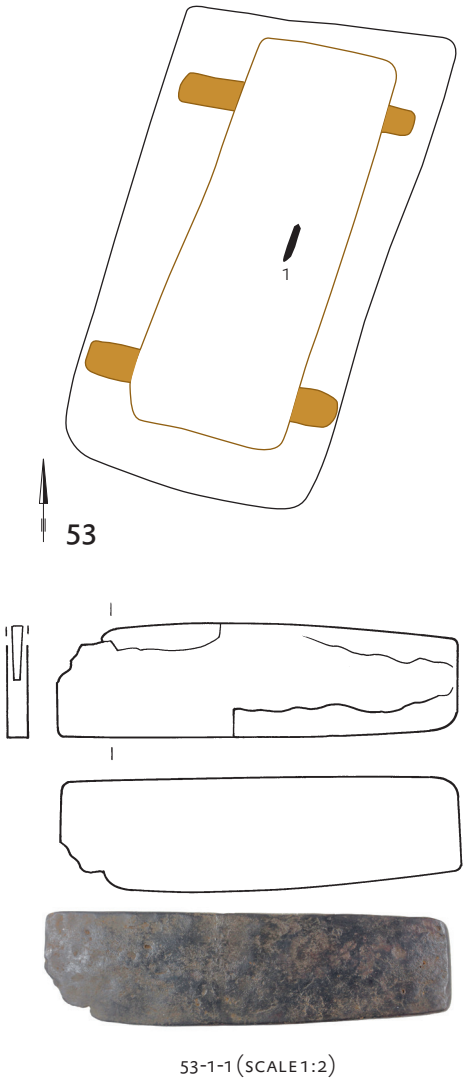
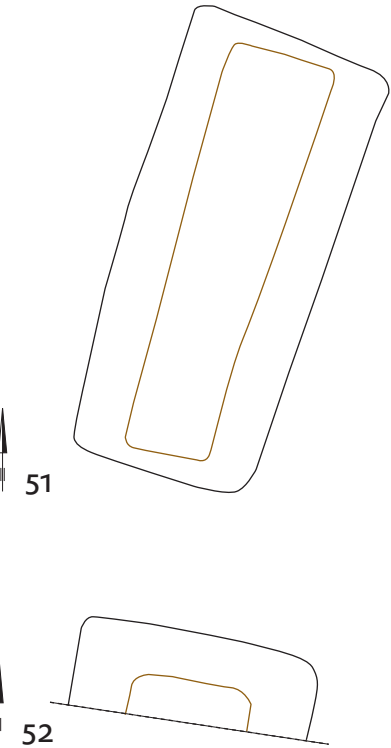
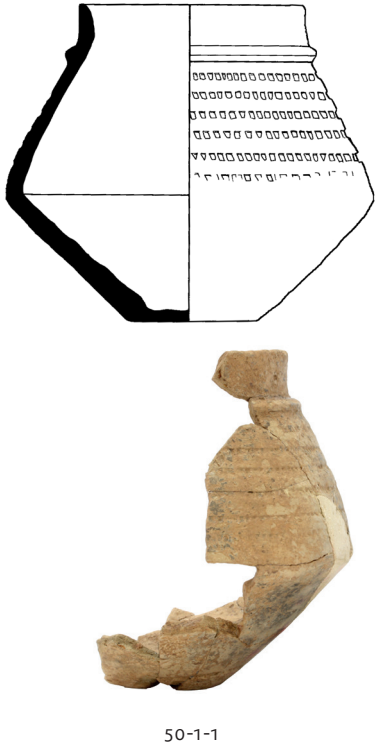
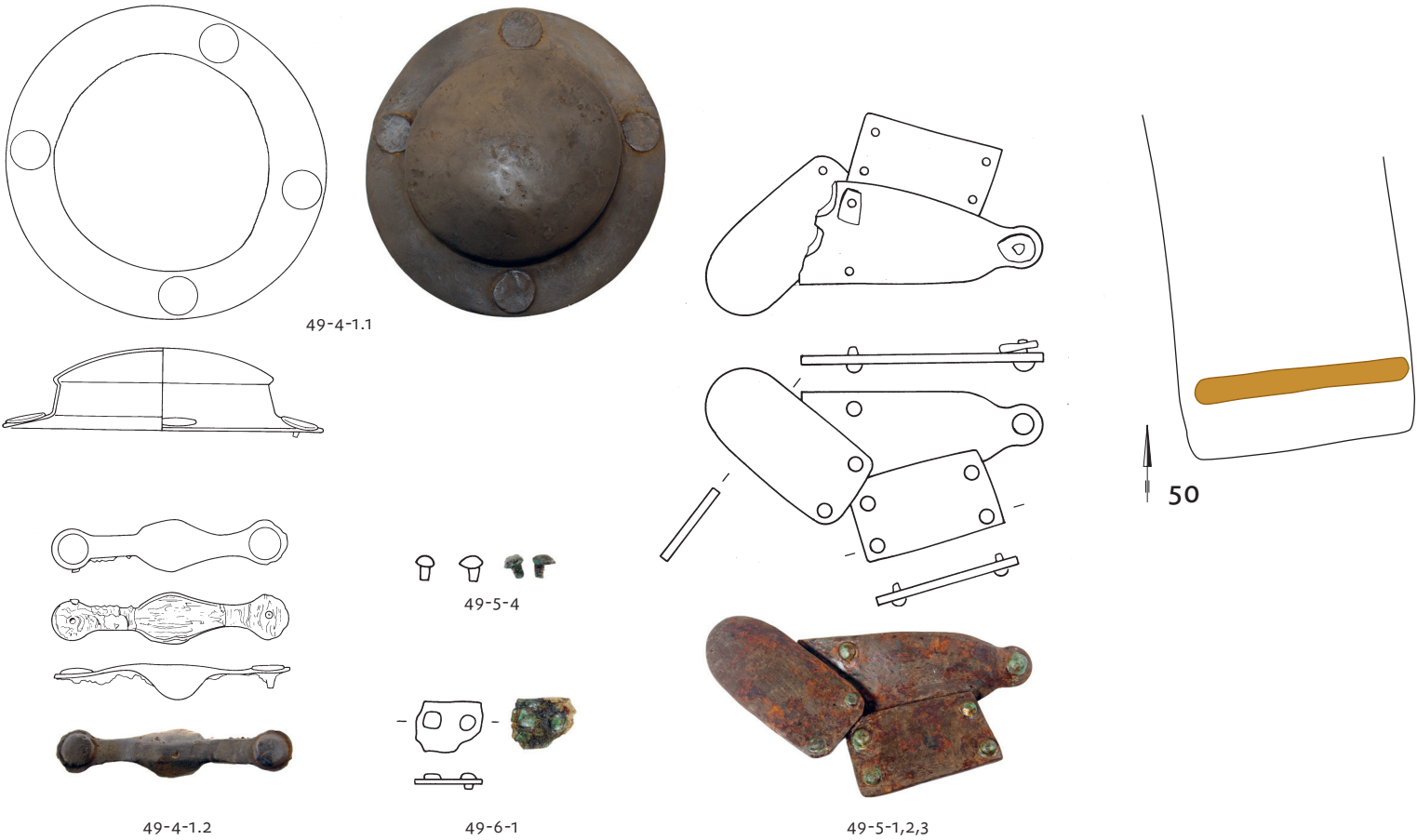
53 INHUMATION GRAVE

Trench	4
Grave structure	wooden container grave
Grave pit length	262
Grave pit width	145
Grave pit depth	47
Orientation	17 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams.

GRAVE DATE
SK IIIb: 640/50-c.750
FAG phases 8-10 : 640/50-c.750

FINDS
1 Knife, iron
Find number: 53-1-1
Find depth: 55.70
Foldable knife
Length: 10.4 cm
Type: S-Ger1.3
Rhineland phases: 9-11
Rhineland date: 640-740
Alternative type: FAG S-Ger1.3: 640-750
Location: PDB Limburg



54
INHUMATION GRAVE

Trench	4
Grave structure	trench grave?
Grave pit width	87
Grave pit depth	23
Grave orientation	16 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since only a small part of the grave was excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners. Traces of beams or a wooden container were not found. Only the northern end of the grave was excavated. The digging of a gas-pipe trench disturbed the other part of the grave.

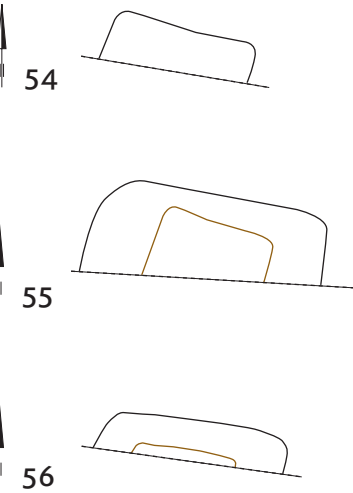
GRAVE DATE
Cannot be dated

55
INHUMATION GRAVE

Trench	4
Grave structure	wooden container grave
Grave pit width	126
Grave pit depth	33
Orientation	17 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since only a small part of the grave was excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container. Only the northern end of the grave was excavated. The digging of a gas-pipe trench disturbed the other part of the grave.

GRAVE DATE
Cannot be dated



56
INHUMATION GRAVE

Trench	4
Grave structure	wooden container grave
Grave pit width	101
Grave pit depth	22

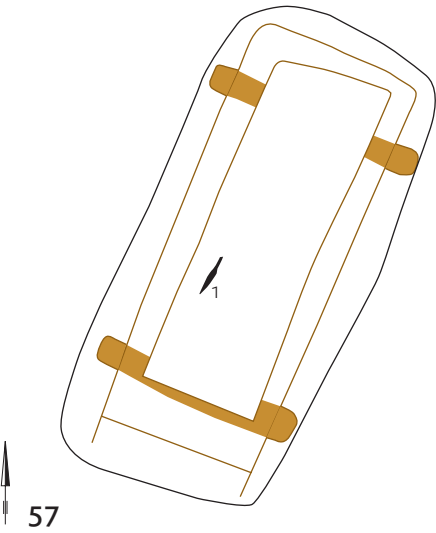
DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since only a small part of the grave was excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container. Only the northern end of the grave was excavated. The digging of a gas-pipe trench disturbed the other part of the grave.

GRAVE DATE
Cannot be dated

57
INHUMATION GRAVE

Trench	4
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	269
Grave pit width	129
Grave pit depth	22
Orientation	21 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The field drawing suggests that the long sides of this container extended beyond the southern short side of the container.



The second, inner container was probably the wooden coffin that held the body. However, human remains or a body silhouette were not found.

GRAVE DATE
Cannot be dated

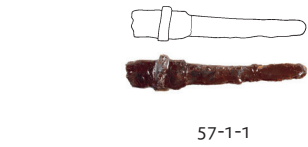
- FINDS**
- 1 Knife, iron
Find number: 57-1-1
Find depth: 55.85
Iron knife of which a significant part of the blade is gone.
Blade length: 2.9 cm
Location: PDB Limburg

58
INHUMATION GRAVE

Trench	4
Grave structure	wooden container grave
Grave pit length	167
Grave pit width	86
Grave pit depth	22
Orientation	18 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams.

GRAVE DATE
Cannot be dated



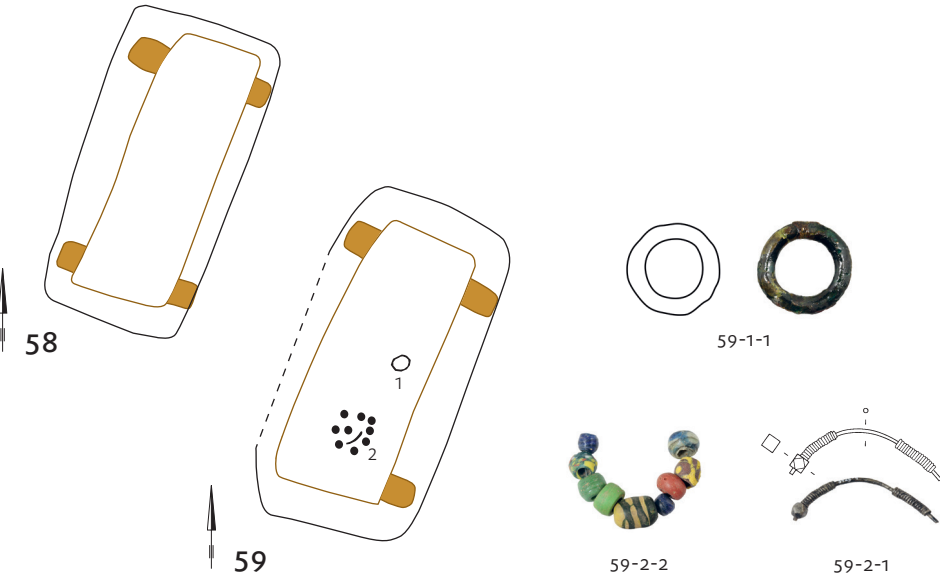
59
INHUMATION GRAVE

Trench	4
Grave structure	wooden container grave
Grave pit length	185
Grave pit width	96
Grave pit depth	19
Orientation	19 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The location of beads suggests that the grave’s orientation was south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. Grave 59 and 60 are placed next to one another. The stratigraphic relation between the two graves is unclear.

GRAVE DATE
SK IIIb: 640/50-c.750
FAG phases 7-10: 610/20-c.750

- FINDS**
- 1 Simple ring, iron
Find number: 59-1-1
Find depth: 56.03
Simple iron ring.
Diameter: 2.5 cm
Type: L/P/V 357
L/P/V phases: MA2-MR1
L/P/V date: 520/30-630/40
Location: PDB Limburg
 - 2 Earring, silver
Find number: 59-2-1
Find depth: 55.97
Fragment of a silver cast earring with a solid polygonal appendage and silver wire twisted around the main ring.
Diameter ring: cannot be established
Appendage diameter: 0.8 cm



Type: S-Ohr7.2
Rhineland phase: 10
Rhineland date: 670-705
Alternative type: FAG Ohr7 ((640/50) 670/80-710)
Location: PDB Limburg

Bead, glass
Find number: 59-2-2.1
Find depth: 55.97
Blue, opaque, globular compressed. Decoration: opaque white band.
Number: 1
Location: PDB Limburg

Bead, glass
Find number: 59-2-2.2
Red/brown, opaque, barrel shaped. Decoration: yellow waves, crossing, with yellow opaque dots in between.
Number: 1
Location: PDB Limburg

Bead, glass
Find number: 59-2-2.3
Find depth: 55.97
Red, opaque, globular compressed.
Number: 1
Type: RO18 / S-Per 35.6
Kombinationsgruppe: (G) H-I
Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

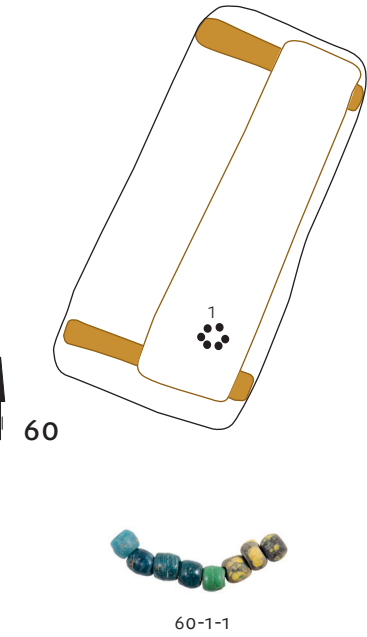
Bead, glass
Find number: 59-2-2.4
Find depth: 55.97
Blue, opaque, barrel shaped.
Number: 1
Type: BO19 / S-Per 37.1?
Kombinationsgruppe: (H) I
Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 59-2-2.5
Find depth: 55.97
Black, long cylindrical. Decoration: white/yellow spiral band.
Number: 1
Location: PDB Limburg

Bead, glass
Find number: 59-2-2.6
Find depth: 55.97
Green, opaque, barrel shaped.
Number: 2
Type: GO19 / S-Per 36.2
Kombinationsgruppe: (F-H) I
Rhineland phases: (5) 8-(9) 10
Rhineland date: (555) 610-(670) 705
Location: PDB Limburg

Bead, glass
Find number: 59-2-2.7
Find depth: 55.97
Blue, opaque, barrel shaped. Decoration: yellow, red and white dots.
Number: 1
Type: Koch-Schretzheim 1977 / Pleidelsheim 2001: group 11
Koch-phases: 2-3
Koch date: 545/50-590/600
Location: PDB Limburg

Bead, glass
Find number: 59-2-2.8
Find depth: 55.97
Blue, transparent, small, globular compressed.
Number: 1
Type: BT30 / S-Per 47.3?
Kombinationsgruppe: I
Rhineland phases: 8-10
Rhineland date: 610-705
Location: PDB Limburg



60

INHUMATION GRAVE

Trench	4
Grave structure	wooden container grave
Grave pit length	218
Grave pit width	106
Grave pit depth	15
Orientation	19 (SW-NE)

DESCRIPTION

Merovingian inhumation grave. The location of beads suggests that the grave's orientation was south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. Grave 60 and 59 were placed next to one another. The stratigraphic relation between the two graves is unclear.

GRAVE DATE

Cannot be dated

- FINDS**
- 1

Bead, glass

Find number: 60-1-1.1

Find depth: 56.00

Blue, opaque, barrel shaped.

Type: BO19

Number: 4

Location: PDB Limburg
- Bead, glass

Find number: 60-1-1.2

Find depth: 56.00

Green, opaque, barrel shaped.

Number: 1

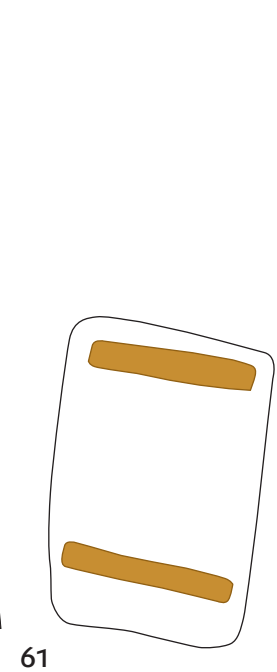
Type: GO19 / S-Per 36.2

Kombinationsgruppe: (F-H) I

Rhineland phases: (5) 8-(9) 10

Rhineland date: (555) 610-(670) 705

Location: PDB Limburg



Bead, glass

Find number: 60-1-1.3

Find depth: 56.00

Red/brown, opaque, barrel shaped. Decoration: yellow and green or blue dots.

Number: 3

Type: Koch-Schretzheim 1977 / Pleidelsheim 2001: group 11

Koch-phases: 2-3

Koch date: 545/50-590/600

Location: PDB Limburg

61

INHUMATION GRAVE

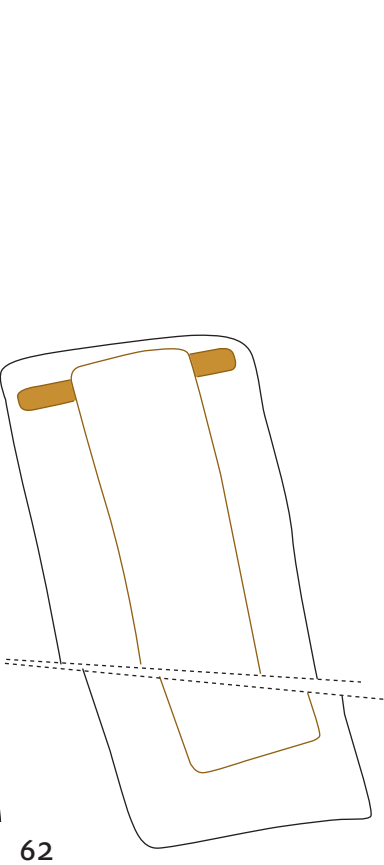
Trench	4
Grave structure	possible wooden container grave
Grave pit length	166
Grave pit width	110
Grave pit depth	13
Orientation	6 (S-N)

DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained two wooden beams. The presence of beams suggests that the grave initially held a container; its remains were, however, not found during excavation.

GRAVE DATE

Cannot be dated



62

INHUMATION GRAVE

Trench	1 and 6
Grave structure	wooden container grave
Grave pit length	259
Grave pit width	135
Grave pit depth	33
Orientation	349 (SE-NW)

DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on at least one wooden beam. Grave 62 was excavated in two trenches. In trench 6 only a small part of the grave's southern end was excavated. It contained the silhouette of a wooden container, but no wooden beam. The part of the grave excavated in trench 1 contained the rest of the wooden container silhouette and the only surviving beam. The second beam might have been dug away when the excavation trenches were constructed or was overlooked by the excavators.

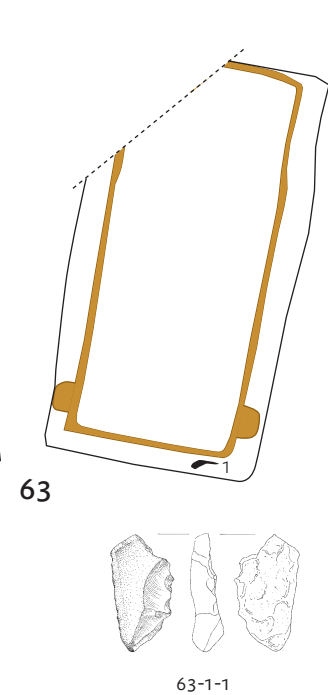
GRAVE DATE

Cannot be dated

63

INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit length	220
Grave pit width	122
Grave pit depth	15
Orientation	13 (SW-NE)



DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. Wood traces of the container were still present and documented by the excavators. A sewer-pipe trench disturbed the north-western corner of the grave.

GRAVE DATE

Cannot be dated

- FINDS**
- 1

Stone

Find number: 63-1-1

Find depth: 56.16

Flint

Length: 3.1 cm

Location: PDB Limburg

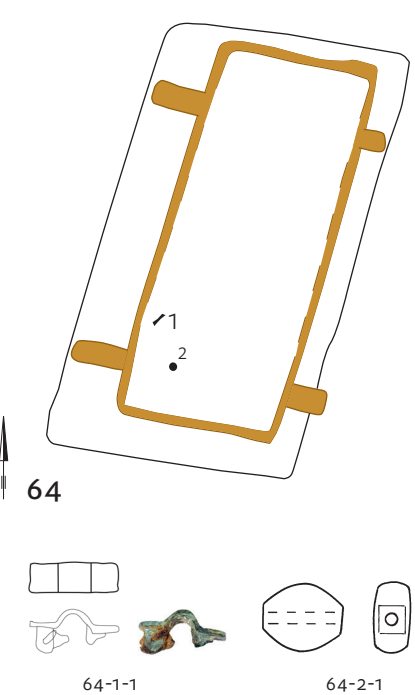
64

INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit length	235
Grave pit width	134
Grave pit depth	58
Orientation	17 (SW-NE)

DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. Wood traces of the container were preserved and



documented by the excavators. The southern beam was dug into the burial pit's eastern wall.

GRAVE DATE

SK IIIB: 640/50-c.750

FAG phases 7-10: 610/20-c.750

- FINDS**
- 1

Equal armed brooch, copper alloy

Find number: 64-1-1

Find depth: 55.70

Rectangular equal armed brooch of copper alloy, with remnants of the copper alloy fastener with iron pin on the back side.

Length: 2.3 cm

Type: Thörle group XI

Thörle phases: JM II-JMIII

Thörle date: 630/40-720

Location: PDB Limburg

- 2

Bead, amber

Find number: 64-2-1

Find depth: 55.73

Biconical, both sides are flat, slightly damaged at one side.

L: 2.1 cm

W: 1.8 cm

Number: 1

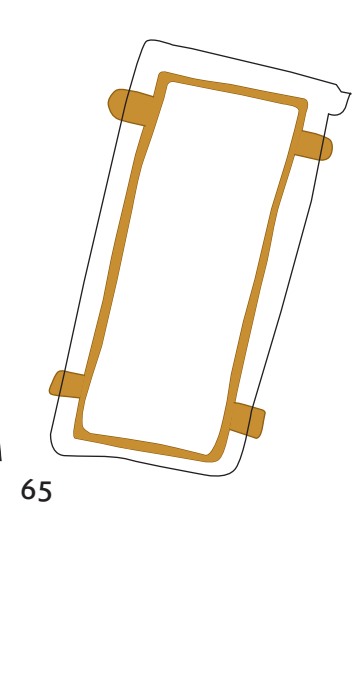
Type: A26

Location: PDB Limburg

65

INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit length	225
Grave pit width	107
Grave pit depth	38
Orientation	14 (SW-NE)



DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. Wood traces were still present and documented by the excavators. Both beams were dug into the burial pit's eastern and western walls.

GRAVE DATE

Cannot be dated

66

INHUMATION GRAVE

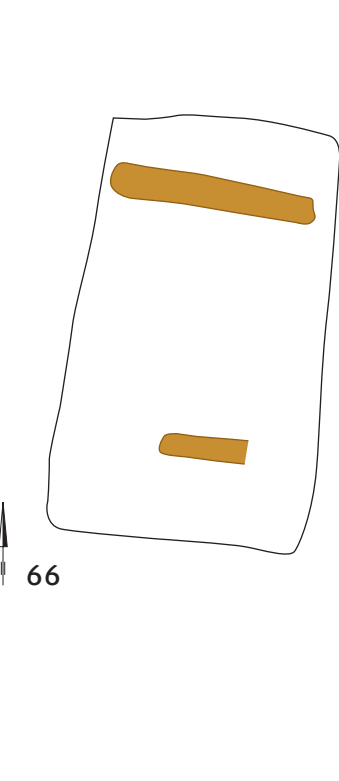
Trench	5
Grave structure	possible wooden container grave
Grave pit length	224
Grave pit width	141
Grave pit depth	48
Orientation	10 (SW-NE)

DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained two wooden beams. One of them was clearly visible; the traces of the other beam were rather vague. The presence of beams suggests that the grave initially held a container of which the remains were not discovered during excavation.

GRAVE DATE

Cannot be dated



67
INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit width	135
Grave pit depth	26
Orientation	15 (SW-NE)
Stratigraphic relation	above context 68

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. Wood traces were still present and documented by the excavators. Grave 67 cuts grave 68 and disturbed the north-western part of that feature. Grave 67 is younger than grave 68 and its fill may contain finds that originally belonged to the older grave. The relation between the graves is clear. The southern end of grave 67 was dug away by construction work preceding the archaeological excavation.

GRAVE DATE
Cannot be dated

68
INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit depth	36
Orientation	11 (SW-NE)
Stratigraphic relation	below context 67

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since only a part (the north-eastern corner) of the grave was excavated and no

human remains were found. The burial pit was probably rectangular with slightly rounded corners and held a wooden container placed on at least one wooden beam. The grave was cut by grave 67 and partly dug away by construction work preceding the archaeological excavation. Grave 68 is older than grave 67. The relation between the two graves is clear.

GRAVE DATE
Cannot be dated

69
INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit width	170
Grave pit depth	8
Orientation	14 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since only a part of the grave was excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on at least one wooden beam. Wood traces of the container walls were still present and documented by the excavators. The southern half of the grave was not excavated; it was disturbed by construction work preceding the archaeological excavation.

GRAVE DATE
Cannot be dated

70
INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit width	120
Grave pit depth	2
Orientation	10 (S-N)
Stratigraphic relation	below context 72

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but we cannot be certain of this since only a part of the grave was excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on at least one wooden beam. The grave was cut by grave 72 and it is clear that grave 70 is the older feature of the two.

GRAVE DATE
Cannot be dated

71
INHUMATION GRAVE

Trench	5
Grave structure	wooden chamber grave with wooden container (coffin) or partition wall
Grave pit length	233
Grave pit width	153
Grave pit depth	50
Orientation	0 (S-N)

DESCRIPTION
Merovingian inhumation grave. The orientation of the grave is south-north. The burial pit was rectangular with slightly rounded corners and held a wooden chamber with a possible partition wall. The wooden chamber was supported by two wooden beams. Wood traces of the walls were still

present and documented by the excavators. There is a possibility that the chamber was not divided by a partition wall, but that the traces indicate the former presence of a second wooden container in which the body was placed. An almost complete body silhouette was found in the western part of the grave, but clear traces of the wooden coffin in which the body was placed were not found. The skull seems to have moved from its original location, which is probably the result of post depositional processes. The deceased was positioned on its back in an extended position. The length of the body silhouette (measured from the lower jaw to the feet) was 141 cm; with the head in its original position it was c. 20 cm longer.

PHYSICAL ANTHROPOLOGY
Not suitable for examination.

GRAVE DATE
SK IIc: 580/90-640/50
FAG phase 4-7: 510/25-640/50

FINDS
1 Fragment, iron
Find number: 71-1-1
Find depth: 55.86
No drawing/information available.
Location: missing

- 2 Pottery vessel
Find number: 71-2-1
Find depth: 55.65-55.90
Bionial pot with a brown, considerably weathered, surface and red/brown core. The pot is restored and partially completed; approximately 90% of the original pot is present.
Height: 11.8 cm
Type: S-Kwt2.42
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Kwt4A: 510/25-640/50
Location: PDB Limburg
- 3 Finger ring, copper alloy
Find number: 71-3-1
Find depth: 55.78

Copper alloy finger ring with a flat, lozenge shaped bezel. The middle field of the bezel is decorated with an incised/engraved cross and surrounded with an engraved line applied along the edges (these lines are vague). A part of the bezel is gone.
Diameter ring: 2.3 cm
Length bezel: 1.5 cm
Type: L/P/V 334
L/P/V phases: MA3-MR2
L/P/V date: 560/70-660/70
Location: PDB Limburg

- 4 Flat strip, iron
Find number: 71-4-1
Find depth: 55.79
Flat iron strip with one iron rivet, heavily restored; function unknown.
Length: 5.8 cm
Location: PDB Limburg
- 5 Bracelet, copper alloy
Find number: 71-5-1
Copper alloy open bracelet with a circular section.
Diameter: 6.6 cm
Type: Wührer A.3.1
Wührer phase: AMI-end MP
Wührer date: 450/80-720
Alternative type: Siegmund Rng1.3
Rhineland phase: chronological indifferent
Location: PDB Limburg
- 6 Human remains
Find number: 71-6-1
Skeletal remains: leg
Location: PDB Limburg
- 7 Human remains
Find number: 71-7-1
Find depth: 55.80
Skeletal remains: jaw
Location: PDB Limburg
- 8 Bead, glass
Find number: 71-8-1.1
Orange, opaque, barrel shaped.
Number: 1
Type: OO19 / S-Per34.1

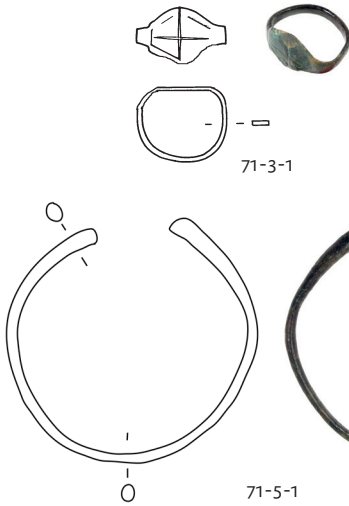
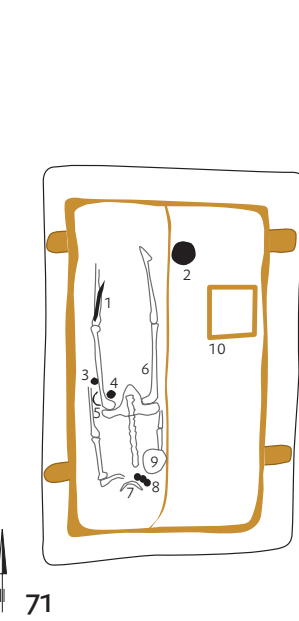
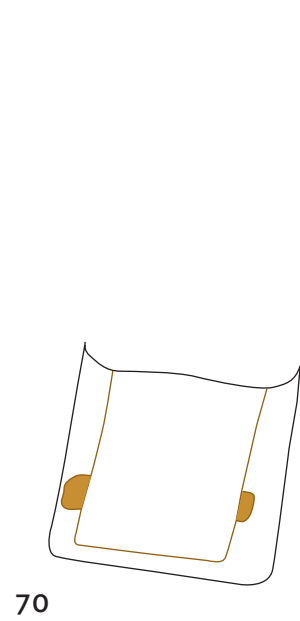
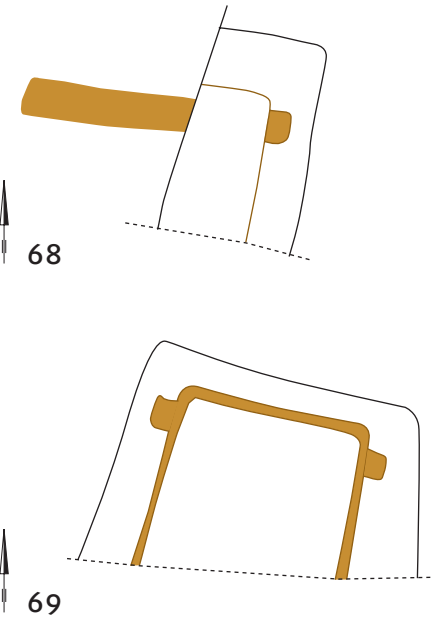
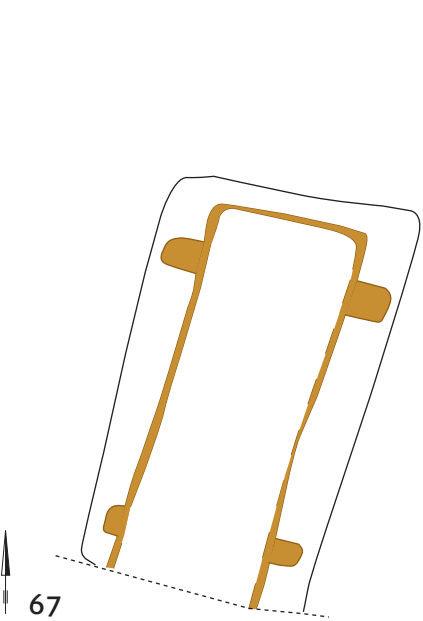
Kobinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 71-8-1.2
Blue, transparent, double connected.
Number: 1
Type: BT25 / S-Per 47.7 (groups: G-H)
Rhineland phases: 6-10
Rhineland date: 570-705
Location: PDB Limburg

Bead, glass
Find number: 71-8-1.3
White, opaque, double connected
Number: 1
Type: WO25 / S-Per 32.2
Kombinationsgruppe: H-I
Rhineland phase: 8-10
Rhineland date: 610-705
Location: PDB Limburg

Bead, glass
Find number: 71-8-1.4
Red, opaque, long cylindrical. Decoration: white opaque spiral band.
Number: 2
Type: Koch-Schretzheim 1977; 49,9
Koch phases: 3-4
Schretzheim date: 565-620/30
Location: PDB Limburg

Bead, glass
Find number: 71-8-1.5
Blue, transparent, triple connected.
Number: 1
Type: BT24 / S-Per 47.7
Kombinationsgruppe: G-H
Rhineland phases: 6-10
Rhineland date: 570-705
Location: PDB Limburg



Bead, glass
Find number: 71-8-1.6
Yellow, opaque, small, globular compressed.
Number: 1
Type: YO30 / S-Per 33.3
Kombinationsgruppe: D-H
Rhineland phases: 3-10
Rhineland date: 485-705
Location: PDB Limburg

Bead, glass
Find number: 71-8-1.6
Yellow, opaque, small, globular compressed.
Number: 2
Type: YO30 / S-Per 33.3
Kombinationsgruppe: D-H
Rhineland phases: 3-10
Rhineland date: 485-705
Location: Missing

Bead, glass
Find number: 71-8-1.7
Red/brown, opaque, triple connected.
Type: RO24
Number: 1
Type: RO24 / S-Per 35.7
Kombinationsgruppe: H
Rhineland phase: 8-10
Rhineland date: 610-705
Location: PDB Limburg

9 Human remains
Find number: 71-9-1
Find depth: 55.78
Skeletal remains: skull
Location: PDB Limburg

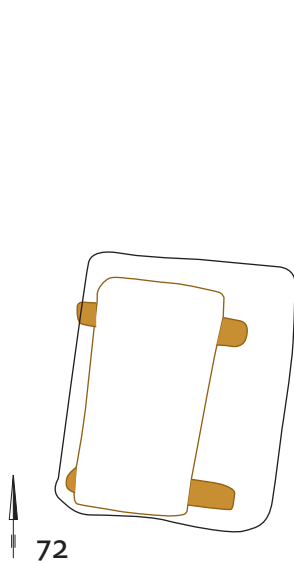
10 Wooden box, silhouette
Find number: 71-10-1
Find depth: 55.86
The shadows of the walls of a wooden box are recorded on the field drawing.
Length: 32 cm
Width: 28 cm
Type: Nieveler 2003; wooden boxes with iron fittings
Phase: 3-7
Date: 460/80-640/50
Location: not relevant

72 INHUMATION GRAVE

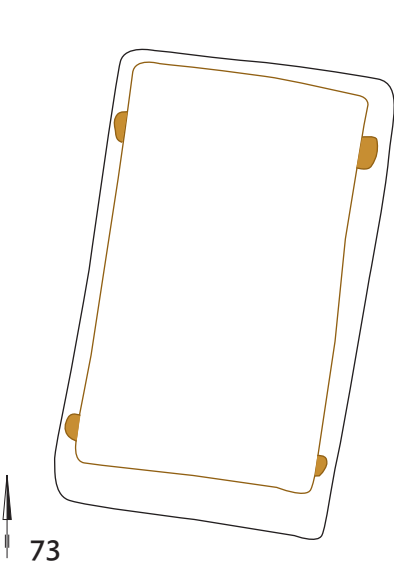
Trench	5
Grave structure	wooden container grave
Grave pit length	143
Grave pit width	115
Grave pit depth	15
Orientation	9 (S-N)
Stratigraphic relation	above context 70

DESCRIPTION
Merovingian inhumation grave, possibly of a child. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams. The length of the burial pit and the wooden container suggest that it was the grave of a child. However, no body silhouette was found. The grave cuts grave 70 and disturbed the northern half of that feature. It is clear that grave 72 is younger than grave 70.

GRAVE DATE
Cannot be dated



72



73



73-1-1

73 INHUMATION GRAVE

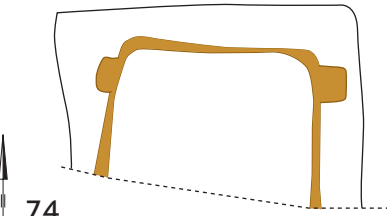
Trench	5
Grave structure	wooden container grave
Grave pit length	245
Grave pit width	149
Grave pit depth	27
Orientation	10 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on two wooden beams.

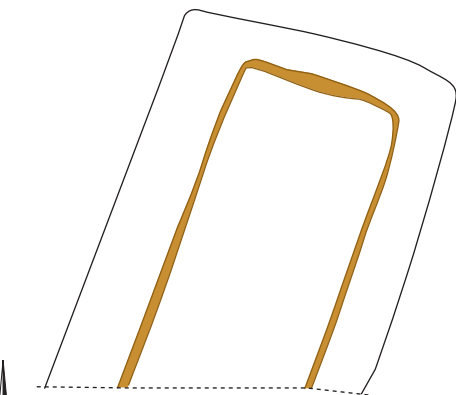
GRAVE DATE
SK IIIB: 640/50-c.750
FAG phases 7-9: 610/20-710

FINDS
1 Bead, glass
Find number: 73-1-1
Black, opaque, biconical
Number: 1
Type: BLO20 / S-Per 37.1
Kombinationsgruppe: (H) I
Rhineland phase: (8) 10
Rhineland date: (610) 670-(640) 705
Location: PDB Limburg

Pottery, fragment
Find number: 73-1-2
Weathered grey fragment.
Location: PDB Limburg



74



75

74 INHUMATION GRAVE

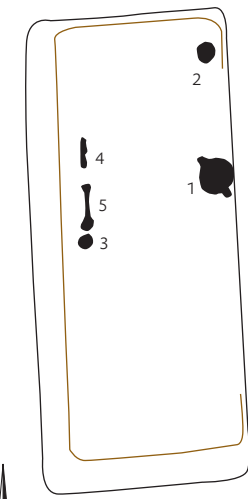
Trench	5
Grave structure	wooden container grave
Grave pit width	161
Grave pit depth	14
Orientation	1 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since only a part of the grave was excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on at least one wooden beam. Wood traces of the container walls were still present and documented by the excavators. The southern half of the grave was not excavated because it was disturbed by construction work preceding the archaeological excavation. Because of this recent disturbance, the overlap between grave 74 and grave 75 could not be identified. However, the orientation of grave 74 (which is comparable to that of grave 46) indicates that it was probably older than grave 75.

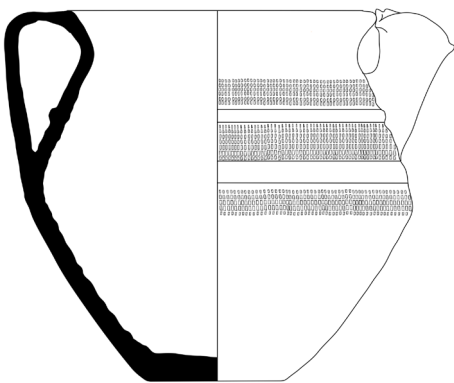
GRAVE DATE
Cannot be dated

75 INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit width	159
Grave pit depth	25
Orientation	20 (SW-NE)



76



76-1-1



76-2-1

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container. Wood traces of the container walls were still visible and documented by the excavators. The southern part of the grave was not excavated since it was dug away by construction work preceding the archaeological excavation. Because of this recent disturbance, the overlap between grave 74 and grave 75 could not be identified. However, the orientation of grave 74 (which is comparable that of grave 46) indicates that it was probably older than grave 75.

GRAVE DATE
Cannot be dated

76 INHUMATION GRAVE

Trench	6
Grave structure	wooden container grave
Grave pit length	250
Grave pit width	110
Grave pit depth	54
Orientation	359 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained vague traces of a wooden container.

GRAVE DATE
SK IId: 610/20-640/50
FAG phase 7: 610/20-640/50

FINDS
1 Pottery vessel
Find number: 76-1-1
Find depth: 56.52
Spouted pot with one handle and a light brown, considerably weathered, surface which seems to have been originally black/grey. The upper wall is decorated with a ridge and three zones of multiple lines (6/7) of rectangular roulette stamp impressions: one zone is applied above the ridge and two zones beneath the ridge.
Height: 19.3 cm
Type: S-Kwt3.23
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Location: Museum Het Domein

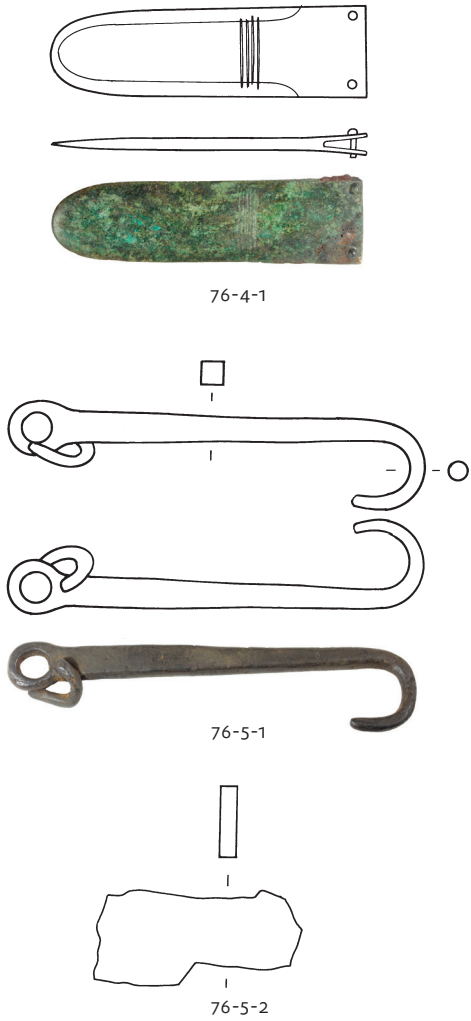
2 Glass vessel
Find number: 76-2-1
Find depth: 56.40
Bell beaker of brown glass with an incurved wall and a decoration of similar coloured vertical threads (loops) applied on the wall and similar coloured horizontal spiral threads applied underneath the rim. Air bubbles can be observed in the glass and a bottom fragment is missing.
Height: 12.3 cm
Type: Maul Sturzbecher A1
Maul date: 550-600
Alternative type: Feyeux T.53.2fh (550-600)
Alternative type: Koch bell beaker type 6 (SD 7: 580-600)
Alternative type: FAG Gla8B/C (5: 565-580/90)
Location: Museum Het Domein

3 Finger ring, copper alloy
Find number: 76-3-1
Find depth: 56.38
Copper alloy finger ring with a flat bezel with engraved cross.
Type: L/P/V 334
L/P/V type: MA3-MR2
L/P/V date: 560/70-660/70
Location: missing

4 Belt fitting, copper alloy
Find number: 76-4-1
Find depth: 56.38
Copper alloy strap end with a split base with two domed copper alloy rivets, and a decoration of grooves and facetted (oblique) edges.
Length: 8.3 cm
Type: L/P/V 199
Phases L/PV: MA1-MR1
Date L/P/V: 470/80-630/40
Location: PDB Limburg

5 Latch lifter key, iron
Find number: 76-5-1
Find depth: 56.38
Iron latch lifter key with a looped head and suspension ring and one hooked extremity. The key is restored.
Length: 10.8 cm
Type: L/P/V 351
L/P/V phases: MA1-MA3
L/P/V date: 470/80-600/10
Location: PDB Limburg

Knife, iron
Find number: 76-5-2
Find depth: 56.38
Fragment of an iron knife, corroded. Leather remains are preserved on it.
Length blade: 5.4 cm
Location: PDB Limburg



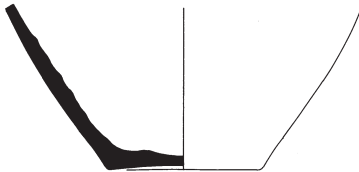
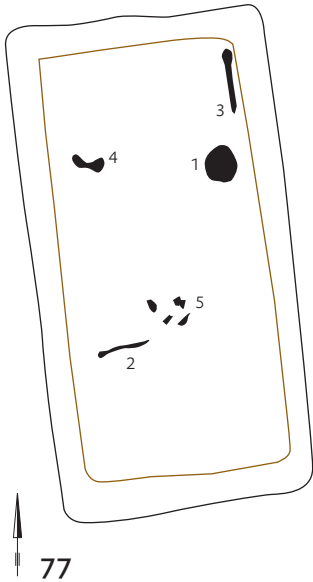
77 INHUMATION GRAVE

Trench	6
Grave structure	wooden container grave
Grave pit length	264
Grave pit width	139
Grave pit depth	24
Orientation	352 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container.

GRAVE DATE
SK IIb: 565-640/50
FAG phases 5-7: 565-640/50

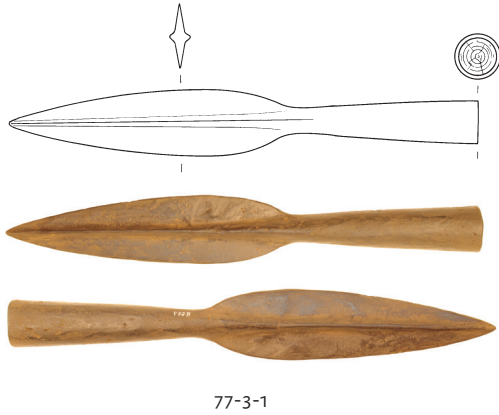
FINDS
1 Pottery, fragments
Find number: 77-1-1
Find depth: 56.45-56.64
Fragments of the base and wall of a pot or dish with a straight lower wall. The surfaces of the fragments are brown, their cores are red-brown. The fragments



have a weathered surface and approximately 25-30% of the vessel is present.
Base diameter: 8.0 cm.
Location: PDB Limburg

2 Ring rod, iron
Find number: 77-2-1
Find depth: 56.64
Iron ring rod of which the top is bent and forms a loop. It has a pointed tip and the shank has a round section. It is restored.
Length: 15.5 cm
Type: L/P/V 353
L/P/V phase: MA2-MR1
L/P/V date: 520/30-700/10
Location: PDB Limburg

3 Lance head, iron
Find number: 77-3-1
Find depth: 56.53
Iron lance head with a long oval blade with mid rib and a closed shaft with wood remains.
Length blade: 14.7
Type: Siegmund Lan2.1
Rhineland phase: 7-8A
Rhineland date: 585-640
Alternative type: L/P/V 38 (520/30-600/10)
Alternative type: FAG S-Lan2.1 (565-620)
Location: PDB Limburg

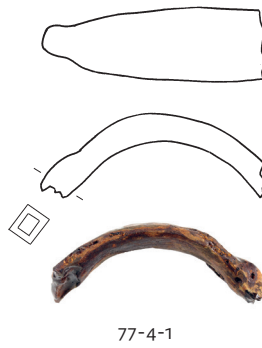
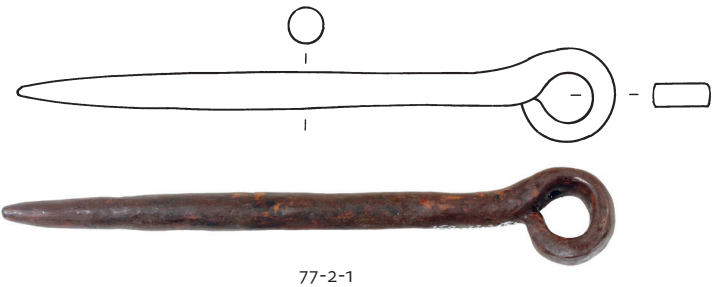


4 Ring, iron
Find number: 77-4-1
Find depth: 56.58
Fragment of an iron ring with a rectangular section, function unknown.
Diameter: 5.9 cm
Location: PDB Limburg

5 Pottery vessel
Find number: 77-5-1
Thick bottom fragment of a pot (approximately 5% of the pot) with a grey surface. The grooves visible on its exterior are production traces.
Location: PDB Limburg

78 INHUMATION GRAVE

Trench	6
Grave structure	trench grave?
Grave pit length	240
Grave pit width	118
Grave pit depth	21
Orientation	351 (S-N)



DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners. Traces of a wooden container or beams were not observed.

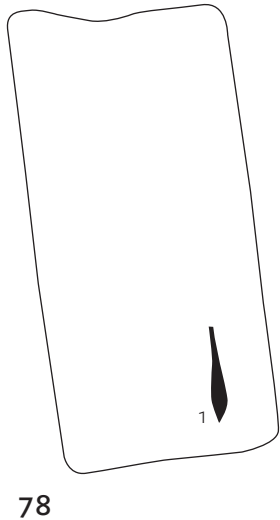
GRAVE DATE
SK IIa: 565-610/20
FAG phases 6-: 580/90-610/20

FINDS
1 Lance head, iron
Find number: 78-1-1
Find depth: 56.52
Iron lance head with a leaf to diamond shaped blade with possibly the presence of a slight mid rib (the manifestation of the mid rib might also be a result of the restoration of the lance head) and a closed socket with wood remains of the shaft preserved inside it.
Blade length: 16.5
Total length: 34.5
Type: Siegmund Lan2.2
Rhineland phases: 7
Rhineland date: 585-610
Alternative type: Siegmund Lan2.1 (7-8A: 585-625)
Location: PDB Limburg

79 INHUMATION GRAVE

Trench	5
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit depth	43
Orientation	15 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since the grave was only partially excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was probably the wooden coffin that held the body. However, no body silhouette or human remains were found. The northern and western sections of the grave were disturbed by construction work preceding the archaeological excavation. Therefore, it was not possible to establish the exact size of the burial pit and its containers. It seems, however, that the second wooden container or coffin was placed in the eastern half of the chamber, which is deviant from the common locations of coffins in the chamber



graves at Sittard Kemperkoul and observed only in one other grave (grave 47). The coffin might have been disturbed by an early reopening since two beads moved from their presumed original location, near the head inside the coffin, as did the strap end. The richly decorated strap end might indicate that matching belt fittings were originally present inside the coffin, but that these were taken after the its reopening.

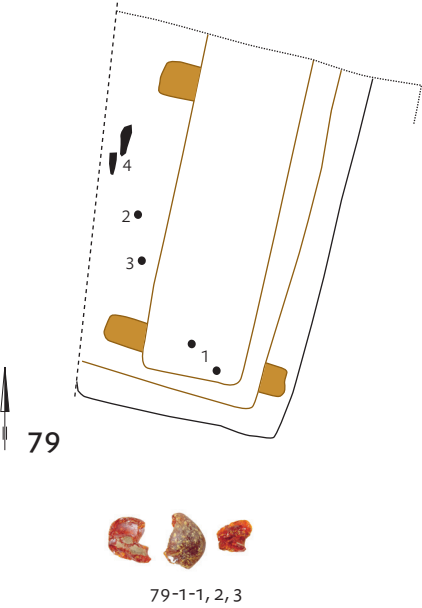
GRAVE DATE
SK IId: 610/20-640/50
FAG phase 7: 610/20-640/50

FINDS
1 Bead, amber
Find number: 79-1-1.1
Find depth: 55.77
Almond shaped.
Type: A15
Number: 1
Location: PDB Limburg

Bead, glass
Find number: 79-1-1.2
Find depth: 55.77
White, opaque, barrel shaped.
Number: 1
Type: WO19 / S-Per 32.3?
Kombinationsgruppe: (G) H-I
Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 79-1-1.3
Find depth: 55.77
Green, transparent, barrel shaped.
Type: GT19
Number: 1
Location: PDB Limburg

Bead, amber
Find number: 79-1-1.4
Find depth: 55.77



Fragmented, shape indeterminate.
Type: A40
Diameter: c. 18 mm.
Number: 1
Location: PDB Limburg

2 Bead
Find number: 79-2-1
Find depth: 55.75
One of the beads described above; found separately from the string, but administrated as belonging to this string.
Location: PDB Limburg

3 Bead
Find number: 79-3-1
Find depth: 55.60
One of the beads described above; found separately from the string, but administrated as belonging to this string.
Location: PDB Limburg

4 Belt fitting, iron
Find number: 79-4-1
Find depth: 55.67
Iron strap end, severely worn, with a geometric pattern of silver inlays (copper alloy inlays may have disappeared; they are not visible). The decoration pattern seems to consist of a middle field filled with braided bands. This middle field is bordered with a silver thread and surrounded with silver dots. The strap end is heavily restored: traces of a split base are not visible and only a small remnant of probably one rivet seems to be present at the base of the front side of the plate.
Length: 7.8 cm
Type: Siegmund Gür4.6
Rhineland phase: 8
Rhineland date: 610-640
Location: Museum Het Domein



80

INHUMATION GRAVE

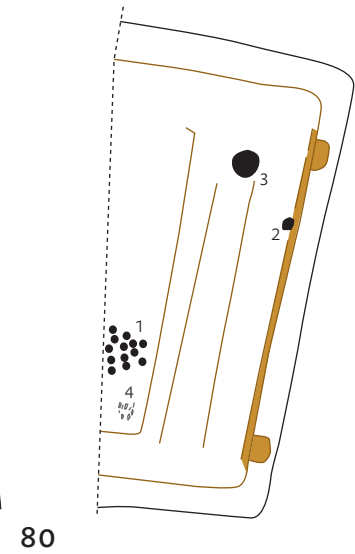
Trench 5
Grave structure wooden chamber grave with wooden container (coffin)
Grave pit length 253
Grave pit depth 36
Orientation 12 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The location of teeth and beads suggests that the grave's orientation was south-north. Other human remains were not found. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was the wooden coffin that held the body. The western half of the grave was disturbed by construction work preceding the archaeological excavation. It was therefore not possible to establish the exact width of the burial pit and its containers. In the eastern part of the grave, imprints of wooden boards (top or bottom boards), probably of the chamber, were still visible.

PHYSICAL ANTHROPOLOGY
Not examined

GRAVE DATE
SK I + SK II: 510/20-640/50
FAG phases 4-6: 510/25-610/20

FINDS
1 Bead, glass
Find number: 80-1-1.1
Find depth: 55.88
Green, opaque, cylindrical long.
Number: 1
Type: GO23 / S-Per 46.2
Kombinationsgruppe: A
Rhineland phases: 3-4
Rhineland date: 485-555
Location: PDB Limburg



Bead, amber
Find number: 80-1-1.2
Find depth: 55.88
Drop shaped, diameter: 18 mm
Number: 3
Type: A22
Location: PDB Limburg

Bead, amber
Find number: 80-1-1.3
Find depth: 55.88
Irregular shaped.
Number: 1
Type: A40
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.4
Find depth: 55.88
Red, opaque, globular compressed.
Number: 1
Type: RO30 / S-Per 35.6?
Kombinationsgruppe: (G) H-I
Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.5
Find depth: 55.88
Red, opaque, double connected.
Number: 1
Type: RO25 / S-Per 35.7
Kombinationsgruppe: H
Rhineland phases: 8-10
Rhineland date: 610-705
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.6
Find depth: 55.88
Blue, opaque, barrel shaped.
Number: 2
Type: BO19
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.7
Find depth: 55.88
Orange, opaque, barrel shaped.
Number: 1
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I



Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

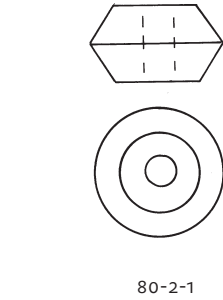
Bead, glass
Find depth: 55.88
Find number: 80-1-1.8
Blue, transparent, cylindrical ribbed.
Number: 1
Type: BT28
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.9
Find depth: 55.88
Blue, opaque, barrel shaped.
Number: 2
Type: BO19 / S-Per 37.1
Kombinationsgruppe: (H) I
Rhineland phases: (8) 10
Rhineland date: (610) 670-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.10
Find depth: 55.88
Yellow, opaque, barrel shaped. Decoration: red/brown waves, crossing.
Number: 1
Type: Koch-Schretzheim 1977: 33.7
Koch phases: 1-3
Schretzheim date: 525/30-590/600
Alternative type: S-Per: 33.7 (Kombinationsgruppe D-H: 485-705)
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.11
Find depth: 55.88
Blue, opaque, cylindrical ribbed.
Type: BO39
Number: 1
Location: PDB Limburg

Bead, amber
Find depth: 55.88
Find number: 80-1-1.12
Almond shaped, diameter: 14 mm
Number: 2
Type: A15
Location: PDB Limburg



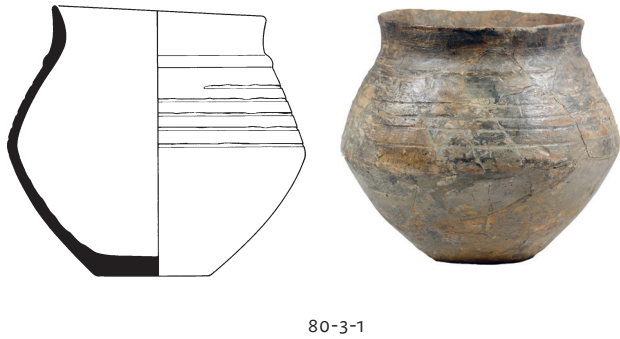
Bead, glass
Find number: 80-1-1.13
Find depth: 55.88
White, opaque, barrel shaped.
Number: 1
Type: WO19 / S-Per 32.3?
Kombinationsgruppe: (G) H-I
Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.14
Find depth: 55.88
Red, opaque. Decoration: white waves, polychrome eyes: white dots with raised blue dots.
Number: 1
Type: S-Per 35.10
Kombinationsgruppe: G-I
Rhineland phases: 6-10
Rhineland date: 570-705
Alternative type: Koch-Pleidelsheim 25.6
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.15
Find depth: 55.88
Red, opaque, large cylindrical. Decoration: yellow edge bands and black vertical bands.
Number: 1
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.16
Find depth: 55.88
Red, opaque, biconical. Decoration: white waves and yellow edge and middle bands.
Number: 2
Type: Koch-Schretzheim 1977: 58,5
Koch phases: 3-4
Schretzheim date: 565-620/30
Location: PDB Limburg

Bead, glass
Find number: 80-1-1.17
Find depth: 55.88
Red, opaque, short cylindrical. Decoration: yellow edge bands and polychrome eyes of white dots with blue raised dots in between yellow dots.
Number: 1
Location: PDB Limburg



- 2

Spindle whorl, ceramic

Find number: 80-2-1

Find depth: 55.82

Ceramic biconical spindle whorl with a brown/grey surface.

Height: 2.0 cm

Diameter: 3.4 cm

Type: L/P/V 347

L/P/V phases: MA1-MR1

L/P/V date: 470/80-630/40

Location: PDB Limburg
- 3

Pottery vessel

Find number: 80-3-1

Find depth: 55.90

Biconical pot with a grey surface. The upper wall is decorated with grooves. The pot was found in fragmented condition; the fragments are glued together and some small missing parts were filled up. Approximately 90% of the pot was preserved.

Height: 14.0 cm

Type: Siegmund Kwt2.32

Rhineland phases: 4-5

Rhineland date: 530-570

Alternative type: FAG S-Kwt3A (510/25-580/90(610/20))

Location: PDB Limburg
- 4

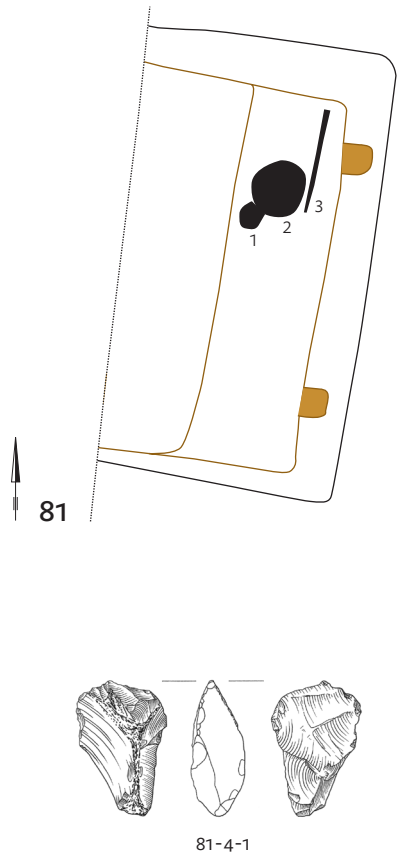
Human remains

Find number: 80-4-1

Find depth: 55.83

Skeletal remains: teeth

Location: PDB Limburg



81

INHUMATION GRAVE

Trench	5
Grave structure	wooden chamber grave with wooden container (coffin) or partition wall
Grave pit length	239
Grave pit depth	22
Orientation	10 (S-N)

DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and held two wooden containers or one wooden container with a partition wall. The outer container was the wooden chamber supported by two wooden beams. The possible second container or western part of the chamber divided by the partition wall probably held the body. The western half of the grave was disturbed by construction work preceding the archaeological excavation. It was therefore not possible to establish the exact width of the burial pit and its containers.

GRAVE DATE

SK IIb: 565-640/50

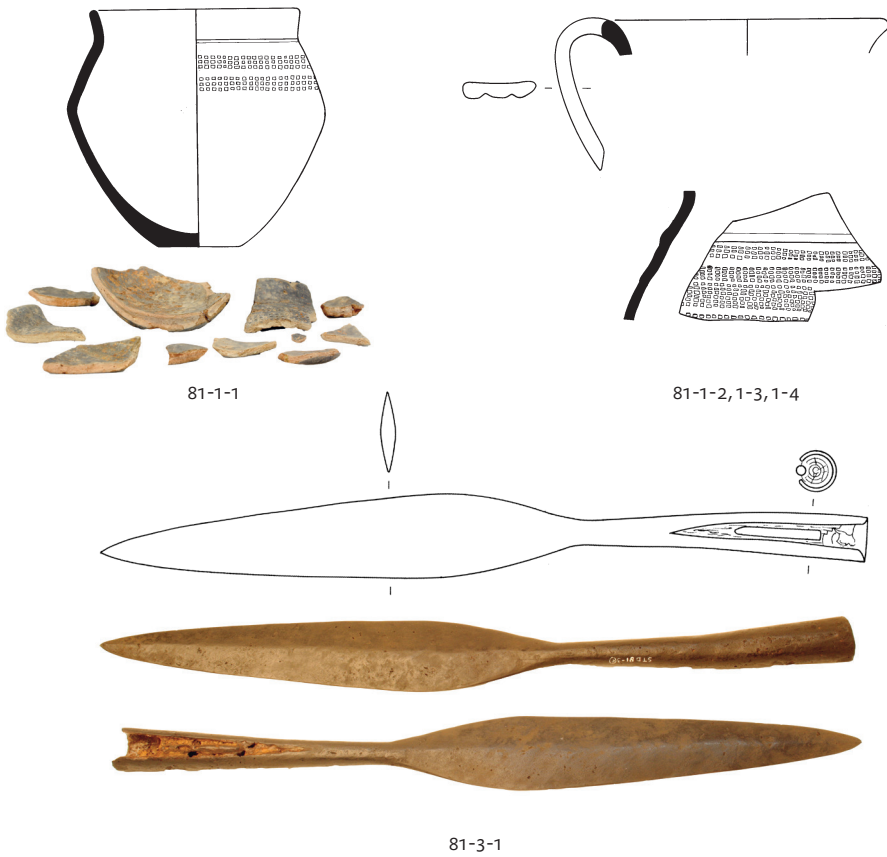
FAG phases 5-7: 565-640/50

- FINDS**
- 1

Pottery vessel

Find number: 81-1-1

Find depth: 56.00



Biconical pot, found in fragmented condition: shards of the bottom and upper wall are available, fragments of the middle part are missing. The fragments have a grey surface. The upper wall of the reconstructed pot is decorated with two zones of three lines of rectangular roulette stamp impressions.

Height: 12.6

Type: S-Kwt3.22

Rhineland phases: end 7-begin 8

Rhineland date: 600-620

Alternative type: FAG Kwt5B (565-640/50)

Location: PDB Limburg

Pottery vessel

Find number: 81-1-2

Find depth: 56.00

Fragments of a (trefoil) jug: seven wall fragments, two handle fragments and one rim fragment with the spout. Approximately 5% of the jug is present which makes its classification difficult. See also find number 81-1-4.

Height: not reconstructed

Type: Siegmund Kru1.1?

Rhineland phases: 7

Rhineland date: 585-610

Type: Siegmund Kru1.2?

Rhineland phases: 1-2

Rhineland date: 400-485

Location: PDB Limburg

Pottery, fragments

Find number: 81-1-3

Find depth: 56.00

Fragments of a biconical pot decorated with multiple lines of rectangular roulette stamp impressions.

Height: not reconstructed

Location: PDB Limburg

Pottery, fragments

Find number: 81-1-5

Find depth: 56.00

Fragments (6) of a biconical pot with an orange outer surface. Approximately 5% of the pot is present (no drawing available).

Height: not reconstructed

Location: PDB Limburg

Pottery, fragments

Find number: 81-1-6

Find depth: 56.00

Pottery, fragments. See find numbers: 81-1-1 (biconical pot) and 81-1-2 (jug).

- 2

Pottery vessel

Find number: 81-2-1

Find depth: 56.01

Incomplete orange bowl on a foot ring with signs of use on its interior surface. The vessel was found in fragmented condition; the fragments are glued together and missing parts are completed. Approximately 60% of the bowl is present.

Height: 8.5cm

Type: Siegmund2.21

Rhineland phases: 5-8

Rhineland date: 555-640

Alternative type: FAG S-Shaz2.21 (510-650)

Location: PDB Limburg



- 3

Lance head, iron

Find number: 81-3-1

Find depth: 55.97

Iron lance head with a long oval blade and an open socket with wood remains of the shaft and an iron pin inside the socket base.

Length blade: 25.0 cm

Type: Siegmund Lan1.4

Rhineland phases: 6-8A

Rhineland date: 570-625

Alternative type: L/P/V 32 ((440/50) 470/80-600/610)

Alternative type: FAG S-Lan1.4 (565-620)

Location: PDB Limburg

- 4

Stone

Find number: 81-4-1

Flint, not recorded on the field drawing.

Length: 3.6 cm

Location: PDB Limburg

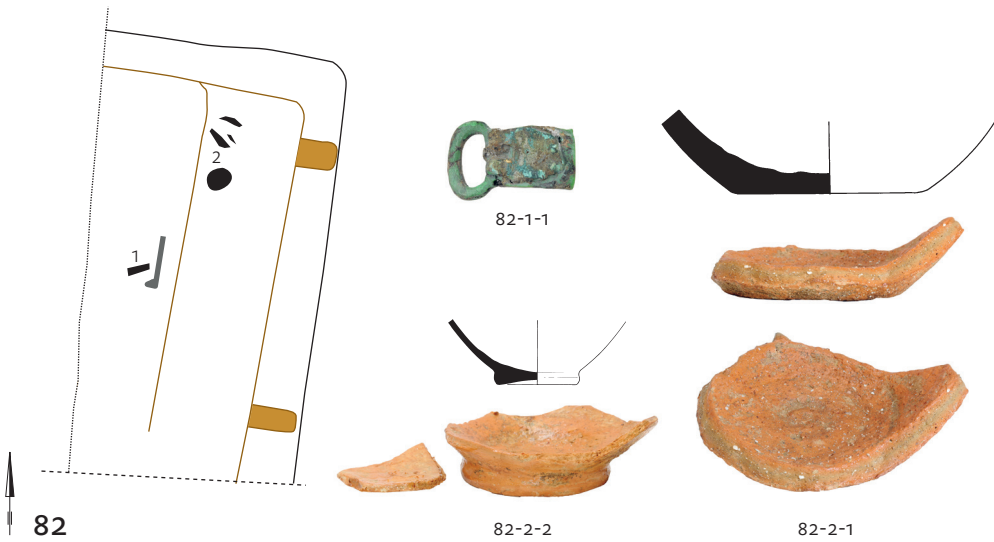
82

INHUMATION GRAVE

Trench	5
Grave structure	wooden chamber grave with wooden container (coffin) or partition wall
Grave pit depth	51
Orientation	10 (S-N)

DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since only the silhouette of one long bone was found. The burial pit was rectangular with slightly rounded corners and held two wooden containers, or a wooden container with a partition wall. The container was placed on two wooden beams. The outer container was the wooden chamber supported by these beams. The possible second container or western part of the chamber divided by the partition wall, held the



body of the deceased. The western and southern ends of the grave were disturbed by construction work preceding the archaeological excavation. It was therefore not possible to estimate the size of the burial pit and its containers.

PHYSICAL ANTHROPOLOGY

Not suitable for examination.

GRAVE DATE

SK I + SK II: 510/20-640/50

FAG phases 4-7: 510/25-640/50

- FINDS**
- 1

Belt fitting, copper alloy

Find number: 82-1-1

Find depth: 55.68

Copper alloy plate buckle with a rectangular plate and an oval buckle loop. The tongue is missing.

Length plate: 2.4 cm

Maximum loop length: 2.1 cm

Location: Museum Het Domein

- 2

Pottery, fragment

Find number: 82-2-1

Find depth: 55.72

Thick bottom fragment with a red surface and grey core of coarse ware tempered with white pebble.

Diameter: 17.3 cm

Location: PDB Limburg
- Pottery, fragments
- Find number: 82-2-2
- Find depth: 55.72
- Fragments of an orange bowl or dish; they form approximately 5% of the complete vessel. The grooves visible on the bowl's exterior are signs of production.
- Bottom diameter: 8.9 cm
- Type: Siegmund Shaz2.1
- Rhineland phases: 5-8
- Rhineland date: 555-640
- Alternative type: FAG S-Shaz2.21: 510-650
- Location: PDB Limburg

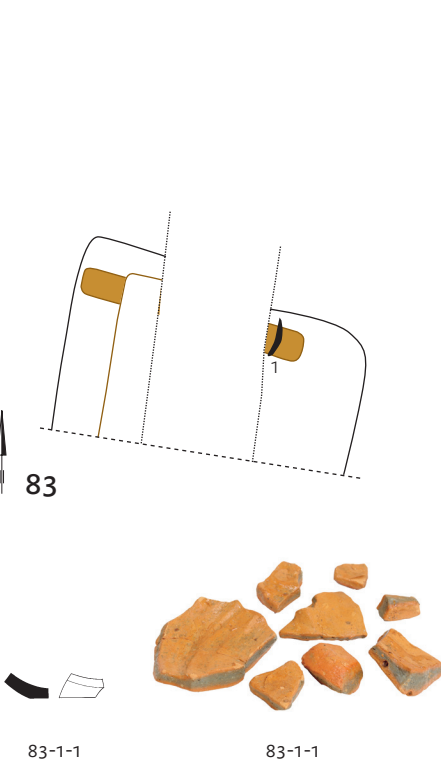
83
INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit width	162
Grave pit depth	21
Orientation	9 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since the grave was only partially excavated and no human remains were found. The burial pit was rectangular with slightly rounded corners and held a wooden container placed on at least one wooden beam. The grave was for its greatest part disturbed by construction work preceding the archaeological excavation. It was therefore not possible to establish the exact size of the burial pit and its containers.

GRAVE DATE
Cannot be dated

FINDS
1 Pottery vessel
Find number: 83-1-1
Find depth: 56.04
Fragments of what was probably a jug or spouted pot of fine burnished ware: 8 fragments of which one with remnants of the handle. The fragments have an orange/red surface and a grey core.
Location: PDB Limburg



84
INHUMATION GRAVE

Trench	5
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	234
Grave pit depth	49
Orientation	14 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since the grave was only partially excavated and no human remains were found. The burial pit was probably rectangular with slightly rounded corners and held at least one wooden container placed on wooden beams. A vague silhouette of the western wall of a second wooden container was visible. This could be the coffin that held the body; a body silhouette or human remains were, however, not discovered. The eastern half of the grave was disturbed by construction work preceding the archaeological excavation. It was therefore not possible to establish the exact width of the burial pit and its containers.

GRAVE DATE
SK IId: 610/20-640/50
FAG phases 7-8: 610/20-670/80



FINDS
1 Seax, iron
Find number: 84-1-1
Find depth: 55.69
Iron seax with leather of the scabbard and metal scabbard fittings preserved on it.
Length blade: 37.0 cm
Type: FAG Sax 2.2
FAG phases: (6-9) 8
FAG date: (580/90-710) 640/50-670/80
Alternative type: Siegmund Sax2.2 (9-10: 640-705)
Alternative type: L/PV 61 (600-710)
Location: PDB Limburg

Rivets (3), copper alloy
Find number: 84-1-2
Find depth: 55.69
Three copper alloy rivets with perforations, preserved on seax 84-1-1.
Diameter: 1.7 cm
Type: S-Sax4.1
Rhineland phases: 8-9
Rhineland date: 610-670
Location: PDB Limburg

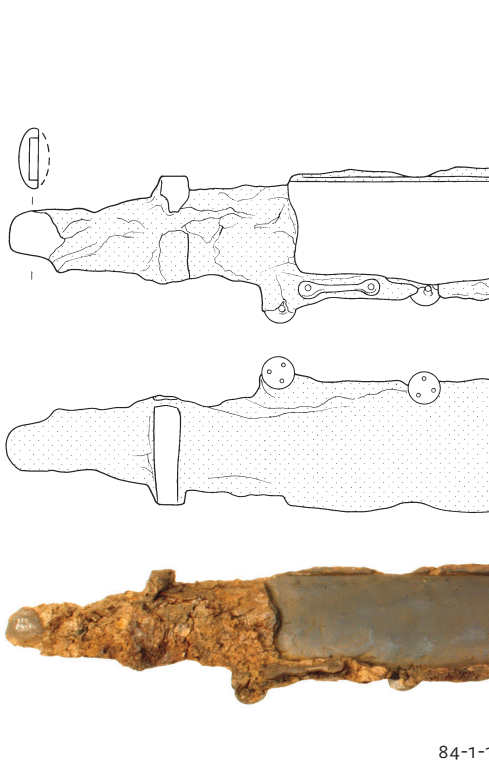
Scabbard, leather
Find number: 84-1-3
Find depth: 55.69
Leather remains of a seax scabbard, preserved on seax 84-1-1.
Type: FAG Sax 2.2
FAG phases: (6-9) 8
FAG date: (580/90-710) 640/50-670/80
Alternative type: Siegmund Sax2.2 (9-10: 640-705)
Alternative type: L/PV 61 (600-710)
Location: PDB Limburg



Scabbard fitting, copper alloy
Find number 84-1-4
Find depth: 55.69
Mount (*tragbügel*) with elevation leaving space for a narrow leather strap which attached the scabbard with seax to the waist belt.
Length: 4.3 cm
Type: FAG Sax 2.2
FAG phases: (6-9) 8
FAG date: (580/90-710) 640/50-670/80
Alternative type: Siegmund Sax2.2 (9-10: 640-705)
Alternative type: L/PV 61 (600-710)
Location: PDB Limburg

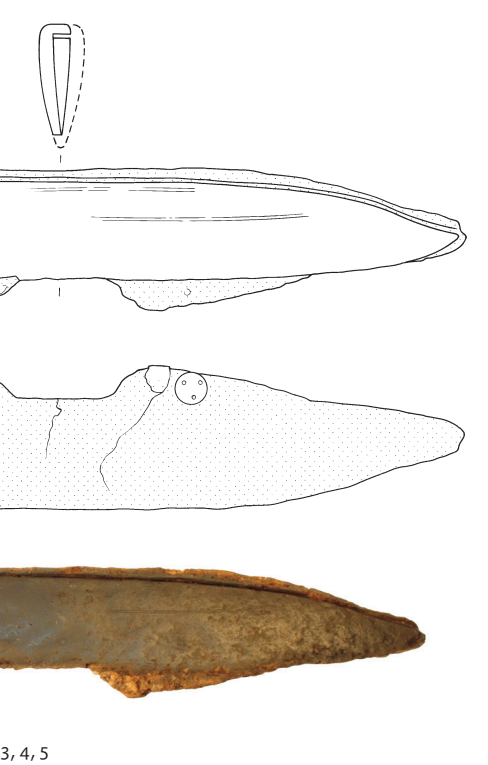
Scabbard, mouth reinforcement, copper alloy
Find number: 84-1-5
Find depth: 55.69
Copper alloy band which served as seax scabbard mouth reinforcement.
Length: 5.2 cm
Type: FAG Sax 2.2
FAG phases: (6-9) 8
FAG date: (580/90-710) 640/50-670/80
Alternative type: Siegmund Sax2.2 (9-10: 640-705)
Alternative type: L/PV 61 (600-710)
Location: PDB Limburg

Rod, iron
Find number: 84-1-6
Find depth: 55.69
Iron rod with bent loop and shank with round section; function unknown.
Length: 8.7 cm
Location: PDB Limburg



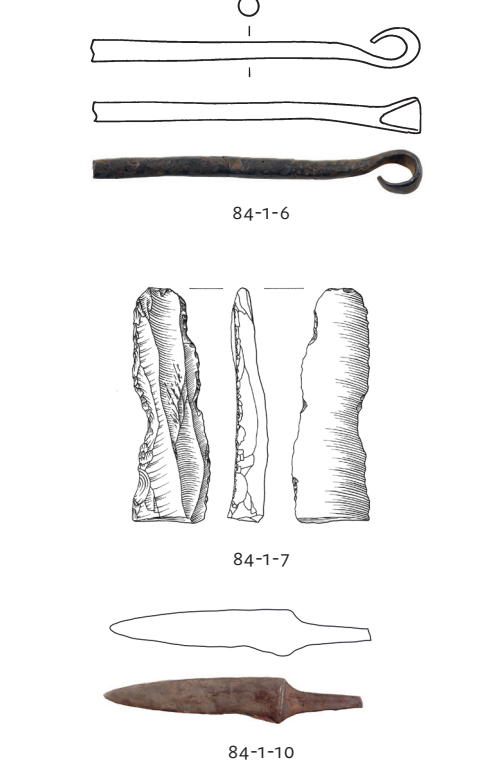
Stone
Find number: 84-1-7
Find depth: 55.69
Flint
Length: 6.2
Location: PDB Limburg

Belt fitting, iron
Find number: 84-1-8
Find depth: 55.69
Iron rectangular back plate with four domed copper alloy rivets and silver inlays forming a geometric pattern of braided bands filled with dots. Fragments of rivet pins are visible at the back side of the plate; corroded (mineralised leather?) remains are attached to them. The back plate is heavily restored; other inlays, similar to the decoration on the associated plate buckle, may have been originally present around the braided band decoration on the middle field.
Length: 4.6 cm
Width: 4.0 cm
Type: Siegmund Gür4.6
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: Fag S-Gür4.6 (610/20-640/50)
Location: Museum Het Domein



Belt fitting, iron
Find number: 84-1-9
Find depth: 55.69
Iron plate buckle with three domed copper alloy rivets and a trapezium shaped plate with silver and copper alloy inlays. The decoration pattern consists of a middle field with braided bands filled with dots of silver inlays surrounded with copper alloy threads. A spiral pattern of silver inlays is applied on the shield of the shield tongue and silver stripes on the oval buckle loop.
Length plate: 6.3 cm
Maximum length loop: 5.6 cm
Type: Siegmund Gür4.6
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: Fag S-Gür4.6 (610/20-640/50)
Location: Museum Het Domein

Knife, iron
Find number: 84-1-10
Find depth: 55.69
Iron knife
Length blade: 9.8 cm
Location: Museum Het Domein



85

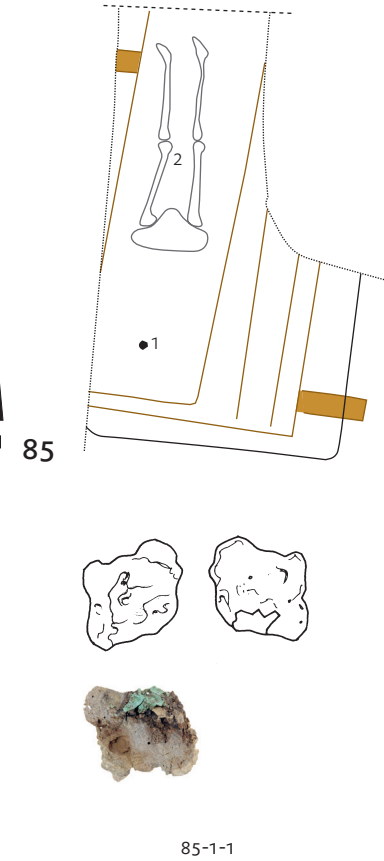
INHUMATION GRAVE

Trench	5
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit depth	72
Orientation	9 (S-N)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was south-north. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was the wooden coffin that held the body. The grave's northern and western walls and the north-eastern corner of the grave were disturbed by construction work preceding the archaeological excavation. It was therefore not possible to establish the width of the burial pit and its containers. In the eastern part of the grave, imprints of the chamber's wooden (bottom or top) boards were still visible. A body silhouette displaying the lower body (pelvis, leg bones and feet) was found. The deceased was probably positioned on its back in an extended position. The length of the silhouette (from the pelvis to the feet) was 114 cm.

PHYSICAL ANTHROPOLOGY
Not suitable for examination

GRAVE DATE
Cannot be dated



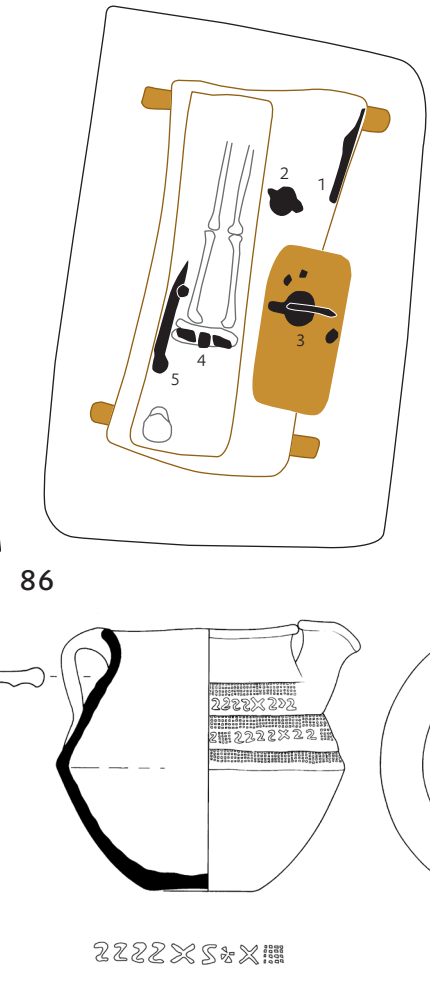
- FINDS**
- Fragment, copper alloy
Find number: 85-1-1
Find depth: 55.41
Copper alloy sheet fragment on bone material.
Length: 2.5 cm
Location: PDB Limburg

- Human remains
Find number: 85-2-2
Find depth: 55.40
Imprint of the pelvis and the two legs and feet recorded on the field drawing.
Location: not relevant

86

INHUMATION GRAVE

Trench	6
Grave structure	wooden chamber grave with wooden container (coffin)
Grave pit length	280
Grave pit width	182
Grave pit depth	25
Orientation	10 (SW-NE)



DESCRIPTION
Merovingian inhumation grave. The grave's orientation was south-north. The burial pit was rectangular with slightly rounded corners and held two wooden containers and two wooden beams. The outer container was the wooden chamber supported by two wooden beams. The second, inner container was a wooden coffin that held the body. It contained a body silhouette of which only the upper body, except for the skull, vanished. The deceased was probably positioned on its back in an extended position. The length of the body silhouette (measured from the top of the skull to the distal part of the leg bones) was 163 cm.

PHYSICAL ANTHROPOLOGY
Not suitable for examination.

GRAVE DATE
SK IIId: 610/20-640/50
FAG phases 7-8: 610-670/80

- FINDS**
- Lance head, iron
Find number: 86-1-1
Find depth: 56.37
Iron lance head with a long oval blade and a closed socket with wood remains.
Total length: 37.6 cm
Blade length: 22.0 cm
Type: Siegmund Lanz.4
Rhineland phases: 8B-10
Rhineland date: 635-705
Alternative type: L/P/V 36 (630/40-660/670)
Alternative type: FAG S-Lanz.4 (510/25-710)
Location: PDB Limburg

- Pottery vessel
Find number: 86-2-1
Find depth: 56.43
Spouted pot with an orange surface, found in fragmented condition. The upper wall is decorated with three zones of multiple lines of rectangular roulette stamp impressions in between which two zones of complicated roulette stamp impressions consisting of crosses, mirrored S-shapes and grids of rectangles are applied. Approximately 90% of the pot is preserved; the fragments are glued together and the missing parts completed.
Height: 17.4 cm
Type: Siegmund Kwt3.22
Rhineland phases: 7-8A
Rhineland date: 600-625
Alternative type: Siegmund type Kwt3.12 (6-7: 570-610)
Alternative type: FAG Kwt5B (565-640/50)
Location: PDB Limburg

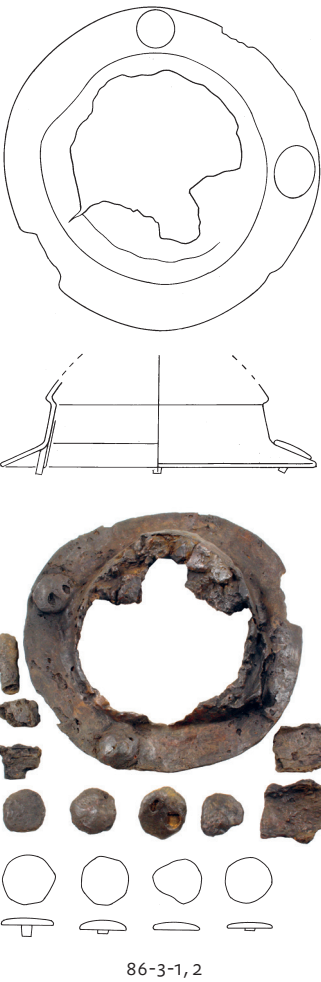
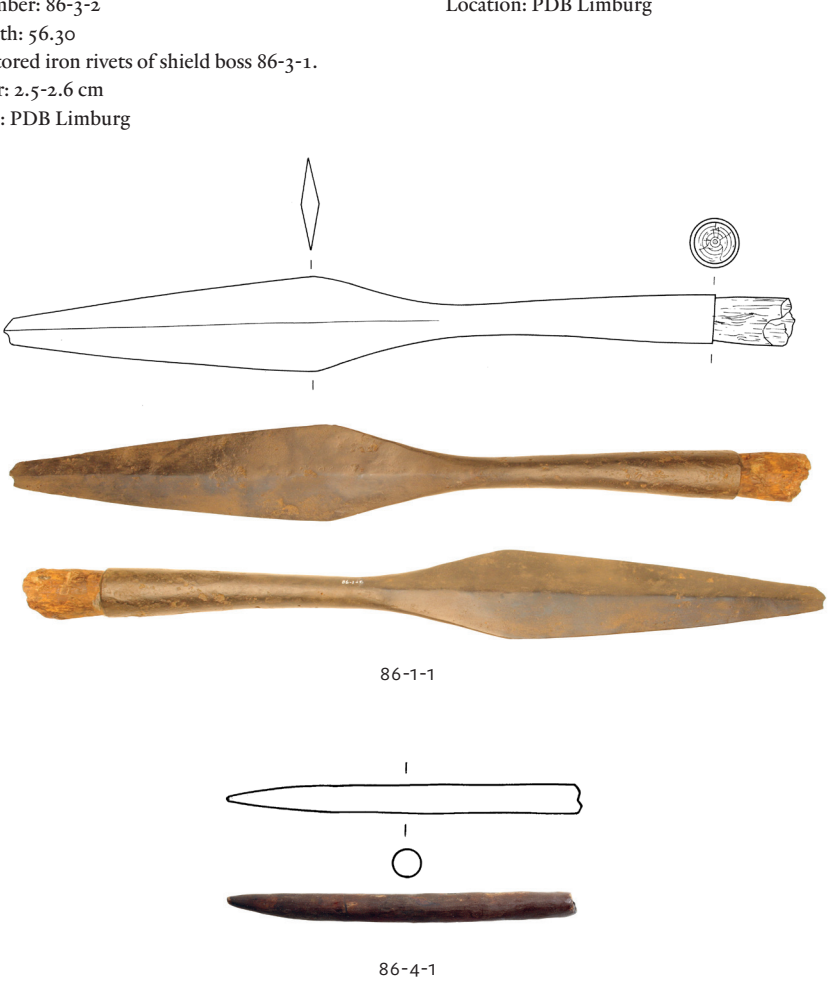
- Shield boss, iron
Find number: 86-3-1
Find depth: 56.30
Incomplete iron shield boss (its cone is for the greatest part missing). Two (of originally six?) flat iron rivets are preserved on the rim. Four detached rivets (86-3-2) and four fragments of the grip are also available.
Height: not reconstructed
Type: cannot be identified
Location: PDB Limburg
- Rivets, iron
Find number: 86-3-2
Find depth: 56.30
Four restored iron rivets of shield boss 86-3-1.
Diameter: 2.5-2.6 cm
Location: PDB Limburg

- Awl, iron
Find number: 86-4-1
Find depth: 56.32
Restored iron awl of which one extremity is broken off and missing. The shank has a round section.
Length: 9.1 cm
Location: PDB Limburg
- Belt fitting, iron
Find number: 86-4-2
Find depth: 56.32
Iron rectangular back plate with four domed copper alloy rivets. The plate is heavily restored; inlays might originally have been present.
Length: 6.1 cm
Width: 5.8 cm
Type: Siegmund Gür.4.3
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg

- Belt fitting, iron
Find number: 86-4-3
Find depth: 56.32
Iron plate buckle with a triangular plate with undulating outline and five copper alloy rivets. The oval buckle loop has an iron shield tongue. The plate buckle is heavily restored; inlays might originally have been present.
Length plate: 9.7 cm
Length loop: 6.5 cm
Type: Siegmund Gür.4.3
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg

- Belt fitting, iron
Find number: 86-4-4
Find depth: 56.32
Iron triangular counter plate with undulating outline and protruding extremity and five copper alloy rivets. The two rivets at the base of the plate are smaller than the other rivets. The counter plate is heavily restored; inlays might originally have been present.
Length: 11.3 cm
Type: Siegmund Gür.4.3
Rhineland phase: 8
Rhineland date: 610-640
Location: PDB Limburg

- Seax, iron
Find number: 86-5-1
Find depth: 56.32
Iron seax with wood remains of the hilt and leather and metal fittings of the scabbard preserved on it. A knife was also attached to it. The seax has two grooves on each side of the blade.
Length blade: 37.5
Type: FAG Sax 2.2
FAG phases: (6-9) 8
FAG date: (580/90-710) 640/50-670/80
Alternative type: Siegmund Sax2.2 (9-10: 640-705)
Alternative type: Siegmund Sax2.1 (7-9A: 585-655).
Alternative type: L/PV 61 (600-710)
Location: PDB Limburg



Knife, iron
Find number: 86-5-2
Find depth: 56.32
Iron knife (attached to seax 86-5-1)
Length blade: 10.4
Location: PDB Limburg

Scabbard, leather
Find number: 86-5-3
Find depth: 56.32
Leather remains of the scabbard (preserved on seax 86-5-1)
Length: 23.0
Type: FAG Sax 2.2
FAG phases: (6-9) 8
FAG date: (580/90-710) 640/50-670/80
Alternative type: Siegmund Sax2.2 (9-10: 640-705)
Alternative type: Siegmund Sax2.1 (7-9A: 585-655).
Alternative type: L/PV 61 (600-710)
Location: PDB Limburg

Rivets, copper alloy
Find number: 86-5-4
Find depth: 56.32
Four flat headed copper alloy rivets with cast geometric decorations on the heads.
Diameter: 1.8 cm
Type: L/P/V type 70
L/P/V phases: LPV-MR2
L/P/V date: 600-670
Location: PDB Limburg

87
INHUMATION GRAVE

Trench	5
Grave structure	trench grave?
Grave pit length	270
Grave pit width	203
Grave pit depth	20
Orientation	17 (SW-NE)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners. It is a wide burial pit, but traces of wooden containers or beams, which can be expected in such a wide pit, were not observed.

GRAVE DATE
SK IId: 610/20-640/50
FAG phase 7: 610/20-640/50

FINDS

1 Coin pendant, copper alloy
Find number: 87-1-1
Find depth: 56.60
Copper alloy Roman coin, altered into a pendant with two suspension holes. The edges of the coin are damaged; it is difficult to identify the image which was originally present on its surface.
Diameter: 2.6
Location: PDB Limburg

2 Bracelet, copper alloy
Find number: 87-2-1
Find depth: 56.58
Copper alloy open bracelet with slightly expanding extremities with decoration: four zones of faceted triangles and grooves.
Diameter: 8.6 cm
Type: Siegmund Rng1.2
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: Wührer A.38 (JM I: 600-630/40)
Location: Museum Het Domein

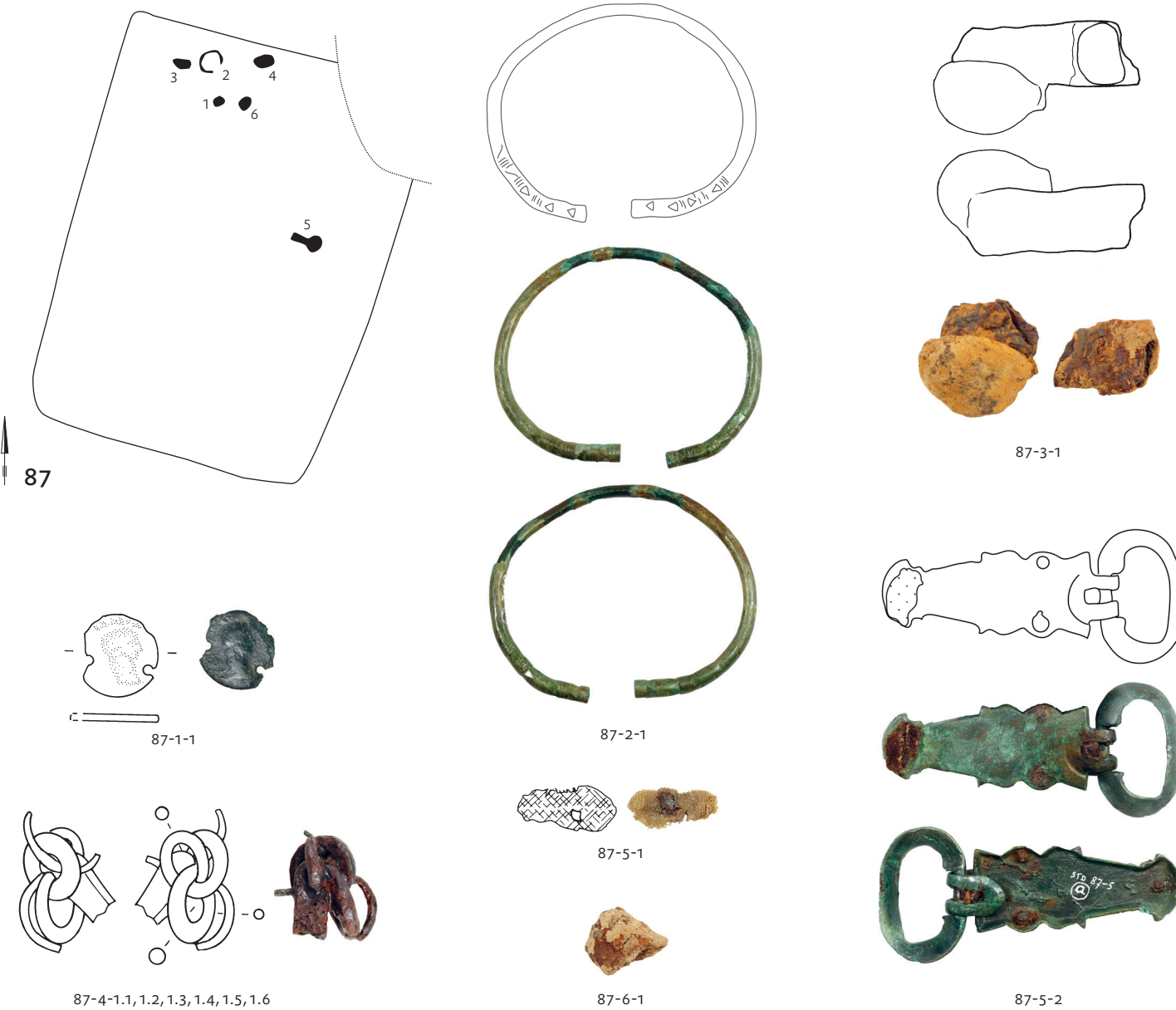
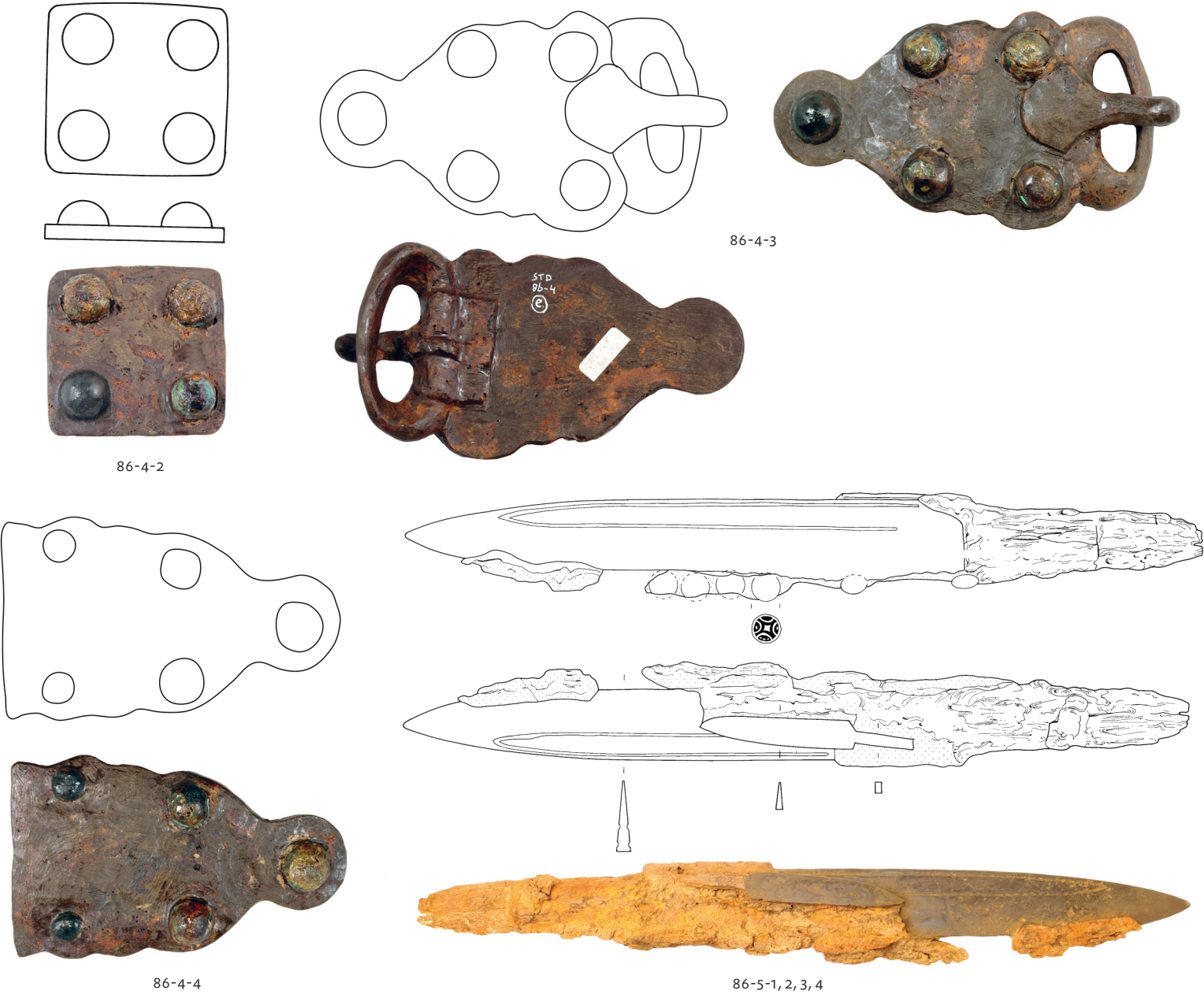
3 Fragment, iron
Find number: 87-3-1
Find depth: 56.58
Iron fragment, corroded; part of a small knife?
Location: PDB Limburg

4 Simple ring, copper alloy
Find number: 87-4-1.1
Find depth: 56.60
Copper alloy ring (half), attached to five other rings.
Diameter: 2.5 cm
Location: PDB Limburg

Simple ring, iron
Find number: 87-4-1.2
Find depth: 56.60
Iron ring attached to five other rings.
Diameter: 2.1 cm
Type: L/P/V 357
L/P/V phases: MA2-MR1
L/P/V date: 520/30-630/40
Location: PDB Limburg

Simple ring, iron
Find number: 87-4-1.3
Find depth: 56.60
Iron ring attached to five other rings.
Diameter: 2.3 cm
Type: L/P/V 357
L/P/V phases: MA2-MR1
L/P/V date: 520/30-630/40
Location: PDB Limburg

Simple ring, iron
Find number: 87-4-1.4
Find depth: 56.60
Iron ring (half), attached to five other rings.
Diameter: 2.1 cm
Type: L/P/V 357
L/P/V phases: MA2-MR1
L/P/V date: 520/30-630/40
Location: PDB Limburg

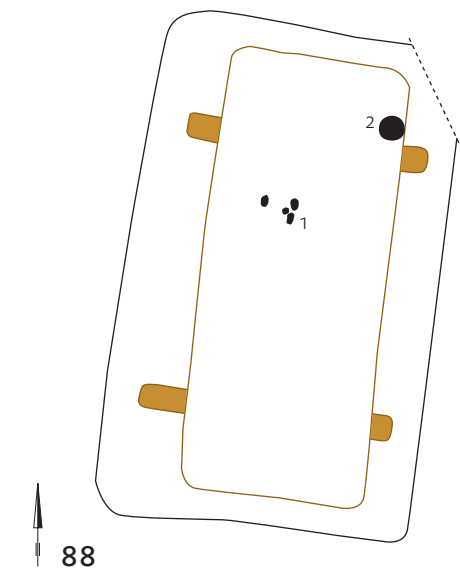


Ring rod, iron
Find number: 87-4-1.5
Find depth: 56.60
Iron rod with loop to which one of an ensemble of five simple rings is attached.
Length: 2.3 cm
Type: L/P/V 353
L/P/V phase: MA2-MR1
L/P/V date: 520/30-700/10
Location: PDB Limburg

Simple ring, iron
Find number: 87-4-1.6
Find depth: 56.60
Simple iron ring (going through the loop of rod 86-4-1.5).
Diameter: 1.8 cm
Type: L/P/V 357
L/P/V phases: MA2-MR1
L/P/V date: 520/30-630/40
Location: PDB Limburg

5 Textile fragment
Find number: 87-5-1
Find depth: 56.58
Location: PDB Limburg

Belt fitting, copper alloy
Find number: 87-5-2
Find depth: 56.58
Copper alloy plate buckle with a triangular hollow plate. The pins of the rivets are visible at the back side of the plate, but the actual rivets (three) are gone: traces of the rivets are present on the front side of the plate as are some textile fragments. The plate is attached to the buckle loop with a wrapped and slotted construction. The tongue is missing from the oval buckle loop.
Length plate: 6.6 cm
Maximum length loop: 4.2 cm
Type: 'hollow plate'
Date: 600-700
Location: PDB Limburg



88

6 Knife, iron?
Find number: 87-6-1
Find depth: 56.50
Fragment of iron knife? (no drawing available)
Length: 5.5 cm
Location: PDB Limburg

88 INHUMATION GRAVE

Trench	5
Grave structure	wooden container grave
Grave pit length	257
Grave pit width	168
Grave pit depth	21
Orientation	10 (SW-NE)

DESCRIPTION

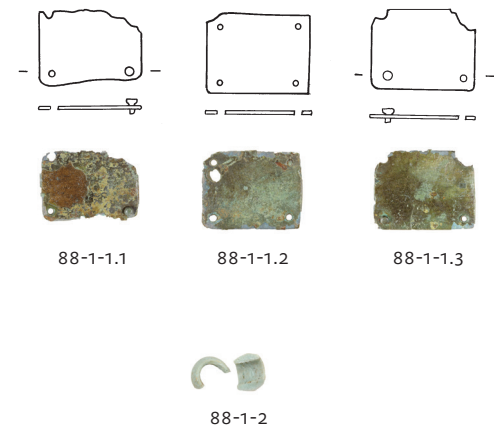
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The burial pit was rectangular with slightly rounded corners and contained vague traces of a wooden container placed on two wooden beams. The north-eastern corner was disturbed by construction work preceding the archaeological excavation.

GRAVE DATE

SK: chronological indifferent
FAG phases 4-9: 510/20-710

FINDS

1 Mount, copper alloy
Find number: 88-1-1.1
Find depth: 56.40
Copper alloy mount: rectangular plate with two rivet holes but no rivets preserved.
Length: 2.7 cm
Location: PDB Limburg



Mount, copper alloy
Find number: 88-1-1.2
Find depth: 56.40
Copper alloy mount: rectangular plate with two rivet holes but no rivets preserved.
Length: 2.6 cm
Location: PDB Limburg

Mount, copper alloy
Find number: 88-1-1.3
Find depth: 56.40
Fragment of a rectangular plate with two (of originally four?) rivet holes but no rivets preserved.
Length: 2.8
Location: PDB Limburg

Bead, glass
Find number: 88-1-2
Find depth: 56.40
White, opaque, biconical.
Number: 1
Type: WO20 / S-Per 32.3
Kombinationsgruppe: (G) H-1
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: PDB Limburg

2 Pottery, fragment
Find number: 88-2-1
Find depth: 56.40
Fragments of a biconical pot or jug with a grey surface and a brown wall core. The fragments are glued together; approximately 30% of the vessel is present.
Type: FAG-Kwt4A?
FAG phases: 4-7
FAG date: 510/25-640/50
Location: PDB Limburg



FINDS WITHOUT CONTEXT



Bead, glass
Find number: 0-1-1.1
Red, opaque, cylindrical.
Type: RO11
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 0-1-1.2
White, opaque, cylindrical.
Type: WO11
Number: 1
Location: Museum Het Domein

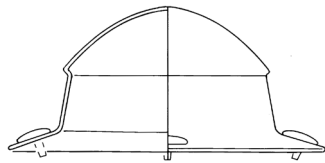
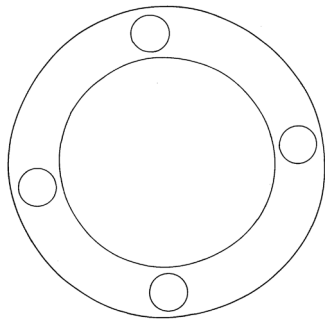
Bead, glass
Find number: 0-1-1.3
Blue, opaque, globular.
Type: BO1
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 0-1-1.4
Blue, transparent, globular compressed.
Type: BT30
Number: 1
Location: Museum Het Domein

Bead glass
Find number: 0-1-1.5
Black, opaque, globular compressed
Type: BLO30 S-Per 31.1
Kombinationsgruppe: C-D
Rhineland phase: 3-6
Rhineland date: 485-585
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 0-1-1.6
Red, opaque, globular compressed. Decoration: yellow waves, crossing.
Type: Koch-Schretzheim 1977: 34,18 / 19
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.11 (Kombinationsgruppe (D-H) F-G: (485) 555-705)
Number: 1
Location: Museum Het Domein

Bead, glass
Find number: 0-1-1.7
Red, opaque, cylindrical, large. Decoration: white and blue swirling bands, yellow edge band (vague).
Number: 1
Location: Museum Het Domein

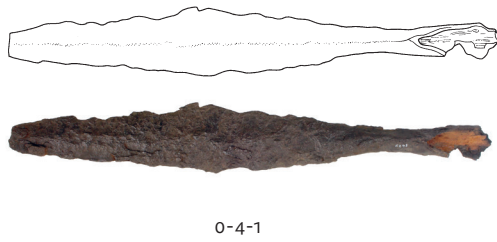


0-2-1

Shield boss, iron
Find number: 0-2-1
Iron shield boss with rounded cone and four copper alloy rivets on the flange.
Diameter: 16.3 cm
Height: 7.5 cm.
Type: L/P/V 80
Phase: MR1-MR2
Date: 600-670
Alternative type : Siegmund Sbu5 (8 :710-640)
Alternative type : FAG-Sbu5B (6-9 :580-710)
Location: PDB Limburg



Seax, iron
Find number: 0-3-1 (was wrongly assigned to discarded context 27)
Iron seax, heavily restored, with wood remains present on the hilt.
Length blade: 34.0 cm
Type: FAG Sax2.1
FAG phases: (5) 6-7 (8)
FAG date: (565) 580/90-640/50 (680)
Alternative type: Siegmund Sax2.1: 585-655
Location: PDB Limburg



Lance head, iron
Find number: 0-4-1 (was wrongly assigned to context 78)
Iron lance head, severely corroded. It is conserved but not restored; it cannot be determined whether the socket was closed or not, which makes its type identification difficult. Wood remains are present in the socket. The lance has an oval blade of which the edges are severely corroded.
Length blade: 18.1 cm
Type: Siegmund Lan1.4
Rhineland phases: 6-8A
Rhineland date: 570-625
Alternative type: L/P/V 30 (440-610)
Alternative type: FAG S-Lan1.4 (565-620)
Type: Siegmund Lan2.4
Rhineland phases: 8B-10
Rhineland date: 625-705
Alternative type: L/P/V 34 (560/70-630/40)
Alternative type: FAG S-Lan2.4 (510/20-710)
Location: PDB Limburg

1
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	120 (remaining)
Grave pit width	140
Grave pit depth	150
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was in its longitudinal direction partly destroyed; the original length of the burial pit could not be established. It is assumed that the western part of the grave was gone since the location of the biconical pot was given in exact centimetres measured from the eastern and southern burial pit walls.

GRAVE DATE
O-OM IIB: 565-640/50
FAG 5-7: 565-640/50

- FINDS**

1 Pottery vessel
Find number: 1-1-1
Original find number: VIB 3
Red biconical pot with rounded carination of which the upper wall is decorated with double lines of rectangular roulette stamp impressions. The pot is complete apart from some small missing rim fragments.
Height: 14.1 cm
Type: Siegmund Kwt4.11
Rhineland phase: end 7-8A
Rhineland date: c.600-c.625
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Location: Archaeological Museum Stein
- 2 Spindle whorl, ceramic
Find number: 1-2-1
Original find number: VIB 1
Brown ceramic asymmetric spindle whorl with four grooves on the higher cone.
Height: 1.8 cm
Diameter: 3.0 cm
Type: L/P/V 347
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein
- 3 Plate buckle, copper alloy
Find number: 1-3-1
Original find number: VIB 2
Find depth: 150
Copper alloy buckle with fixed diamond shaped plate, simple iron tongue and two loops at back side of the plate.

Plate length: 2.2 cm
Loop length: 1.7 cm
Type: L/P/V 130
L/P/V phases: MA2-MR1
L/P/V date: 520/30-630/40
Location: Archaeological Museum Stein

2
INHUMATION GRAVE

DESCRIPTION
Merovingian inhumation grave. The dimensions and location of this grave could not be recorded; it was mentioned to have been destroyed by construction works preceding the archaeological excavation. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate. It was recorded that this grave was without grave goods.

GRAVE DATE
Cannot be dated

3
INHUMATION GRAVE

DESCRIPTION
Merovingian inhumation grave. The dimensions and location of this grave could not be recorded; it was mentioned to have been destroyed by construction works preceding the archaeological excavation. The indicated location, outline and orientation of this grave and the location of the pot inside it on the original cemetery plan are not accurate.

GRAVE DATE
O-OM IIB: 565-640/50
FAG 5-7: 565-640/50

- FINDS**

1 Pottery
Find number: 3-1-1
Original find number: VIB 4
Bottom fragment of a terra sigillata plate.
Date: Roman
Location: Archaeological restoration company Restaura
- 2 Pottery
Find number: 3-2-1
Original find number: VIB 5
Wall fragment of a biconical pot with a dark outer surface. The decoration consists of single lines of complex roulette stamp impressions: rectangular

impressions alternating with oblique and straight stripes.
Type: Siegmund Kwt3.11/3.12/3.13 which date to Rhineland phases 6-7 (570-610)
Rhineland phase: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5G (5-6: 565-610/20)
Alternative type: FAG Kwt5H (5-7: 565-640/50)
Location: Archaeological restoration company Restaura

4
INHUMATION GRAVE

DESCRIPTION
Merovingian inhumation grave. The dimensions and location of this grave could not be recorded; it was mentioned to have been destroyed by construction works preceding the archaeological excavation. The indicated location, outline and orientation of this grave and the pottery vessel inside it on the original cemetery plan are not accurate. Nonetheless, several objects could be recorded as finds from this grave.

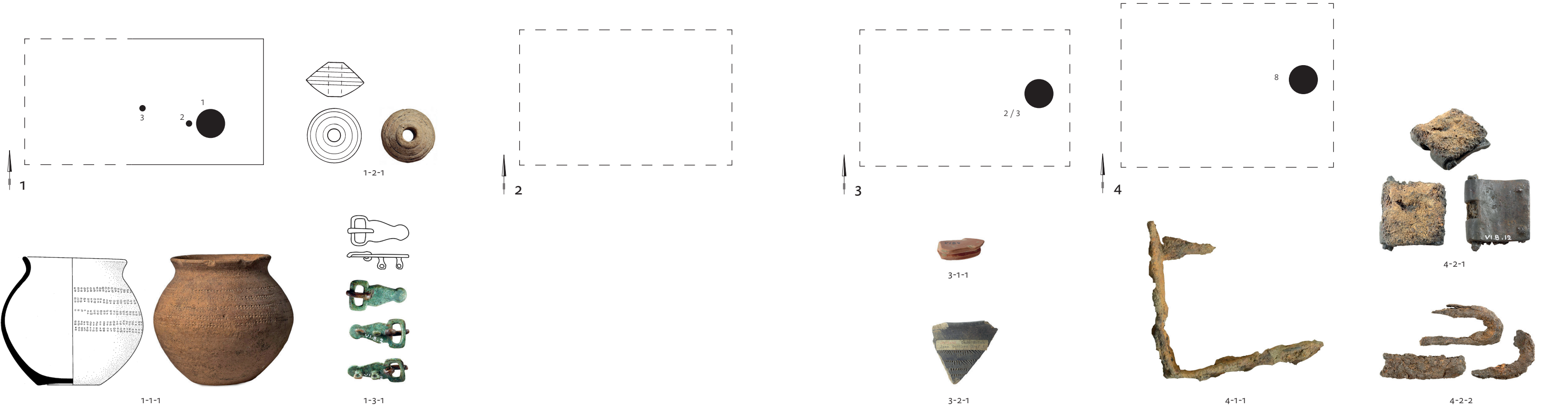
GRAVE DATE
O-OM IIB: 565-640/50
FAG 3-7: 460/80-640/50

FINDS

1 Fragments, iron
Find number: 4-1-1
Original find number: VIB 11
Numerous indeterminate iron fragments and one corner mount of a box/coffin.
Dimensions: 8.9 x 8.9 cm
Location: Archaeological restoration company Restaura

2 Belt fitting, iron
Find number: 4-2-1
Original find number: VIB 12
Iron plate of a plate buckle with remnants of two rivets, folded around loop remnants. One side of the plate is covered with mineralised leather/textile.
Length: 3.4 cm
Width: 3.3 cm
Location: Archaeological Museum Stein

Belt fitting, iron
Find number: 4-2-2
Original find number: VIB 6
Remnants of a buckle loop; it might have been part of a plate buckle (4-1-2.1).
Location: Archaeological Museum Stein



3 Ring rod, iron
Find number: 4-3-1
Original find number: VIB 6
Iron rod with hook (a suspension ring with a diameter of 4 cm was originally attached to it)
Length: 7.4 cm
Type: L/P/V 199
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein

Ring, iron
Find number: 4-3-2
Original find number: VIB 7
Simple iron ring (originally attached to 4-2-1)
Diameter: 3.9-4.2 cm
Type: L/P/V 357
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Type: L/P/V 199 (ring rod)
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein

4 Shield boss, iron
Find number: 4-4-1
Original find number: VIB 8
Shield boss rim fragment and at least five detached copper alloy or iron rivets with copper alloy sheet.
Location: Archaeological restoration company Restaura

5 Seax, iron
Find number: 4-5-1
Iron seax; corroded and broken condition but clearly a broad seax (depending on the classification scheme a *leichter* or *schwerer Breitsaxe*).
Recorded hilt length: 11.0 cm
Width blade: c. 4.5 cm
Type: Siegmund Sax2.1
Rhineland phases: 7-9A
Rhineland date: 585-655
Alternative type: FAG Sax2.1 (6-7: 580/90-640/50)
Alternative type: FAG Sax2.2 (end7-8: 640-670/80 (6-9: 580-710))

6 Knife, iron
Find number: 4-6-1.1
Original find number: VIB 10
Iron knife with curved back and curved cutting edge; wood remains preserved around the iron hilt core. Three knives in the collection have find numbers matching with this grave; it is not certain which knife originally belonged to grave 4.
Length blade: 12.6 cm
Location: Archaeological Museum Stein

Find number: 4-6-1.2
Original find number: VIB 10/VIB 6
Iron knife with curved back and straight cutting edge; wood remains preserved around the iron hilt core and mineralised remains (of a scabbard?) preserved at one side of the blade. Three knives in the collection have find numbers matching with

this grave; it is not certain which knife originally belonged to grave 4.
Length blade: 8.6 cm
Type: L/P/V 73
L/P/V phase: MR2-MR3
L/P/V date: 630/40-700/10
Location: Archaeological Museum Stein

Find number: 4-6-1.3
Iron knife with curved to angled back and slightly curved cutting edge; wood remains are preserved around the iron hilt core. Three knives in the collection have find numbers matching with this grave; it is not certain which knife originally belonged to grave 4.
Length blade: 12.1 cm
Location: Archaeological Museum Stein

7 Arrow head, iron
Find number: 4-7-1
Original find number: VIB 12
Iron arrow head with split socket and broad oval blade; wood remains seem to be preserved in the shaft opening.
Total length: 10.1 cm
Length blade: 4.6 cm
Width blade: 2.3 cm
Type: L/P/V 24
L/P/V phases: PM-MA3
L/P/V date: 440/50-600/10
Location: Archaeological Museum Stein

8 Lance head
Find number: 4-8-1
Original find number:
Iron lance head, present in corroded condition. The two detached rivets were probably attached to the socket of this lance head; they are domed copper alloy rivets with carved rims.
Type (rivets): L/P/V 44
L/P/V phase: (MA2) MA3-MR1
L/P/V date: (520/30-560/70) 560/70-630/40
Location: Archaeological restoration company Restaura

9 Pottery, fragments
Find number: 4-9-1
Original find number: VIB 14
Wall and rim fragments of a grey biconical pot. The decoration consists of single lines of complex roulette stamp impressions: rectangular impressions alternating with oblique and straight stripes. The fragments form approximately 5% of the original pot.
Type: Siegmund Kwt3.11/3.12/3.13
Rhineland phase: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5G (5-6: 565-610/20)
Alternative type: FAG Kwt5H (5-7: 565-640/50)
Location: Archaeological restoration company Restaura

10 Pottery, fragments
Find number: 4-10-1
Original find number: VIB 13
Grey coarse ware fragments among which one rim fragment showing an outward folded rim; they are presumably of a globular coarse ware pot. Approximately 15% of the original pot is present.
Type: globular pots (seventh century)
Date: 600- >700
Location: Archaeological Museum Stein

11 Human remains
Find number: 4-11-1
Original find number: VIB 12
Teeth: two molars and 2 fragments of tooth.
Location: Archaeological Museum Stein



4-3-1



4-3-2



4-7-1



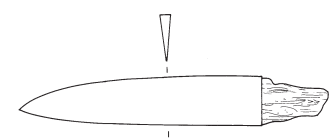
4-9-1



4-10-1



4-11-1



4-6-1.1



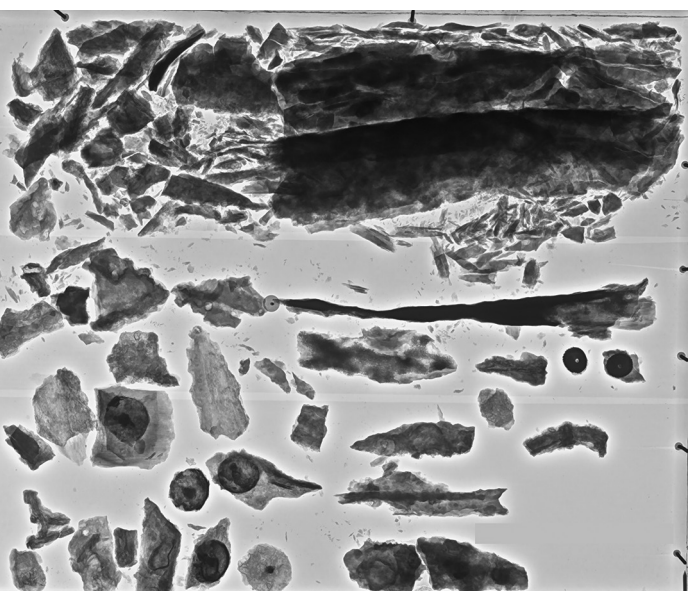
4-6-1.2



4-6-1.3



4-4-1, 5-1, 8-1



4-4-1, 5-1, 8-1

5
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	270
Grave pit width	185
Grave pit depth	190
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was mentioned to have been disturbed by 'ground works' but its dimensions could nonetheless be recorded. The broken sword was found outside the grave, but numerous other objects, among which the sword hilt, were found inside it.

GRAVE DATE
O-OM IIa: 565-610/20
FAG 4-10: 510/20- >725

FINDS

- 1 Sword, iron
Find number: 5-1-1
Original find number: VIB 15
Find depth: 170
Sword, broken, partly preserved, with detached hilt with knob. The knob has an oval base and narrow rectangular elevation in the middle of the base plate. The original length and width of the sword cannot be established precisely.
Recorded length blade: 82.0 cm
Blade width: c.5.0 cm
Knob width: 6.2 cm
Knob height: 1.2 cm
Location: Archaeological Museum Stein
- 2 Seax
Find number: 5-2-1
Original find number: VIB 16
Find depth: 170
Iron seax with knob, broken and corroded.
Length blade: 25.0 cm
Type: FAG Sax1
FAG phases: (end 3-end 7) 4-5
FAG date: (510-640/50) 510/25-580/90
Alternative type: Siegmund Sax1 (4-7: 530-610)
Location: Archaeological Museum Stein

- 3 Belt fitting
Find number: 5-3-1
Original find number: VIB 18
Find depth: 170
Iron plate buckle with three copper alloy rivets and a shield tongue with round base.
Recorded (plate) length: 10.0 cm
Recorded width: 7 cm
Type: Siegmund Gür4.1-4.7
Rhineland phase: 7-9
Rhineland date: 585-670
Location: missing
- 4 Belt fitting, iron
Find number: 5-4-1
Iron back plate, rectangular, with four copper alloy rivets.
Type: Siegmund Gür4.1-4.7
Rhineland phase: 7-9
Rhineland date: 585-670
Location: missing
- 5 Folded knife, iron
Find number: 5-5-1
Folded iron knife.
Type: Siegmund Ger1.3
Rhineland phases: 9-11

Rhineland date: 640-740
Alternative type: FAG S-Ger1.3 (8-10: 640-750)
Location: missing

- 6 Knife, iron
Find number: 5-6-1
Original find number: VIB 16?
Iron knife with a curved back and a more or less straight cutting edge.
Length blade: 10.1 cm
Type: L/P/V 73
L/P/V phase: MR2-MR3
L/P/V date: 630/40-700/10
Location: Archaeological Museum Stein
- 7 Tweezers, iron
Find number: 5-7-1
Original find number: VIB 21
Iron tweezers with inward curved arms and remnants of a suspension ring.
Length: 7.6 cm
Type: L/P/V 322
L/P/V phases: MA2-MA3
L/P/V date: 520/30-600/10
Location: Archaeological Museum Stein

- 8 Fire steel
Find number: 5-8-1
Iron fire steel
Recorded length: 10.0 cm
Type: Siegmund Ger5
Location: missing
- 9 Fragments, iron
Find number: 5-9-1
Several iron fragments, indeterminate.
Location: Archaeological Museum Stein

6
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	170 (remaining)
Grave pit width	160
Grave pit depth	130
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was partly dug away but its eastern section was recorded to have been preserved.

GRAVE DATE
O-OM IIa: 565-610/20
FAG 3-6: 460/80-610/20

FINDS

- 1 Arrow head, iron
Find number: 6-1-1
Original find number: VIB 26
Iron arrow head with a triangular shaped blade and a closed socket; its current shape may be partly a result of an incorrect reconstruction since similar shaped blades are not known to me.
Length: 6.7 cm
Location: Archaeological Museum Stein



2 Arrow head, iron
Find number: 6-2-1
Original find number: VIB 26
Iron arrow head with a conversed V-shaped blade and a closed socket.
Length: 11.7 cm
Type: L/P/V 27
L/P/V phase: MA1-MA3
L/P/V date: 470/80-600/10
Location: Archaeological Museum Stein

3 Fragments, iron
Find number: 6-3-1
Some indeterminate iron fragments (of a seax?).
Location: missing/Archaeological restoration company Restaura

4 Pottery
Find number: 6-4-1
Original find number: VIB 25
Dark grey biconical pot with a considerably weathered surface, found in fragmented condition but now restored and completed; approximately 95% of the original pot is present. The upper wall is decorated with six/seven (single) lines of triangular and rectangular roulette stamp impressions; it is not certain whether they are single or multiple roulette stamp lines.
Height: 11.4 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6-7
Rhineland date: 570-610
Type: Siegmund Kwt3.22
Rhineland phase: end 7-beginning 8B
Rhineland date: c.600-c.630
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Location: Archaeological Museum Stein

7 INHUMATION GRAVE

Orientation W-E?

DESCRIPTION
Merovingian inhumation grave. The dimensions and location of this grave could not be recorded; it was mentioned to have been destroyed by construction works preceding the archaeological excavation. The indicated location, outline and orientation of this grave and the location of the pottery vessel inside it on the original cemetery plan are not accurate.

GRAVE DATE
O-OM I+IIc: 510/20-640/50
FAG 4-7: 510/20-640/50

FINDS
1 Pottery vessel
Find number: 7-1-1
Original find number: VIB 26/27
Brown-grey biconical pot of which the upper wall is decorated with three grooves. Approximately 90% of the original pot is present.
Height: 10.8 cm
Type: Siegmund Kwt2.33
Rhineland phases: 6-8
Rhineland date: 570-640
Alternative type: FAG Kwt3A (4-5: 510/25-580/90 (6: 580/90-610/20))
Location: Archaeological Museum Stein

8 INHUMATION GRAVE

Grave structure trench grave?
Grave pit length 300
Grave pit width 140
Grave pit depth 145
Orientation W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. It was suggested that the grave was reopened since beads and pottery and iron fragments were found scattered throughout the grave.

GRAVE DATE
O-OM IIa: 565-610/20
FAG 4-9: 510/20-710

FINDS
1 Fragments, iron
Find number: 8-1-1
Various iron indeterminate fragments.
Location: missing
2 Nails, iron
Find number: 8-2-1
A number of iron nails; one nail is present in the collection but it is without find number. It is not certain whether it belonged to this grave.
Length: 4.8 cm
Location: missing/Archaeological Museum Stein

3 Brooch, fragment
Find number: 8-3-1
Fragment of a copper alloy Roman bow brooch.
Length: 4.1 cm
Date: Roman
Location: missing

4 Ring, iron
Find number: 8-4-1.1
Original find number: VIB 28
Fragment of an iron ring
Diameter: 3.7 cm
Type: L/P/V 357
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: Archaeological Museum Stein

Ring and ring rod, iron
Find number: 8-4-1.2
Original find number: VIB 28
Fragment of an iron ring attached to the loop of a ring rod.
Diameter ring: 3.1 cm
Length ring rod: 3.2
Type: L/P/V 357
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: Archaeological Museum Stein

5 Bead, glass
Find number: 8-5-1.1
Original find number: VIB 27
Blue, opaque, globular compressed
Number: 1
Type: BO2
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.2
Original find number: VIB 27
Red, opaque, biconical
Number: 5
Type: RO20 / S-Per 35.6
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, amber
Find number: 8-5-1.3
Original find number: VIB 27
Drop shaped amber bead
Number: 1
Type: A22
Location: Archaeological Museum Stein

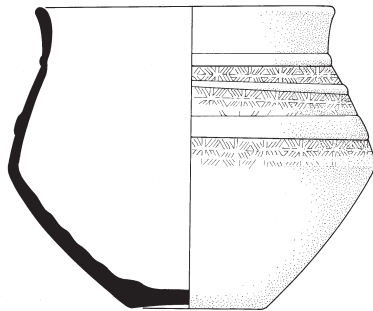
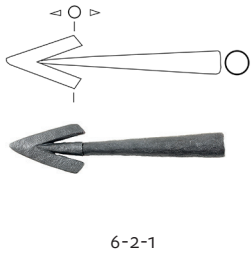
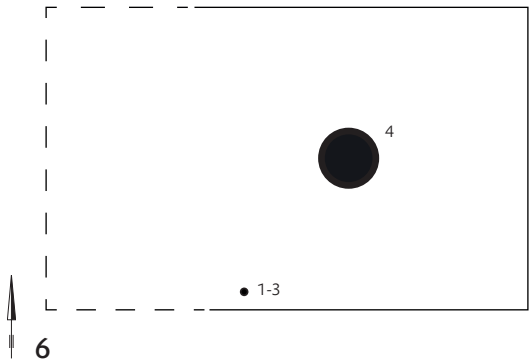
Bead, glass
Find number: 8-5-1.4
Orange/ochre, opaque, barrel shaped
Number: 2
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.5
White, opaque, biconical
Number: 2
Type: WO20 / S-Per 32.3
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.6
Green, opaque, biconical
Number: 4
Type: GO20
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.7
Blue, transparent, biconical
Number: 2
Type: BT20/S-47.3
Kombinationsgruppe: I
Rhineland phase: 8-10
Rhineland date: 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.8
Red, opaque, globular compressed. Decoration: white waves, crossing
Number: 1
Type: Koch-Schretzheim 1977: 34,11/34,12
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.8 (Kombinationsgruppe F-H: 555-705)
Location: Archaeological Museum Stein



Bead, glass
Find number: 8-5-1.9
Green, opaque, globular compressed, four connected beads
Number: 1
Type: GO24 +1
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.10
Blue, opaque, twisted
Number: 1
Type: BO29 / S-from group 47.4
Kombinationsgruppe: (F) H-I
Rhineland phases: (5-9) 8-10
Rhineland date: (555-670) 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.11
Green, opaque, globular compressed, three connected beads
Number: 1
Type: GO24
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.12
Blue, opaque, short cylindrical, two connected beads
Number: 1
Type: BO25 / S-Per 37.2
Kombinationsgruppe: F-I
Rhineland date: 5-10
Rhineland date: 555-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.13
Green, opaque, globular compressed, two connected beads
Number: 1
Type: GO25
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.14
White, opaque, barrel shaped
Number: 2
Type: WO19 / S-Per 32.3?
Kombinationsgruppe: (G) H-I
Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.15
White, opaque, globular compressed
Number: 1
Type: WO2
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.16
Blue, opaque, short cylindrical
Number: 3
Type: BO35
Location: Archaeological Museum Stein

Bead, glass
Find number: 8-5-1.17
Yellow, opaque, globular compressed
Number: 2
Type: YO2
Location: Archaeological Museum Stein

5 Coin pendant
Find number: 8-5-2
Copper alloy coin pendant, severely corroded, with a suspension hole. The letters observed at one of the sides: HINOP.
Date: Roman
Location: missing

6 Pottery
Find number: 8-6-1
Original find number: VIB 39
Grey/brown biconical pot of which the outer surface is considerably weathered. Approximately 60% of the original pot is present. The upper wall is decorated with a ridge and multiple lines of uninterrupted roulette stamp impressions of what seem to be straight and oblique stripes.
Height: 15.9 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5G (565-610/20)
Location: Archaeological Museum Stein

9 INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	260
Grave pit width	160
Grave pit depth	160
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
Cannot be dated



10-1-1

10 INHUMATION GRAVE

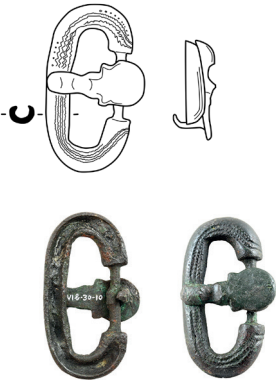
Grave structure	trench grave?
Grave pit length	160
Grave pit width	150
Grave pit depth	140
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since human remains demonstrating this orientation were not found. The soil in the middle of the grave was observed to be greasy and sticky, indicating the former location of the body.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 4-7: 510/20-640/50

FINDS

- Pottery vessel
Find number: 10-1-1
Original find number: VIB 31
Dark grey biconical pot with a considerably weathered surface, found in fragmented condition but now restored and completed; approximately 95% of the original pot is present. The upper wall is decorated with three zones of multiple lines of rectangular roulette stamp impressions covering the entire upper wall.
Height: 15.0 cm
Type: Siegmund Kwt3.21
Rhineland phase: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5B (5-7: 565-640/50).
Location: Archaeological Museum Stein
- Brooch
Find number: 10-2-1
Fragment of a brooch.
Location: missing



10-3-1

3 Buckle, copper alloy
Find number: 10-3-1
Original find number: VIB 30
Copper alloy shield tongue buckle with hollow oval loop decorated with two grooves, alternating with three lines of stamped in dots.
Loop length max: 4.5 cm
Loop length min: 3.2 cm
Type: L/P/V 114
L/P/V phases: MA2 (MA 3)
L/P/V date: 520/30-560/70 (560/70-600/10)
Alternative type: FAG Gürz.6/7D (5: 565-580/90)
Alternative type: Böhner A6 (Stufe III: 525-600)
Location: Archaeological Museum Stein

11 INHUMATION GRAVE

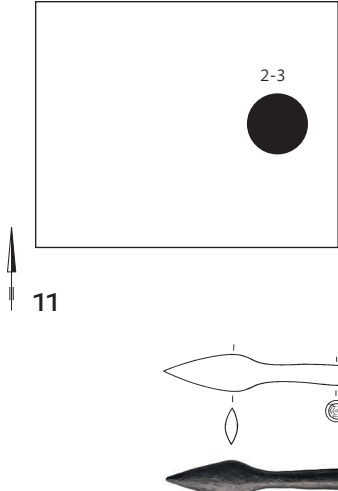
Grave structure	trench grave?
Grave pit length	160
Grave pit width	130
Grave pit depth	100
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
O-OM IIa: 565-610/20
FAG 3-7: 460/80-640/50

FINDS

- Arrow head, iron
Find number: 11-1-1
Original find number: VIB 32
Iron arrowhead with a leaf shaped blade and closed socket.
Length: 9.3 cm
Type: L/P/V 26



11-1-1

L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein

2 Pottery
Find number: 11-2-1
Original find number: VIB 34
Grey-brown biconical pot with a weathered surface. Approximately 90% of the original pot is present. The upper wall is decorated with a single groove above the carination and single lines of complex uninterrupted roulette stamp impressions applied twice above the groove, and once beneath it. The stamp impressions consist of lines, crosses, stars, tridents and squares
Height: 10.6 cm
Type: Siegmund Kwt3.11/12
Rhineland phase: 7-8
Rhineland date: 570-610
Alternative type: FAG 5G (5-6: 565-610/20)
Location: Archaeological Museum Stein

3 Glass vessel
Find number: 11-3-1
Original find number: VIB 33
Lower part of a dark brown conical beaker decorated with vertical trails of similar coloured glass forming approximately eighth loops which cover the entire (lower) wall. It has an asymmetric bottom with shallow indentation. Approximately 20% of the original vessel is present.
Height: 6.5 cm
Bottom diameter: 2.7 cm
Type: Feyeux T.51.2hf/2hi
Feyeux date: 450-550 (600)
Alternative type: Evison Kempston Beaker (400-550).
Alternative type: Siegmund Gla7.3 (4-7: 530-610)
Alternative type: Fag S-Gla7.3 (4-6: 510/25-610/20)
Location: Archaeological Museum Stein



11-2-1



11-3-1

12
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	160
Grave pit width	130
Grave pit depth	120
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
O-OM IIB: 565-640/50
FAG: 5-10: 565->725

- FINDS**
- 1

Seax, iron

Find number: 12-1-1

Location: missing
- 2

Knife, iron

Find number: 12-2-1

Original find number: VIB 35

Iron knife with an angled back, curved cutting edge and with some wood or leather remnants preserved on its blade.

Length blade: 10.5 cm

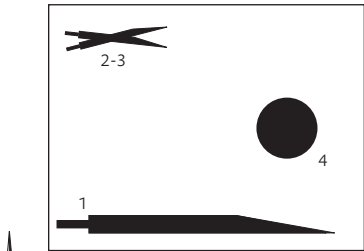
Type: Siegmund Ger1.2?

Rhineland phase: 10-11?

Rhineland date: 670-740?

Alternative type: FAG Ger1.2 (end 7-10: 640/50- 710)?

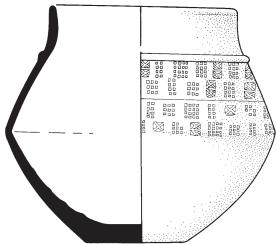
Location: Archaeological Museum Stein



12



12-2-1



12-4-1

- 3

Knife, iron

Find number: 12-3-1

Location: missing
- 4

Pottery

Find number: 12-4-1

Original find number: VIB G 12-1

Black biconical pot with a smoked and weathered surface. Approximately 95% of the original pot is present. The upper wall decoration is vague, but four lines of interrupted complex roulette stamp impressions seem to be present: the stamp consist of rectangular grids filled with 3 columns and 4 rows of square impressions, one rectangular grid of 4 columns and 4 rows of square impressions, a rectangular grid with two columns and four rows of rectangular impressions, a rectangular grid with two crosses and a rectangular grid with two reversed V-shapes. Some circular grid impressions with crosses can also be observed but are vague; they do not seem to fit in the roulette stamp lines. Despite the vagueness of the decoration pattern it is decided to indentify it as a result of roulette stamp impressions and not single stamp impressions since the stamp pattern seems to rather regular. However, the decoration might also be a result of single stamp impressions.

Height: 12.3 cm

Type: Siegmund Kwt3.22

Rhineland phase: end 7-begin 8

Rhineland date: c.600-620

Alternative type: FAG Kwt5F (5-7: 565-640/50)

Alternative type: Siegmund Kwt2.22 (8A: 610-625)

Location: Archaeological Museum Stein

13
INHUMATION GRAVE

Orientation	W-E ?
-------------	-------

DESCRIPTION
Merovingian inhumation grave. The dimensions and location of this grave could not be recorded; it was mentioned to have been destroyed by the construction of one of the mills. The indicated location, outline and orientation of this grave and the pottery vessel inside it on the original cemetery plan are not accurate.

GRAVE DATE
Cannot be dated

- FINDS**
- 1

Pottery, fragments

Find number: 13-1-1

Original find number: VIB 37

Fragments of a large hard baked pot with thick walls and a grey, smoked, outer surface.

Location: Archaeological Museum Stein



13



13-1-1

14
INHUMATION GRAVE

Orientation	W-E?
-------------	------

DESCRIPTION
Merovingian inhumation grave. The dimensions and exact location of this grave were not recorded; it was mentioned to have been located underneath the mills. The indicated location, outline and orientation of this grave and the pottery vessel inside it on the original cemetery plan are not accurate.

GRAVE DATE
O-OM IIA: 565-610/20

- FINDS**
- 1

Pottery, vessel

Find number: 14-1-1

Fragments of a small biconical pot with a blue-grey surface. The upper wall is decorated with single lines of rectangular roulette stamp impressions.

Type: Siegmund Kwt3.11/3.12/3.13

Rhineland phases: 6-7

Rhineland date: 570-610

Alternative type: FAG Kwt5A (5-6: 565-610/20)

Location: Archaeological Museum Stein



14



14-1-1

15
INHUMATION GRAVE

Orientation	W-E?
-------------	------

DESCRIPTION
Merovingian inhumation grave. The dimensions and exact location of this grave were not recorded; it was mentioned to have been destroyed by fundaments, probably those of the mills. The indicated location, outline and orientation of this grave and the pottery vessel inside it on the original cemetery plan are not accurate.

GRAVE DATE
O-OM IIA: 565-610/20
FAG 5-6: 565-610/20

- FINDS**
- 1

Pottery, vessel

Find number: 15-1-1

Original find number:

Fragments of a large pot biconical pot with thick walls and a grey outer smoked surface decorated with seven single lines of roulettes stamp impressions of stripes. Approximately 40% of the original pot is present.

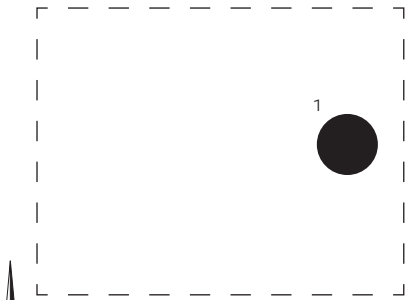
Type: Siegmund Kwt3.11/3.12/3.13

Rhineland phase: 6-7

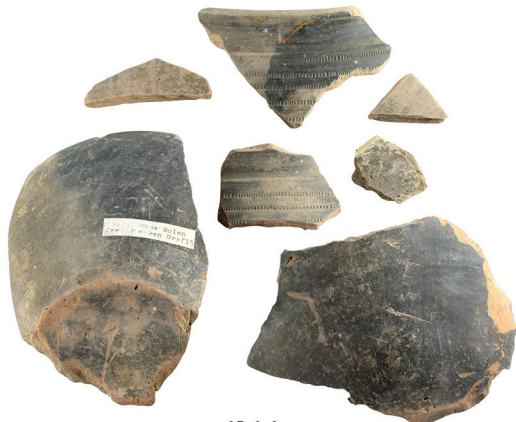
Rhineland date: 570-610

Alternative type: FAG Kwt5E (5-6: 565-610/20)

Location: Archaeological Museum Stein



15



15-1-1

16
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	250
Grave pit width	180
Grave pit depth	160
Orientation	W-E ?

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was without finds.

GRAVE DATE
Cannot be dated



16

17
INHUMATION GRAVE

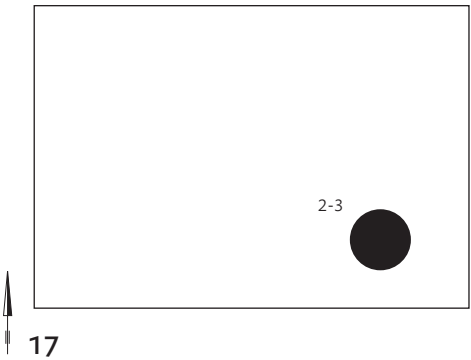
Grave structure	trench grave?
Grave pit length	230
Grave pit width	160
Grave pit depth	110
Orientation	W-E?

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found. The outlines of the burial pit became visible at a depth of 80 cm; given the recorded burial pit depth the remaining visible part of the grave was 30 cm. The remaining visible part was for the other graves in the cemetery not observed or recorded and could not be reconstructed.

GRAVE DATE
O-OM I: 510/20-565
FAG 4-6: 510/20-610/20

FINDS
1 Fragment, iron
Find number: 17-1-1
Small indeterminate iron fragment.
Location: missing

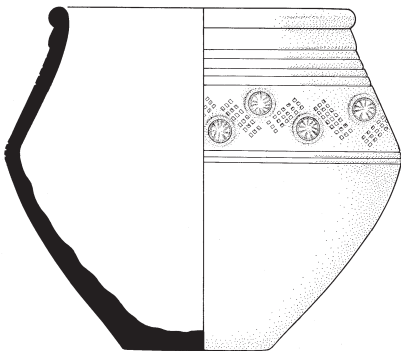
2 Pottery, vessel
Find number: 17-2-1
Original find number: VIB 40
Grey-brown biconical pot, fragmented but now restored and completed; approximately 90% of the original pot is present. The upper wall is decorated with a zone of five grooves underneath the neck and a zone of three grooves above the carination. In between are oblique single stamp impressions of



17-3-1

rectangular grids with rounded corners consisting of three columns and six rows alternating with single circular stamp impressions filled with radial lines.
Height: 18.2 cm
Type: Siegmund Kwt2.12
Rhineland phase: 4
Rhineland date: 530-555
Alternative type: FAG Kwt2A (4-5: 510/25-580/90)
Location: Archaeological Museum Stein

3 Pottery, vessel
Find number: 17-3-1
Original find number: VIB 41
Grey biconical pot of which the upper wall is decorated with two prominent grooves and three shallow grooves just beneath the neck. The pot is complete, apart from some small missing rim fragments.
Height: 8.0 cm
Type: Siegmund Kwt2.31
Rhineland phase: 5
Rhineland date: 555-570
Type: Siegmund Kwt2.32
Rhineland phases: 4-5
Rhineland date: 530-570
Alternative type: FAG Kwt3A (4-5: 510/25-580/90 (6: 580/90-610/20))
Location: Archaeological Museum Stein



17-2-1



18
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	200
Grave pit width	120
Grave pit depth	170
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found. The fragments of a pot were mentioned to have been found scattered throughout the grave, which may indicate that the grave was reopened.

GRAVE DATE
O-OM IIa: 565-610/20
FAG 5-6: 565-610/20

FINDS
1 Pottery, vessel
Find number: 18-1-1
Original find number: VIB 42
Black spouted pot with thickened and outward folded rim with two grooves and a smoked surface. Found in fragmented condition but now restored and completed; approximately 45% of the original pot is present. The upper wall is decorated with four to five zones of two to four single lines of irregular ‘rectangular’ roulette stamp impressions.
Height: 17.0 cm (reconstructed)
Type: Siegmund Kwt3.12
Rhineland phase: end 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Location: Archaeological Museum Stein

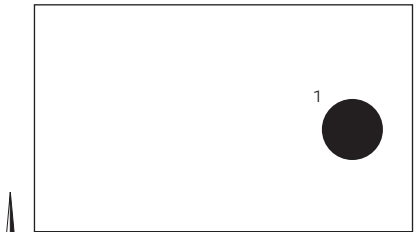
2 Belt fitting, iron
Find number: 18-2-1
Large corroded simple oval buckle.
Length: 4.6 cm
Location: Archaeological restoration company Restaura

19
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	200
Grave pit width	130
Grave pit depth	155
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found. The shadow of a wooden construction was clearly visible as a grey-black band shaped discoloration of the soil, probably along the walls of the burial pit; its dimensions were not given but are assumed to be comparable to that of the burial pit since it was recorded that the shadows were visible along the ‘border’ of the pit.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 3-9: 460/80-710



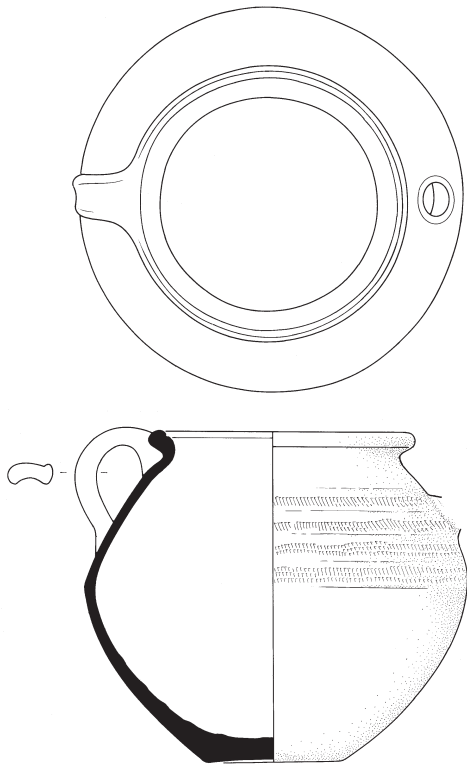
18-2-1

FINDS
1 Beads, glass
Find number: 19-1-1.1
Original find number: VIB 45
Yellow, opaque, small globular compressed
Number: 19
Type: YO30 / S-Per33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Archaeological restoration company Restaura

Bead, glass
Find number: 19-1-1.2
Original find number: VIB 45
Blue, opaque, globular compressed. Decoration: faint red threads?
Type: BO2
Number: 1
Location: Archaeological restoration company Restaura

Bead, amber
Find number: 19-1-1.3
Original find number: VIB 45
Amber bead, nearly square
Number: 1
Type: A49
Location: Archaeological restoration company Restaura

Bead, glass
Find number: 19-1-1.4
Original find number: VIB 45
Green, transparent, globular compressed.
Type: GT2/18



18-1-1

Number: 1
Location: Archaeological restoration company Restaura

Bead, glass
Find number: 19-1-1.5
Original find number: VIB 45
Black, opaque, globular compressed.
Type: BLO2/18
Number: 1
Location: Archaeological restoration company Restaura

2 Buckle, iron
Find number: 19-2-1.1
Original find number: VIB 45
Large simple iron buckle in corroded condition with a simple iron tongue, which is considerably larger than the width of the buckle.
Location: Archaeological restoration company Restaura

Fragments, iron
Find number: 19-2-1.2
Original find number: VIB 44
Indeterminate iron fragments.
Location: Archaeological restoration company Restaura

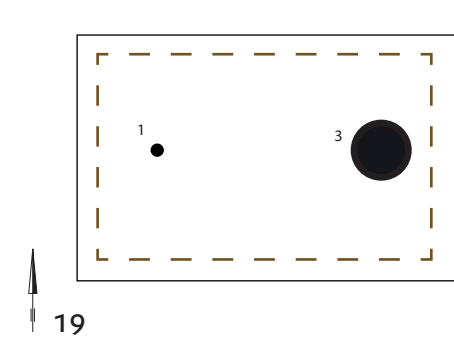
3 Pottery, fragments
Find number: 19-3-1
Original find number: VIB 46
Fragments of a grey biconical pot with complex uninterrupted roulette stamp impressions of single lines of crosses and vertical lines. Approximately 25% of the original pot is present.
Type: Siegmund Kwt3.11/3.12/3.13



Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5G/H (5-7: 565-640/50)
Location: Archaeological restoration company Restaura

- 4 Pottery, fragment
Find number: 19-4-1
Original find number: VIB 46
Fragment of a brown-grey (biconical) pot with single lines of uninterrupted reversed and straight v-shaped roulette stamp impressions.
Type: Siegmund Kwt3.11/3.12/3.13
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5G/H (5-7: 565-640/50)
Location: Archaeological Museum Stein
Location: Archaeological restoration company Restaura

- 5 Unidentifiable object, iron
Find number: 19-5-1
Original find number: VIB 46
Conical hollow tube, closed at the narrow side; function unknown.
Length: 5.9 cm
Diameter: 2.7 cm
Location: Archaeological Museum Stein



19



19-3-1

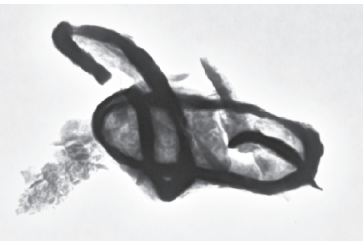
19-4-1



19-2-1.2



19-1-1



19-2-1.1

20 INHUMATION GRAVE

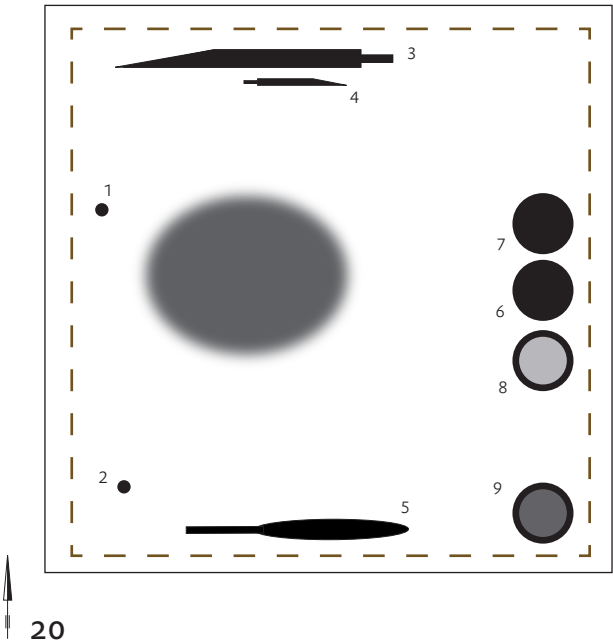
Grave structure	wooden container grave
Grave pit length	300
Grave pit width	300
Grave pit depth	180
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. A black rectangular band shaped soil discoloration, covering nearly the complete burial pit, indicated the former location of a wooden container. The soil was dark and greasy in the middle section of the western part of the grave; this spot indicated the former location of a part (presumably the upper part) of the completely decomposed body.

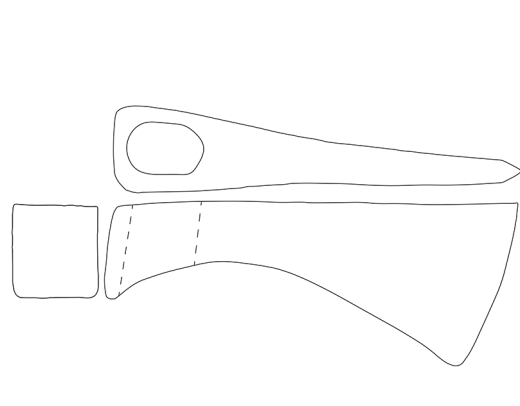
GRAVE DATE
O-OM IIa: 565-610/20
FAG 5-9: 565-710

- FINDS**
- 1 Axe, iron
Find number: 20-1-1
Original find number: VIB 48
Iron axe with facettet cutting edge.
Length blade: 20.6 cm
Type: Siegmund FBA2.1
Rhineland phases: 6-7
Rhineland date: 570-610
Location: Archaeological Museum Stein
- 2 Shield boss, iron
Find number: 20-2-1.1
Original find number: VIB 47
Shield boss with nearly straight rim, straight to oblique wall and pronounced transition from wall to high domed cone.
Diameter: 18.0 cm
Height: 8.1 cm
Type: Siegmund Sbu6
Rhineland phases: 9-10
Rhineland date: 640-705
Alternative type: FAG Sbu5B (5: 565-580/90).
Location: Archaeological Museum Stein
- Shield boss, grip
Find number: 20-2-1.2
Original find number: VIB 47
Iron shield boss, in fragmented and severely corroded condition.

- Length: 15.5 cm (and additional fragments)
Type: Siegmund Sbu6
Rhineland phases: 9-10
Rhineland date: 640-705
Alternative type: FAG Sbu5B (5: 565-580/90).
Location: Archaeological Museum Stein
- Shield boss, rivets
Find number: 20-2-1.3
Original find number: VIB 47
Six iron shield boss rivets, found in association with boss and grip.
Type: Siegmund Sbu6
Rhineland phases: 9-10
Rhineland date: 640-705
Alternative type: FAG Sbu5B (5: 565-580/90).
Location: missing
- 3 Seax, iron
Find number: 20-3-1
Original find number: VIB 49
Iron seax with a large hilt knob; a considerable part of the blade is gone.
Recorded length: 45.0 cm
Remaining length blade: 17.0 cm
Type: FAG Sax2.1/2.2
FAG phase: 5-9
FAG date: 565-710



20



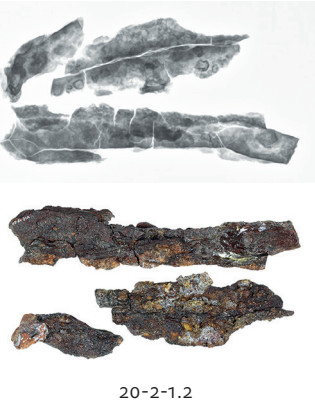
20-1-1

- Alternative type: Siegmund Sax2.1/2/2 (7-10: 585-705)
Location: Archaeological Museum Stein
- 4 Knife, iron
Find number: 20-4-1
Fragments of a iron knife
Location: Archaeological restoration company Restaura
- 5 Lance head, iron
Find number: 20-5-1
Original find number: VIB 50
Iron lance head of which a large part of the blade is gone; the shape of the blade cannot be determined. A remainder of the wooden shaft is preserved in the closed socket on which two copper alloy rivets with domed heads and carved rims are still present.
Recorded total length: 44 cm
Remaining total length: 26.6 cm
Remainder wooden shaft: 2.6 cm
Type (rivets): L/P/V 44
L/P/V phase: (MA2) MA3-MR1
L/P/V date: (520/30-560/70) 560/70-630/40
Location: Archaeological restoration company Restaura

- 6 Pottery vessel
Find number: 20-6-1
Original find number: VIB 51
Large red biconical pot, found in fragmented condition but now restored and completed; approximately 25% of the original pot is present. The upper wall is decorated with single lines of rectangular to triangular roulette stamp impressions.
Height: 16.9-17.5 cm
Type: Siegmund Kwt3.11
Rhineland phase: 6-beginning 7
Rhineland date: 570-c.600
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Location: Archaeological Museum Stein
- 7 Pottery vessel
Find number: 20-7-1
Original find number: VIB 52-54
Fragments of a small red biconical pot decorated with grooves. Approximately 50% of the original pot is present.
Type: Siegmund Kwt2.31/2.32/2.33
Rhineland phases: 4-8
Rhineland date: 530-640
Alternative type: FAG Kwt3A (4-5 (6): 510/25-580/90 (580/90-610/20))
Location: Archaeological restoration company Restaura

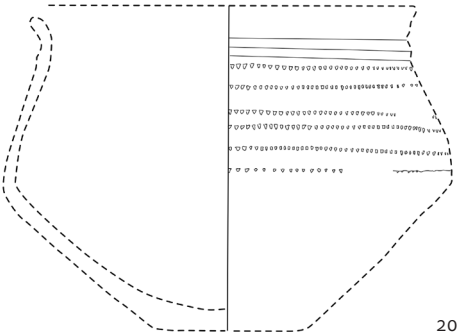


20-2-1.1



20-2-1.2

8 Glass vessel
Find number: 20-8-1
Original find number:
Light green claw beaker with one row of four claws, restored and completed. Approximately 70% of the original vessel is present.
Height: 17.5-18.4 cm
Type: Evison 2008-4C
Date: end sixth-seventh century
Alternative type: Feyeux T.42.2i ((450-550) 550-600)
Location: Archaeological Museum Stein



20-6-1

9 Copper alloy vessel
Find number: 20-9-1
Original find number: VIB 54
Simple copper alloy vessel, fragmented and restored, with two U-shaped handles and handle appliques in the form of pointed shields, a flat base, a slightly conical body and an outward folded horizontal rim without decoration. The bowl has obvious traces of ancient repairs.
Height: 7.7 cm
Diameter: 25.0 cm
Type: FAG BrGE
FAG phase: 5-6
FAG date: 565-610/20
Alternative type:
Location: Archaeological Museum Stein

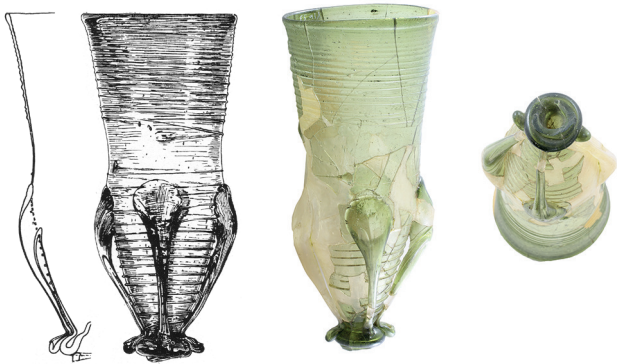


10 Nails, fragments
Find number: 20-10-1
Fragments of nails.
Location: missing
11 Ring
Find number: 20-11-1
Fragments of a ring.
Location: missing
12 Fragments, iron
Find number: 20-12-1.1
Original find number: VIB 54/59
Indeterminate iron fragments, among which a folded rim fragment in corroded condition; it might be a fragment of a bucket (comparable to the bucket from grave 36).
Location: Archaeological restoration company Restaura

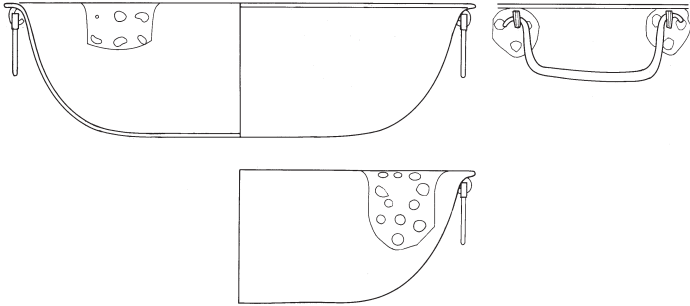


20-7-1

Knife, iron?
Find number: 20-12-1.2
Original find number: VIB 49
Iron fragment; seems to be a knife, corroded.
Length: 10.5 cm
Location: Archaeological Museum Stein
Belt fitting, iron
Find number: 20-12-1.3
Original find number: VIB 49
Iron rectangular buckle with a fragment of a simple iron tongue and remnants of the leather belt fixed with two iron rivets.
Length loop max: 3.8 cm
Location: Archaeological Museum Stein



20-8-1



20-3-1



20-4-1



20-5-1



20-12-1.1



20-12-1.1



20-9-1



20-12-1.2



20-12-1.3

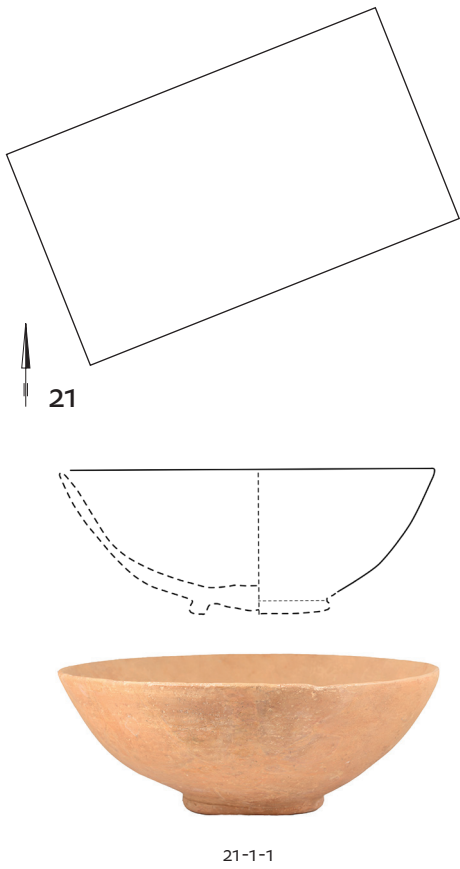
21
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	210
Grave pit width	120
Grave pit depth	130
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. Pottery and iron fragments were mentioned to have been found scattered throughout the grave, which might indicate that it was reopened.

GRAVE DATE
O-OM I: 510/20-565
FAG 3-5: 460/80-580/90

- FINDS**
- 1 Pottery vessel
Find number: 21-1-1
Original find number: VIB 56
Red bowl with a globular belly, a straight, not thickened rim and a foot stand ring. Found in fragmented condition but now restored and completed: approximately 50% of the original bowl is present.
Height: 7.4 cm (reconstructed)
Type: Siegmund Shaz.31
Rhineland phase: 4
Rhineland date: 530-555



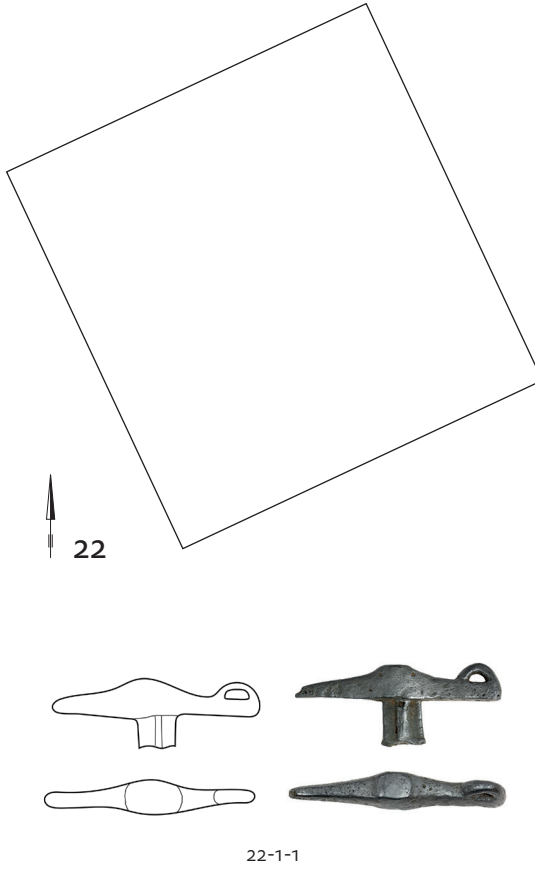
- Alternative type: FAG S-Shaz.31 (3-5: 460/80-580/90)
Location: Archaeological Museum Stein / Archaeological restoration company Restaura
- 2 Fragments, iron
Find number: 21-2-1
Indeterminate iron fragments.
Location: Archaeological restoration company Restaura

22
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	210
Grave pit width	220
Grave pit depth	150
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found.

GRAVE DATE
O-OM I+IIa: 510/20-610/20
FAG 4-7: 510/20-640/50



- FINDS**
- 1 Hilt with knob, iron
Find number: 22-1-1
Original find number: VIB 58
Hilt with a large boat shaped iron knob; it probably belonged to a seax.
Length: 5.5 cm
Height: 0.9 cm
Location: Archaeological Museum Stein

- 2 Fragments, iron
Find number: 22-2-1
Original find number: VIB 58
Iron fragment with a copper alloy plate with an engraved decoration along its edges and a domed copper alloy rivet.
Diameter rivet: 1.0 cm
Diameter copper alloy plate: 1.7 cm
Length iron fragment: 3.7 cm
Location: Archaeological Museum Stein
- 3 Glass vessel
Find number: 22-3-1
Original find number: VIB 59
Fragments of the sagging bottom, wall and simple thickened rim of a small yellow-brown glass vessel; probably an incurved bell beaker without decoration. The glass fragments show air bubbles.
Height remaining lower part: 1.0 cm
Type: Feyeux T.53.
Feyeux date: 530-600
Alternative type: Koch Pleidelsheim (SD7: 580-600)
Alternative type: Siegmund bell beakers (4-8A: 530-625)



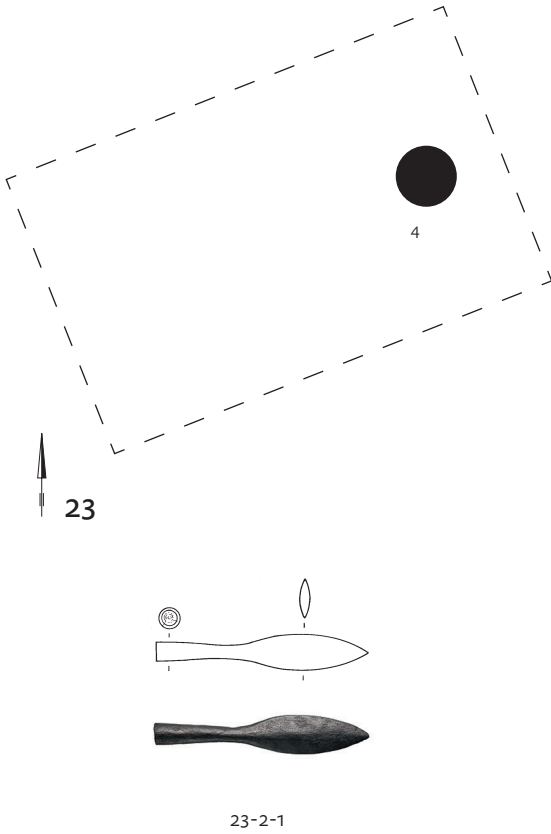
- Alternative type: FAG bell beakers (4-6: 510/25-610/20)
Alternative type: L/P/V 450 (second half MA2-MR1: 520/30-630/40)
Location: Archaeological Museum Stein

23
INHUMATION GRAVE

Grave structure	trench grave?
Orientation	SW-NE?

DESCRIPTION
Merovingian inhumation grave. The dimensions of this grave were not recorded; they were in the original catalogue mentioned to be unknown. Finds from this grave were nonetheless recorded. The indicated location and orientation of this grave and the pottery vessel inside it on the original cemetery plan might be inaccurate.

GRAVE DATE
O-OM IIB: 565-640/50
FAG 3-7: 460/80-640/50



- FINDS**
- 1 Nail, iron
Find number: 23-1-1
Fragment of an iron nail. An iron nail without find number is present in the collection; it is not certain whether it originally belonged to this grave.
Length: 4.8 cm
Location: missing/Archaeological Museum Stein

- 2 Arrow head, iron
Find number: 23-2-1
Original find number: VIB 61?
Iron arrow head with a leaf shaped blade. The socket was recorded as split but this is not visible anymore.
Length: 11.3 cm
Type: L/P/V 24
L/P/V phases: PM-MA3
L/P/V date: 440/50-600/10
Location: Archaeological Museum Stein
- 3 Lance head, iron
Find number: 23-3-1
Original find number: VIB 62
Iron lance head with leaf shaped blade and prominent mid rib. Wood remains of the shaft still present in the socket.
Length: 26.1 cm
Length blade: 16.6 cm
Type: Siegmund Lan2.1



- Rhineland phase: 7-8A
Rhineland date: 585-625
Rivets type: L/P/V 44
L/P/V phases: MA3-MR1
L/P/V date: 560/70-630/40
Location: Archaeological Museum Stein
- 4 Pottery vessel
Find number: 23-4-1
Original find number: VIB 63
Black-brown biconical pot with a weathered surface. Found in fragmented condition but now restored and completed; approximately 80% of the original pot is present. The upper wall is decorated with four grooves in between which two zones with four lines of rectangular roulette stamp impressions are applied.
Height: 11.9 cm
Type: Siegmund Kwt3.21
Rhineland phase: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Location: Archaeological Museum Stein

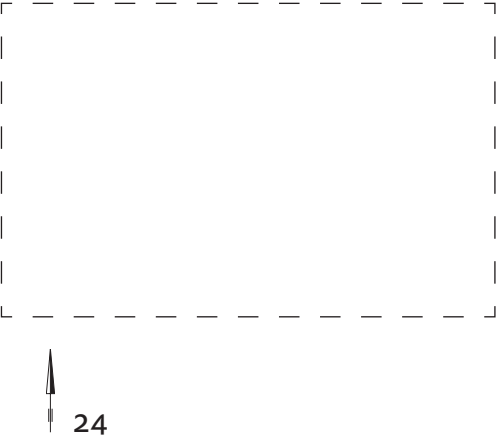
24
INHUMATION GRAVE

Grave pit depth	60
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The dimensions and exact location of this grave were not recorded; it was mentioned to have been destroyed by a construction (or excavation) trench. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 4-9: 510/20-710

- FINDS**
- 1 Pottery vessel
Find number: 24-1-1
Original find number: VIB 64
Red carinated bowl with a simple rim and foot stand. The upper wall is decorated with two zones of multiple lines of rectangular/square roulette stamp impressions. The bowl is complete.
Height: 7.0 cm
Type: Siegmund Shaz.21
Rhineland phase: 5-8
Rhineland date: 555-640
Alternative type: FAG S-Shaz.21 (4-7: 510/20-640/50)
Location: Archaeological Museum Stein



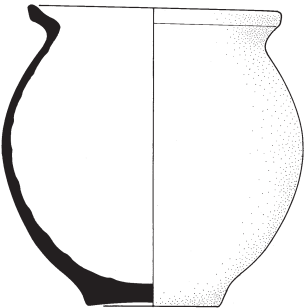
24-1-1

- 2 Pottery vessel
Find number: 24-2-1
Original find number: VIB 65
Grey globular pot, coarse ware with volcanic inclusions, baked hard, and with an outward folded rim with groove for a lid. The pot is complete.
Height: 15.4 cm
Type: Siegmund Kwt4.12?
Rhineland phase: 10?
Rhineland date: 670-705?
Alternative type: globular pots (seventh century)
Location: Archaeological Museum Stein

25
HORSE INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	220
Grave pit width	170
Grave pit depth	130
Orientation	W-E / E-W

DESCRIPTION
Merovingian horse inhumation grave. The actual orientation of the grave remains obscure since it was not recorded where in the grave the head of the horse was located. The outline of a wooden container was observed as a rectangular yellow-brown band shaped soil discoloration with a width of 3.0 cm. The horse skeleton discovered in this grave was observed to fit exactly within the outline of the wooden container without disturbing it, on



24-2-1



25-1-1

the basis of which it was concluded that the horse was not a later deposition on the cemetery site. The thick bones, limbs, skull and teeth of the horse were preserved in articulated position. The smaller bones were gone or left some minor traces. Remnants of a human skeleton or grave finds were not found.

GRAVE DATE
Cannot be dated

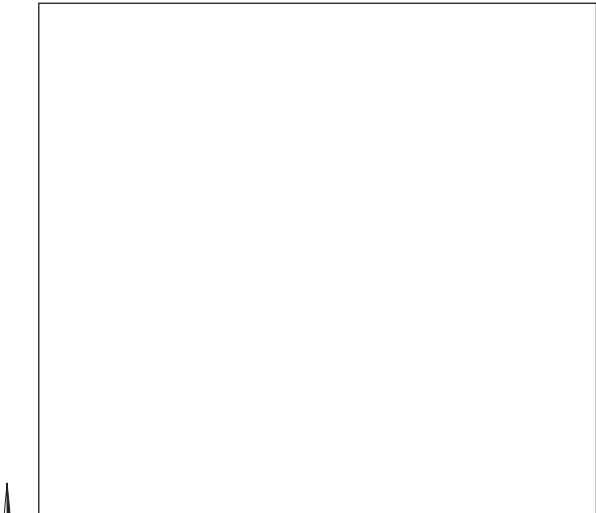
- 1 Fragments of a horse skeleton
Find number: 25-1-1
Only horse teeth are present: these appear to be of two individuals (the teeth of the second individual might have been assigned to this grave by mistake; they might have belonged to grave 29)
Location: Archaeological Museum Stein

26
INHUMATION GRAVE

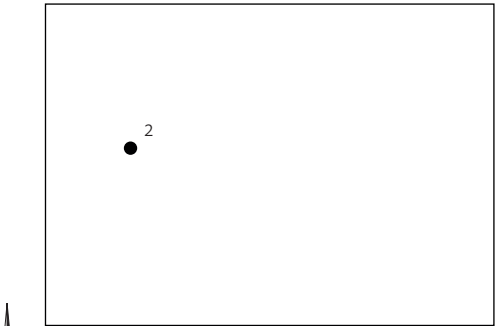
Grave structure	trench grave?
Grave pit length	295
Grave pit width	270
Grave pit depth	115
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was without finds, which is peculiar in view of its dimensions.

GRAVE DATE
Cannot be dated



26



27

27
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	240
Grave pit width	170
Grave pit depth	130
Orientation	W-E

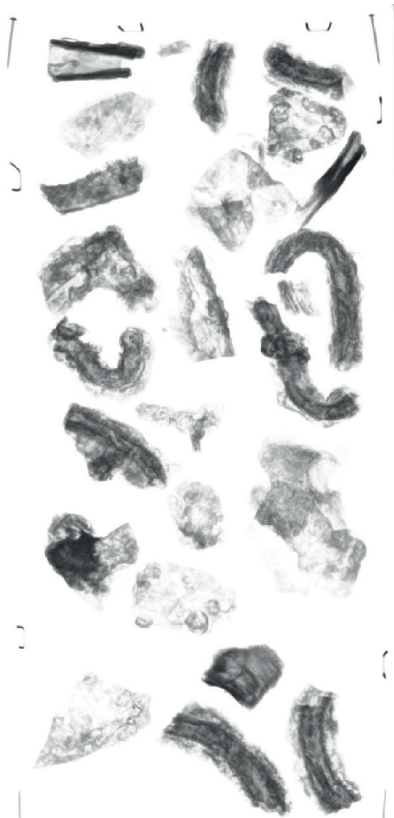
DESCRIPTION
Merovingian inhumation grave. The location of the beads in the western section of the grave indicate that its orientation was probably west-east, but we cannot be certain of this since no human remains were found. Iron fragments were mentioned to have been found scattered throughout the grave, which might indicate that the grave was partially disturbed by a reopening pit.

GRAVE DATE
Cannot be dated

- FINDS**
- 1 Fragments, iron
Find number: 27-1-1
Original find number: VIB 67
Indeterminate iron fragments and a buckle loop.
Location: Archaeological restoration company Restaura
- 2 Beads, glass
Find number: 27-2-1.1
Original find number: VIB 67
Various beads.
Location: missing
- Beads, amber
Find number: 27-2-1.2
Original find number: VIB 67
Amber beads.
Location: missing



27-1-1



28

INHUMATION GRAVE

Grave pit length	275
Grave pit width	230
Grave pit depth	200
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. Pottery fragments were found scattered throughout the grave, which might indicate that the grave was partially disturbed by a reopening pit.

GRAVE DATE
O-OM IIa: 565-610/20
FAG 5-6: 565-610/20

- 1

Sword, iron
Find number: 28-1-1
Fragments of an iron sword.
Location: missing
- 2

Shield boss, iron
Find number: 28-2-1
Iron shield boss, fragments, with eight copper alloy rivets.
Location: Archaeological restoration company Restaura
- 3

Pottery vessel
Find number: 28-3-1
Find depth: 170
Dark grey rather asymmetric spouted pot. Found in fragmented condition but now restored and completed; approximately 95% of the original pot is present. The entire upper wall is decorated with six lines of single lines roulette stamp impressions of vertical and oblique lines and crosses. One line of the same roulette stamp is applied on the horizontal outward folded rim.
Height: 18.7-20.1 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6-7

- Rhineland date: 570-610
Alternative type: FAG Kwt5G (5-6: 565-610/20)
Location: Archaeological Museum Stein
- 4

Pottery vessel
Find number: 28-4-1
Original find number: VIB 64
Fragments of a grey biconical pot. The decoration consists in all probability of multiple lines of rectangular roulette stamp impressions (they may also be single lines, this is difficult to see).
Type: Siegmund Kwt3.21/3.22/3.23
Rhineland phase: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5B/5C (5-8: 565-670/80)
Type: Siegmund Kwt 3.11/3.12 (570-610)
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Location: Archaeological restoration company Restaura
- 5

Pottery vessel
Find number: 28-5-1
Original find number: VIB 64
Fragments of a biconical pot. The decoration consists of single stamp impressions of vertical undulating stripes in combination with grooves.

Type: Siegmund Kwt2.11/2.12
Rhineland phase: 4-5
Rhineland date: 530-570
Alternative type: FAG Kwt2A (4-5: 510/25-580/90)
Location: Archaeological restoration company Restaura

29

INHUMATION GRAVE

Grave structure	wooden coffin
Grave pit length	280
Grave pit width	190
Grave pit depth	135
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. Vague traces of a wooden container with dimensions nearly similar to the burial pit were observed. In the description of horse grave 25 it was mentioned that teeth and jaws of a horse were also found in grave 29 but these are not mentioned in the available description of this grave.

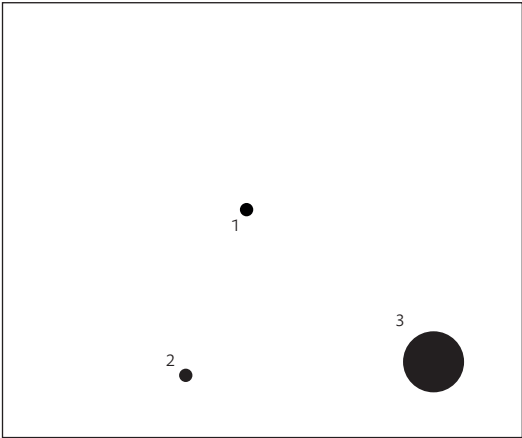
GRAVE DATE
O-OM IIa: 565-610/20
FAG 3-6: 460/80-610/20

FINDS
1 Lance head, iron
Find number: 29-1-1
Original find number: VIB 75
Iron lance head with a 'skewer shaped blade' and wood remains preserved in the socket opening. Only fragments are present; a complete lance head was not discovered in the collection.
Recorded length: 40 cm
Recorded blade width: 3 cm
Type: Siegmund Lan1.1b
Rhineland phase: 4
Rhineland date: 530-555
Type: Siegmund Lan1.1a
Rhineland phase: 6
Rhineland date: 570-585.
Location: Archaeological restoration company Restaura

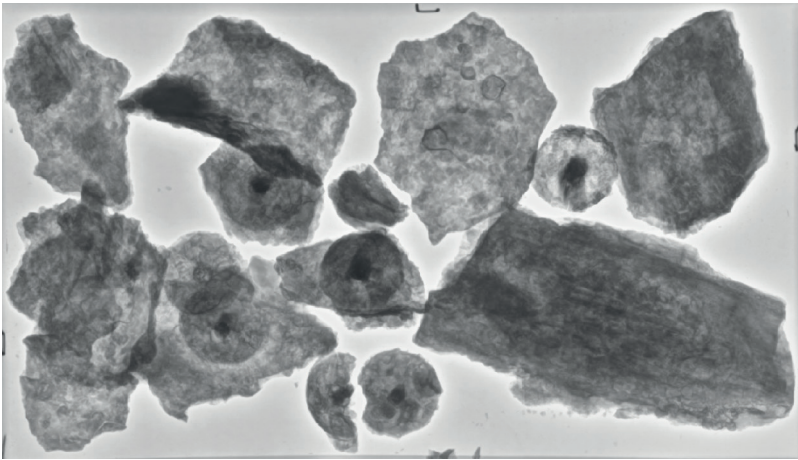
- 2

Horse bridle, iron
Find number: 29-2-1
Iron horse bridle in corroded condition (*Knebeltrense*). It is difficult to determine the type of bridle (8-shaped end of the bit?) more precisely.
Type: L/P/V 101
L/P/V phases: MA1-MA3
L/P/V date: 470/80-600/10
Location: Archaeological restoration company Restaura
- 3

Shield boss, iron
Find number: 29-3-1.1
Original find number: VIB 73/74/75/77
Iron shield boss, incomplete and corroded; with slightly oblique walls and a relatively high domed to conical cone. Four detached and restored copper alloy rivets with iron rim fragments and remnants of lime wood, are also present.
Diameter rivets average: 2.3 cm
Height shield boss: 8.0 cm
Rim fragment length: 8.9 cm
Type: Siegmund Sbu3
Rhineland phase: 4-7
Rhineland date: 530-610
Type: Siegmund Sbu4
Rhineland phase: 6-7
Rhineland date: 570-610
Location: Archaeological museum Stein



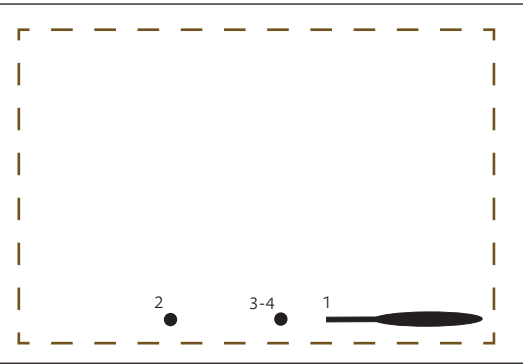
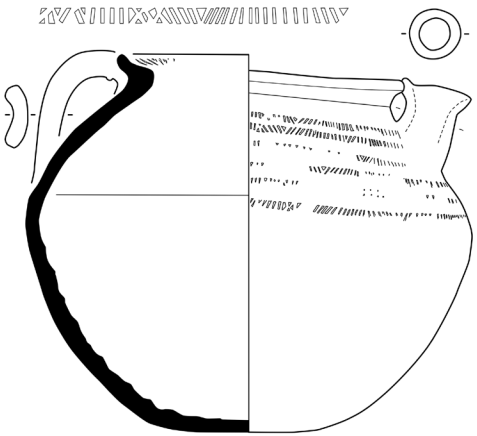
28



28-4-1

28-5-1

28-2-1 (SCALE 1:2)



29

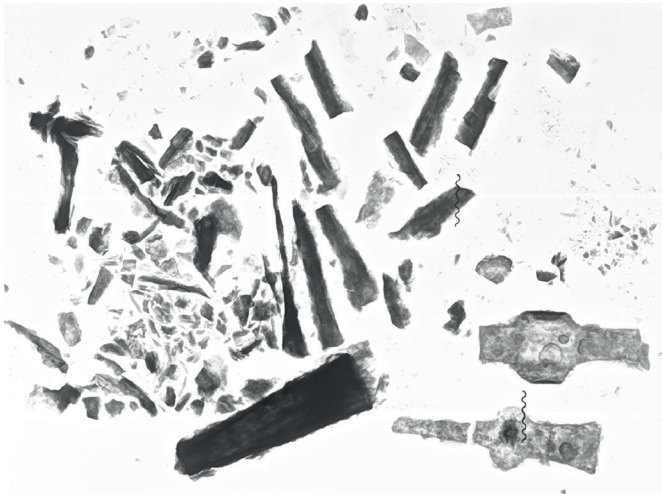


29-3-1.1

29-3-1.2

Grip of shield, iron
Find number: 29-3-1.2
Original find number: VIB 74/75
Iron fragments of the shield boss grip.
Type: Siegmund Sbu3
Rhineland phase: 4-7
Rhineland date: 530-610
Type: Siegmund Sbu4
Rhineland phase: 6-7
Rhineland date: 570-610
Location: Archaeological museum Stein/
Archaeological restoration company Restaura

4 Fragments, iron
Find number: 29-4-1.1
Original find number:
Indeterminate iron fragments (they might be of the shield boss, the horse bridle or a knife)
Location: Archaeological restoration company Restaura



29-1-1, 4-1

5 Buckle, iron
Find number: 29-5-1
Iron oval buckle with D-shaped section and shield tongue.
Length loop max: 2.9
Location: Archaeological Museum Stein

6 Belt fitting, iron
Find number: 29-6-1
Oval loop without tongue but with remnants of a rectangular plate with rivet hole, wrapped around the loop. It might be part of the horse bridle set.
Length plate: 2.5 cm
Width plate: 1.7 cm
Length loop max: 3.3
Location: Archaeological Museum Stein

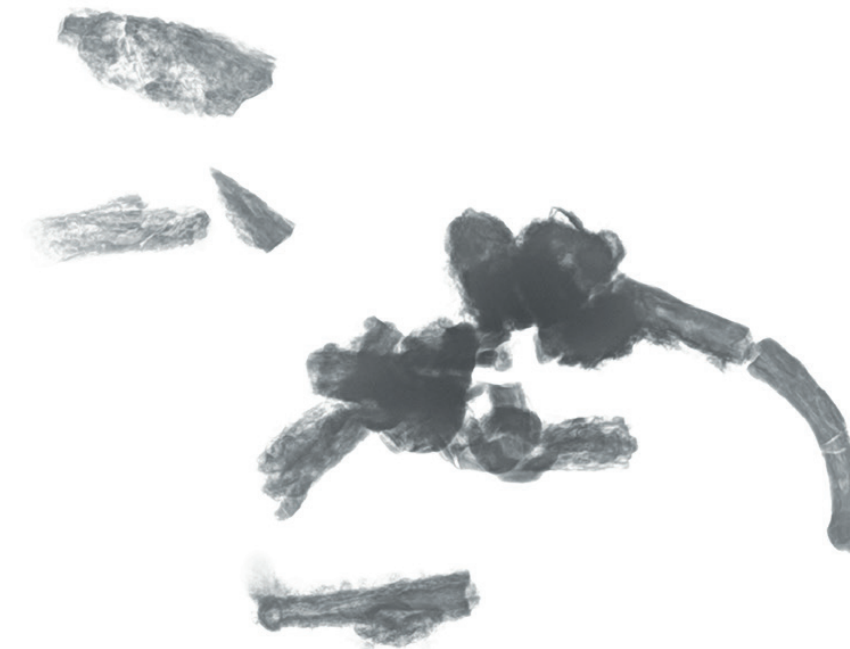


29-5-1



29-6-1

7 Teeth/jaws of a horse
Find number: 29-7-1
Horse teeth of two individuals were assigned to grave 25; one set might have belonged to 29 since it was recorded in the catalogue of Beckers and Beckers that horse tooth were found in this grave.
Location: missing or wrongly assigned to grave 25.



29-2-1

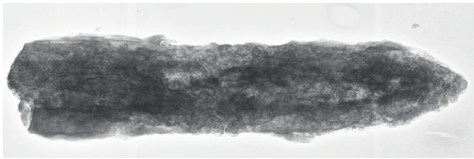
30 INHUMATION GRAVE

Grave structure trench?
Orientation W-E?

DESCRIPTION
Merovingian inhumation grave. The dimensions and exact location of this grave were not recorded; it was mentioned to have been destroyed by the mill. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE
O-OM IIa: 565-610/20
FAG 3-6: 460/80-610/20

FINDS
1 Sword, iron
Find number: 30-1-1
Part of an iron sword, in corroded condition and with thin remains of the leather scabbard preserved around it.
Location: Archaeological restoration company Restaura



30-1-1

- 2

Plate buckle
Find number: 30-2-1
Part of a plate buckle.
Length: 6.0 cm
Width: 4.5 cm
Location: Archaeological Museum Stein
- 3

Shield boss, iron
Find number: 30-3-1.1
Original find number: VIB 78
Iron shield boss with straight walls, pronounced transition from wall to cone, and with the remnant of a knob on the cone. Only one rivet is present on the rim, but some copper alloy rivets and the iron grip were found detached and are present in the collection.
Diameter rivet: 2.3 cm
Diameter boss: 17.0 cm
Type: Siegmund Sbu3
Rhineland phase: 4-7
Rhineland date: 530-610
Alternative type: FAG S-Sbu3 (3-6: 460/80-610/20)
Location: Archaeological Museum Stein

Grip, shield boss
Find number: 30-3-1.2
Original find number: VIB 78
Iron grip of the shield boss, found detached from it
Length: 19.2 cm
Type: Siegmund Sbu3
Rhineland phase: 4-7
Rhineland date: 530-610
Alternative type: FAG S-Sbu3 (3-6: 460/80-610/20)
Location: Archaeological Museum Stein

- Fragments, iron
Find number: 30-3-1.3
Original find number: VIB 78
Many fragments of the shield boss, with rivets, not included in the restored specimen.
Type: Siegmund Sbu3
Rhineland phase: 4-7
Rhineland date: 530-610
Alternative type: FAG S-Sbu3 (3-6: 460/80-610/20)
Location: Archaeological Museum Stein
- 4

Axe, iron
Find number: 30-4-1.1
Original find number: VIB 79
Iron axe with facetted cutting edge.
Length blade: 18.5 cm
Type: Siegmund FBA2.1
Rhineland phases: 6-7
Rhineland date: 570-610
Location: Archaeological Museum Stein

Wood and iron fragments
Find number: 30-4-1.2
Small iron and wood fragments, associated with the axe.
Type: Siegmund FBA2.1
Rhineland phases: 6-7
Rhineland date: 570-610
Location: Archaeological Museum Stein

31

INHUMATION GRAVE

Orientation

W-E?

DESCRIPTION

Merovingian inhumation grave. The dimensions and exact location of this grave were not recorded; it was mentioned to have been destroyed by the mill. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE

O-OM IIa: 565-610/20
FAG 5-7: 565-640/50

FINDS

1 Sword, iron
Find number: 31-1-1
Original find number: VIB 80
Corroded fragment of an iron sword.
Location: Archaeological restoration company Restaura



30-3-1.3



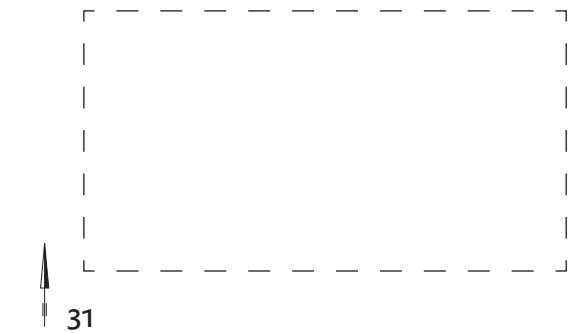
30-4-1

- 2

Knife, iron
Find number: 31-2-1
Original find number: VIB 81
Iron knife, with leather remains of the scabbard on the blade and wood remains preserved around the hilt.
Length blade: 10.8 cm
Blade width: 2.4 cm
Location: Archaeological Museum Stein
- 3

Knife, iron
Find number: 31-3-1
Original find number: VIB
Iron knife with a broken hilt; fragments of this knife are present in corroded condition.
Location: Archaeological restoration company Restaura
- 4

Seax, iron
Find number: 31-4-1
Fragments of a seax, in corroded condition.
Recorded length blade: 30 cm
Location: Archaeological restoration company Restaura



31-2-1

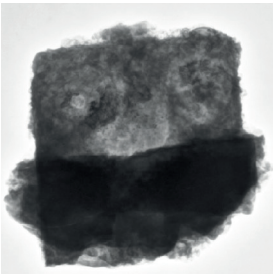


31-5-1

- 5

Axe, iron
Find number: 31-5-1.1
Original find number: VIB 83
Iron axe with wood remains preserved in the oval shaft opening.
Length blade: 18.4 cm
Type: Siegmund FBA2.1
Rhineland phases: 6-7
Rhineland date: 570-610
Location: Archaeological Museum Stein

Wood and iron fragments
Find number: 31-5-1.2
Original find number: VIB 83
Wood and iron fragments (small), associated with the iron axe.
Type: Siegmund FBA2.1
Rhineland phases: 6-7
Rhineland date: 570-610
Location: Archaeological Museum Stein



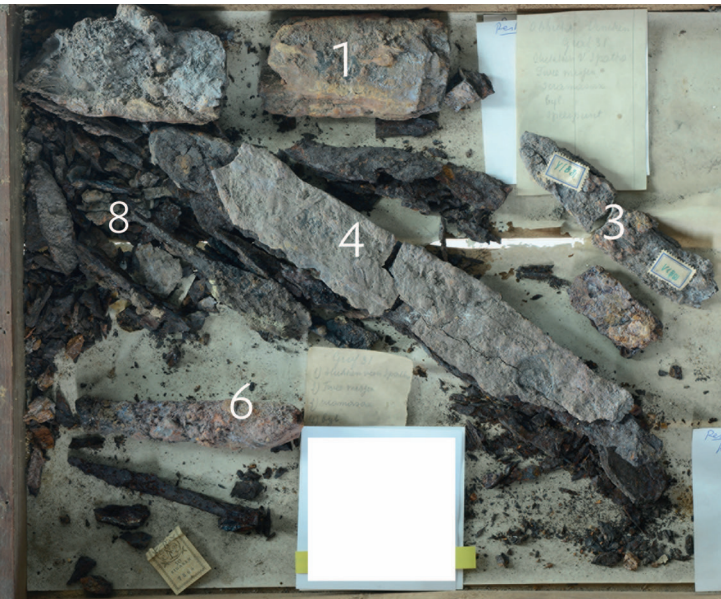
31-7-1

- 6

Lance head, iron
Find number: 31-6-1
Iron lance head with a pronounced mid rib recorded in the catalogue; the lance head socket with wood remains is present in corroded condition.
Recorded total length: 28.0 cm
Type: Siegmund Lan2.1
Rhineland phase: 7-8A
Rhineland date: 585-625
Archaeological restoration company Restaura

7 Plate, iron
Find number: 31-7-1
Plate with shadows of rivets and a rounded elevation. It might be a back plate of a belt.
Location: Archaeological Museum Stein

8 Arrow head, iron
Find number: 31-8-1
Fragments of an arrow head are present in a box holding remnants of grave 31; it is not certain whether it actually belonged to grave 31. It was not recorded as a find in the catalogue of Beckers and Beckers.



31-1-1, 3-1, 4-1, 6-1, 8-1

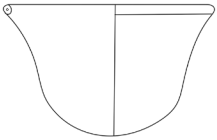
32
INHUMATION GRAVE

Orientation W-E?

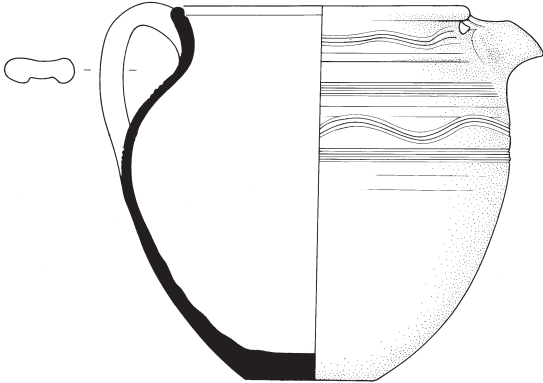
DESCRIPTION
Merovingian inhumation grave. The dimensions and exact location of this grave were not recorded; it was mentioned to have been destroyed by the mill. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 4-7: 510/20-640/50

FINDS
1 Glass vessel
Find number: 32-1-1
Original find number: VIB 86
Olive green palm cup with clearly visible air bubbles, rounded bottom and thick inward folded round rim.
Height: 6.8 cm



32-1-1



32-2-1



2 Pottery vessel
Find number: 32-2-1
Original find number: VIB 85
Grey-black spouted pot, complete, with a horizontal outward folded rim with two shallow grooves. The upper wall is decorated with two zones of three parallel undulating grooves alternating with two zones of three straight grooves.
Height: 19.4 cm
Type: Siegmund Kwt2.33
Rhineland phase: 6-8
Rhineland date: 570-640
Alternative type: FAG Kwt3B (4-5: 510/25-580/90)
Location: Archaeological Museum Stein

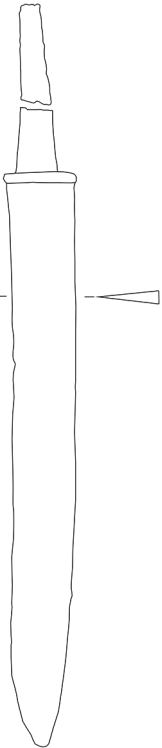
Type: Maul (2002) Tummler B1a
Maul date: 570-680
Alternative type: Feyuex 55.0 (550-620)
Location: Archaeological Museum Stein

33
POSSIBLE INHUMATION GRAVES

Orientation W-E

DESCRIPTION
Possible Merovingian inhumation graves. The dimensions and exact location of this grave were not recorded; it was mentioned to have been destroyed by the mill fundaments but a number of finds were discovered underneath the mill by construction workers. It was not clear whether the finds were from one or two (or maybe more) graves, but, in view of the finds assemblage, it seems unlikely that they came from a single grave. The indicated location, outline and orientation of grave 33 on the original cemetery plan are not accurate.

GRAVE DATE
Cannot be dated



33-4-1



FINDS
1 Seax, iron
Find number: 33-1-1
Original find number: VIB 87
Iron seax; four seaxes and one lance head were identified by Beckers and Beckers but the remnants in Restaura show that in fact four seaxes and two lance heads were discovered and assigned to context 33.
Recorded total length: 62 cm
Recorded length blade: 45 cm
Type: FAG Sax3
FAG phase: 8-10
FAG date: 650-750
Alternative type: Siegmund Sax3 (10B-11: c.685-740)
Location: Archaeological restoration company Restaura

2 Seax, iron
Find number: 33-2-1
Iron seax
Recorded total length: 56
Recorded length blade: 34 cm
Type: FAG Sax2.1
FAG phases: (5-8) 6-7
FAG date: (565-680) 580/90-640/50
Alternative type: Siegmund Sax2.1 (7-middle 9: 585-655)
Location: Archaeological restoration company Restaura

3 Seax, iron
Find number: 33-3-1
Iron seax
Recorded length blade: 40 cm
Type: FAG Sax2.1/2.2
FAG phase: 5-9
FAG date: 565-710
Alternative type: Siegmund Sax2.1/2/2 (7-10: 585-705)
Location: Archaeological restoration company Restaura

4 Seax, iron
Find number: 33-4-1
Original find number: VIB 89
Iron seax
Length blade: 30.1 cm
Type: FAG Sax2.1
FAG phases: (5-8) 6-7
FAG date: (565-680) 580/90-640/50
Alternative type: Siegmund Sax2.1 (7-middle 9: 585-655)
Location: Archaeological Museum Stein

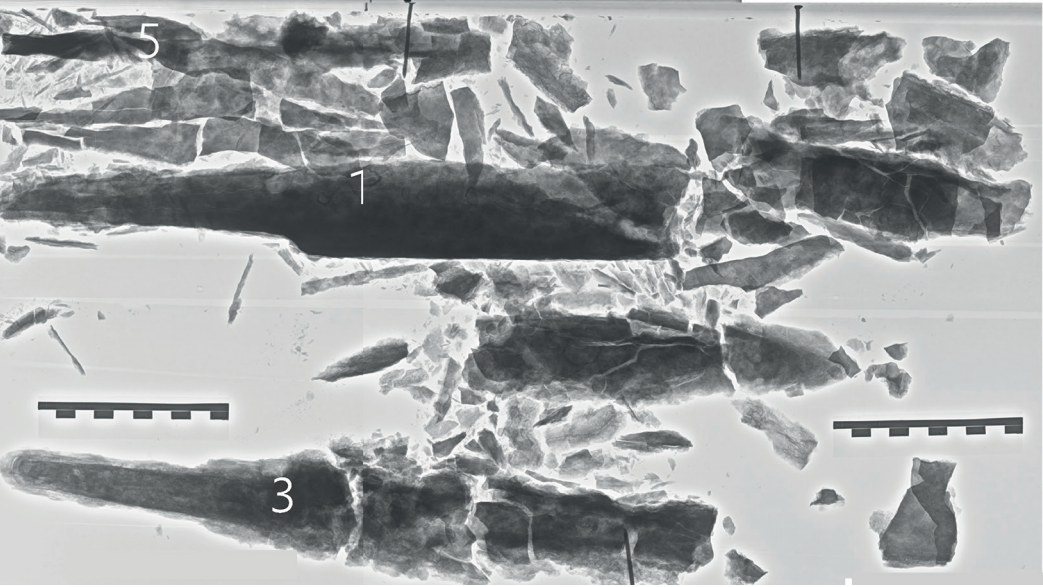
5 Lance head, iron
Find number: 33-5-1
Recorded total length: 30 cm
Recorded length blade: 22 cm
Location: Archaeological restoration company Restaura

6 Pottery vessel
Find number: 33-6-1
Location: missing

7 Pottery vessel
Find number: 33-7-1
Location: missing

8 Pottery vessel
Find number: 33-8-1
Location: missing

9 Glass vessel
Find number: 33-9-1
Location: missing



33-1-1, 2-1, 3-1, 5-1

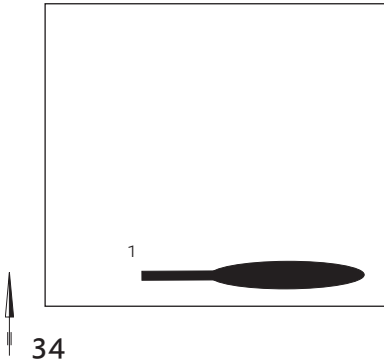
34
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	180
Grave pit width	160
Grave pit depth	170
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
Cannot be dated

- FINDS**
- 1 Lance head, iron
Find number: 34-1-1
Iron lance head with two flat iron plates attached to the socket covered by an iron ring.
Recorded total length: 44 cm
Recorded length blade: 12 cm
Location: missing



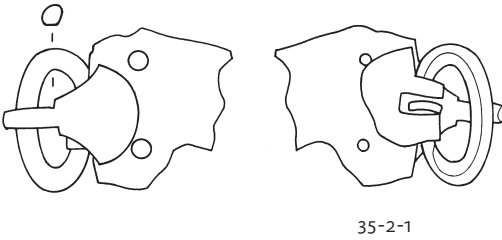
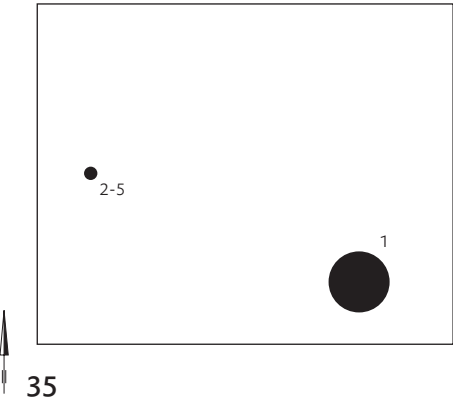
35
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	220
Grave pit width	180
Grave pit depth	180
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 3-9: 460/80-710

- FINDS**
- 1 Pottery vessel
Find number: 35-1-1
Bbiconical pot with a dark surface of which the upper wall is decorated with six lines of rectangular roulette stamp impressions in between which two zones of four grooves are applied; description and dimensions on the basis of the catalogue of Beckers and Beckers.
Recorded height: 18.0 cm
Recorded mouth diameter: 13.5 cm
Recorded belly diameter: 21.0 cm
Type: Siegmund Kwt3.21
Rhineland phases: 7-8
Rhineland date: 585-640
Type: Siegmund Kwt3.11



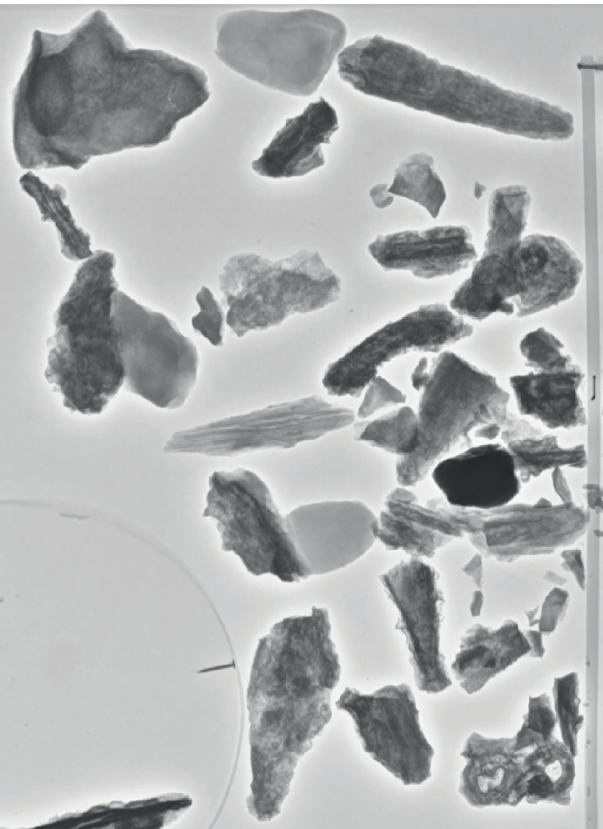
- Rhineland phases: 6-7
Rhineland date: 570-610
Location: missing
- 2 Plate buckle, iron
Find number: 35-2-1
Original find number: VIB 93
Iron plate buckle, incomplete, with two relatively small copper alloy rivets. The plate is attached to the oval buckle with a D-shaped section and shield tongue with a wrapped and slotted construction.
Plate width: 4.2 cm
Length loop max: 3.7 cm
Length loop min: 2.6 cm
Type: Siegmund Gur4.3/4.4/4.5/4.6/4.7
Rhineland phases: 7-9
Rhineland date: 585-670
Location: Archaeological Museum Stein
- 3 Simple ring, iron
Find number: 35-3-1
Original find number: VIB 94
Small simple iron ring with mineralised textile remains.
Diameter: 2.2
Type: L/P/V 357
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: Archaeological Museum Stein
- 4 Fragments, iron
Find number: 35-4-1
Original find number: VIB 91/92
Indeterminate iron fragments, corroded.
Location: Archaeological restoration company Restaura



- 5 Bead, amber
Find number: 35-5-1.1
Original find number: VIB 95
Amber bead, almond shaped
Number: 1
Type: A44
Location: Archaeological Museum Stein
- Bead, amber
Find number: 35-5-1.2
Original find number: VIB 95
Amber bead, broken
Number: 1
Type: A
Location: Archaeological Museum Stein
- Bead, glass
Find number: 35-5-1.3
Original find number: VIB 95
Orange, opaque, barrel shaped
Number: 3
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein
- Bead, glass
Find number: 35-5-1.4
Original find number: VIB 95
Red, opaque, short cylindrical
Number: 1
Type: RO11 / S-Per 35.6?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10



- Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein
- Bead, glass
Find number: 35-5-1.5
Original find number: VIB 95
White, opaque, globular compressed. Decoration: blue waves, crossing
Number: 1
Type: Koch-Schretzheim 1977; K-S: 34.7
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per32.6 (Kombinationsgruppe F-H: 555-705)
Alternative type: S-Per32.7 (Kombinationsgruppe E-H: 530-705)
Location: Archaeological Museum Stein
- Bead, glass
Find number: 35-5-1.6
Original find number: VIB 95
Red, opaque, globular compressed. Decoration: yellow waves, crossing.
Number: 3
Type: Koch-Schretzheim 1977: 34,18 / 19
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.11 (Kombinationsgruppe (D-H) F-G: (485) 555-705)
Location: Archaeological Museum Stein
- Bead, glass
Find number: 35-5-1.7
Original find number: VIB 95
Yellow, opaque, double connected



- Number: 2
Type: YO25 / S-Per 33.6 (groups: G-H)
Rhineland phase: 6-10
Rhineland date: 570-705
Location: Archaeological Museum Stein
- Bead, glass
Find number: 35-5-1.8
Original find number: VIB 95
Yellow, opaque, small globular compressed.
Number: 37
Type: YO30 / S-Per33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Archaeological Museum Stein
- Bead, glass
Find number: 35-5-1.9
Original find number: VIB 95
Red, opaque, globular compressed
Number: 1
Type: YO18
Location: Archaeological Museum Stein
- Bead, glass
Find number: 35-5-1.10
Original find number: VIB 95
Red, opaque, globular compressed, triple connected.
Decoration: yellow waves, crossing.
Number: 1
Location: Archaeological Museum Stein



Bead, glass
Find number: 35-5-1.11
Original find number: VIB 95
Red, opaque, globular compressed, double connected. Decoration: yellow waves, crossing.
Number: 6
Location: Archaeological Museum Stein

Bead, amber
Find number: 35-5-1.12
Original find number: VIB 95
Amber, flat almond shaped.
Type: A44
Number: 1
Location: Archaeological Museum Stein

Bead, glass
Find number: 35-5-1.13
Original find number: VIB 95
Yellow, opaque, globular compressed. Decoration: black/red waves, crossing.
Number: 2
Location: Archaeological Museum Stein

Bead, glass
Find number: 35-5-1.14
Original find number: VIB 95
Yellow, opaque, globular compressed. Decoration: red waves, crossing.
Number: 1
Location: Archaeological Museum Stein

Bead, glass
Find number: 35-5-1.15
Original find number: VIB 95
Red, opaque, globular compressed. Decoration: white waves, crossing.

Number: 2
Type: Koch-Schretzheim 1977; 34.11
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per: 35.8 (Kombinationsgruppe F-H: 5-10 (555-705)
Location: Archaeological Museum Stein

6 Knife, iron
Find number: 35-6-1
Original find number: VIB 91
Iron corroded knife with mineralised textile.
Location: Archaeological restoration company Restaura

36
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	220
Grave pit width	180
Grave pit depth	195
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. At a depth of 180 cm the shadow of a wooden coffin became visible as a black-grey band shaped discoloration of the soil. The dimensions and the location of the wooden container within the burial pit were not provided.

GRAVE DATE
O-OM IIB: 565-640/50
FAG 3-9: 460/80-710

FINDS
1 Beads, glass
Find number: 36-1-1.1
Original find number: VIB 96
Small yellow, opaque, globular compressed.
Number: 12 (20 yellow beads recorded in Beckers and Beckers)
Type: YO30 / S-Per33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Archaeological Museum Stein

Beads, glass
Find number: 36-1-1.2
Original find number: VIB 96
Green, transparent short cylindrical.
Number: 6 (recorded: 28)
Type: GT30/35
Location: Archaeological Museum Stein

Bead, glass
Find number: 36-1-1.3
Original find number: VIB 96
Blue, opaque, short cylindrical, double connected
Number: 3
Type: BO25 / S-Per 37.2
Kombinationsgruppe: F-I
Rhineland date: 5-10
Rhineland date: 555-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 36-1-1.4
Original find number: VIB 96
Red, opaque, biconical.
Number: 1
Type: RO20 / S-Per 35.6
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 36-1-1.5
Original find number: VIB 96
Blue, opaque, short cylindrical, four connected.
Type: BO35 (x4)
Number: 1
Location: Archaeological Museum Stein

Bead, glass
Find number: 36-1-1.6
Original find number: VIB 96
Blue, opaque, barrel/short cylindrical
Number: 3
Type: BO19/35 / S-Per 37.1
Kombinationsgruppe: (H) I
Rhineland phase: (8) 10-(8) 10
Rhineland date: (610) 670-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 36-1-1.7
Original find number: VIB 96
White, opaque, globular compressed. Decoration: blue bands, red dots.
Number: 1
Location: Archaeological Museum Stein

Bead, glass
Find number: 36-1-1.8
Original find number: VIB 96
Orange, opaque, barrel.
Number: 2
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 36-1-1.9
Original find number: VIB 96
Blue, opaque, large cylindrical.
Number: 1
Type: BO11 / S-Per37.1?
Kombinationsgruppe: (H) I
Rhineland phase: (8) 10
Rhineland date: (610) 670-(640) 705
Location: Archaeological Museum Stein

Bead, amber
Find number: 36-1-1.10
Original find number: VIB 96
Amber, almond shaped
Number: 1
Type: A44
Location: Archaeological Museum Stein

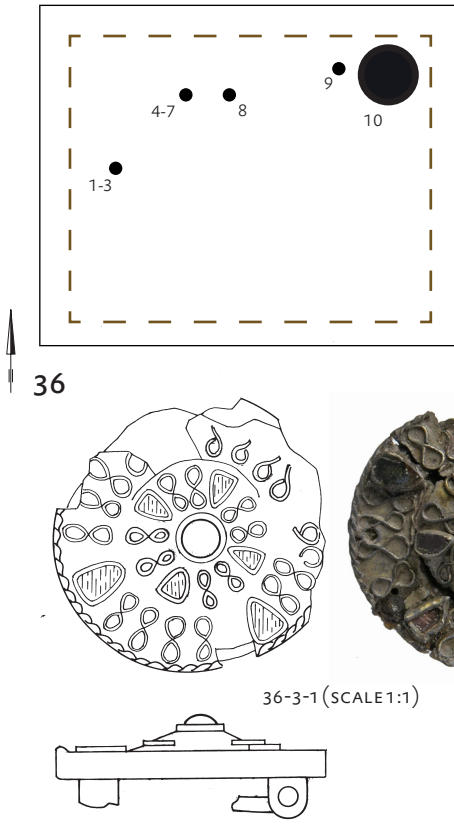
Bead, amber
Find number: 36-1-1.11
Original find number: VIB 96
Amber, irregular
Number: 1
Type: A40
Location: Archaeological Museum Stein

2 Human remains: teeth
Find number: 36-2-1
Four or five tooth of a young child, found in between the beads.
Location: missing

3 Brooch, copper alloy, silver and gold
Find number: 36-3-1
Original find number: VIB 97
Composite filigree brooch with copper alloy ground plate and silver or gold top plate with 8-shaped filigree ornaments and isolated cells (of gold?) with garnet and glass inlays.
Diameter: 3.5 cm
Height: 0.85 cm
Type: Siegmund Fib2.3
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: Fag S-Fib2.3 (6: 580/90-610/20)
Alternative type: Graenert 2007, A1F2 (AMIII-JMI: 560/70-630/40)
Location: Archaeological Museum Stein

4 Rod, copper alloy
Find number: 36-4-1
Original find number:
Thin copper alloy rod.
Length: 3.0 cm
Location: Archaeological Museum Stein

5 Plate, copper alloy
Find number: 36-5-1
Original find number: VIB 98
Kidney shaped copper alloy plate with three rivet holes.
Length: 3.0 cm
Location: Archaeological Museum Stein



- | | |
|---|--|
| <p>6 Simple ring, copper alloy
Find number: 36-6-1
Original find number: VIB 99
Thick simple copper alloy ring.
Diameter: 4.0 cm
Location: Archaeological Museum Stein</p> | <p>9 Bucket, wood, copper alloy and iron
Find number: 36-9-1
Original find number:
Numerous iron fragments, sheet copper alloy and wood remains of a bucket with a diameter of 20-22 cm. Not restored. It was observed that this bucket was richly decorated with copper alloy mounts and iron bands and that it had a rod shaped handle. The remnants in the restoration atelier show that the handle might have been tortured.
Type: L/P/V 456
L/P/V phase: PM-MA1
Rhineland date: 440/50-520/30
Alternative type: FAG EimA (3-5: 460/80-580/90)
Location: Archaeological restoration company Restaura</p> |
| <p>7 Plate, copper alloy
Find number: 36-7-1
Original find number: VIB 100
Copper alloy plate with cut out spaces and impressed dots and semi-circles with silver (niello).
Length: 3.0 cm
Type: Siegmund Ghg6
Rhineland: phase 8
Rhineland date: 610-640
Alternative type: FAG S-Ghg (6-8: 580/90-670/80)
Alternative type: L/P/V 363-366 (MR1: 600/10-630/40)
Location: Archaeological Museum Stein</p> | <p>10 Pottery vessel
Find number: 36-10-1
Original find number:
Dark grey biconical pot with a red-orange substance covering parts of the outer wall (iron corrosion of the bands of the bucket next to which it was standing?). The upper wall is decorated with multiple lines of rectangular roulette stamp impressions. However, they might also be single lines of roulette stamp impressions. Found in fragmented condition but now restored and completed; approximately 95% of the original pot is present.</p> |
| <p>8 Finger ring, gold
Find number: 36-8-1
Original find number: VIB 101
Gold finger ring with a bezel holding a Roman stone of red carnelian with an engraved image. Diameter ring: 2.0 cm
Diameter bezel: 1.3 cm
Location: Archaeological Museum Stein</p> | |

Height: 14.5 cm
Type: Siegmund Kwt3.21
Rhineland phase: 7-8
Rhineland date: 585-640
Type: Siegmund Kwt3.22
Rhineland phase: end 7-beginning 8B
Rhineland date: c.600-c.630
Type: Siegmund Kwt 3.11/3.12 (570-610)
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Location: Archaeological Museum Stein

37A
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit width	180
Grave pit depth	100 ?
Orientation	W-E

DESCRIPTION

Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was in its longitudinal direction partly destroyed; the length of the burial pit could

not be established. The finds from this at first sight single grave were discovered at different depths on the basis of which it was identified as a grave with a second burial. The finds of the upper burial were found at a depth of 100 cm and identified it as the burial of a woman.

GRAVE DATE

Cannot be dated

FINDS

- 1 Knife, iron
Find number: 37-1-1
Find depth: 100
Fragment of an iron knife, present in corroded condition. Leather remnants of the scabbard are preserved.
Location: Archaeological restoration company Restauro
- 2 Bead, glass
Find number: 37-2-1
Original find number: VIB 107
Find depth: 100
White, opaque, short cylindrical.
Location: Archaeological Museum Stein
- 3 Plate, copper alloy
Find number: 37-3-1
Original find number: VIB 105

Find depth: 100
Bent copper alloy plate with four small rivets.
Length: 3.0
Width: 2.4
Location: Archaeological Museum Stein

37B
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit width	180
Grave pit depth	150
Orientation	W-E

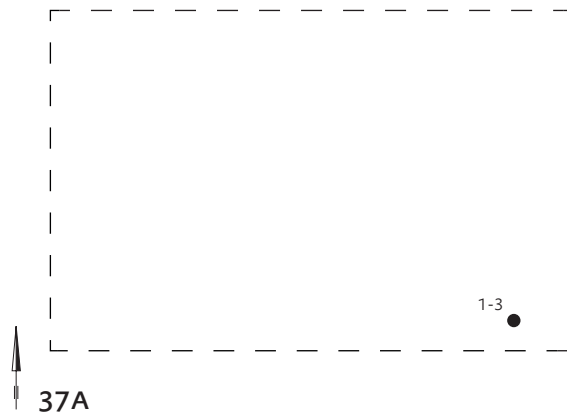
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was in its longitudinal direction partly destroyed; the length of the burial pit could not be established. The finds from this at first sight single grave (37) were nonetheless discovered at different depths on the basis of which it is identified as a grave with a second burial (37A and 37B). The finds of the lower burial were found at a depth of 150 cm and identified it as the grave of a man.

GRAVE DATE

O-OM IIa: 565-610/20
FAG 4-7: 510/20-640/50

FINDS

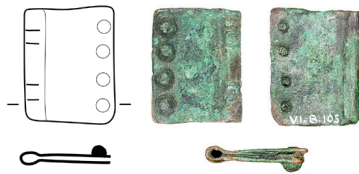
- 4 Lance head, iron
Find number: 37-4-1
Find depth: 150
Iron lance head recorded as a specimen with a skewer shaped blade and a split socket. It is present in corroded condition together with two rings, originally fixed around the socket, and some wood remains of the shaft. The X-ray shows that spiral bands were applied around the shaft; the material of these spiral bands cannot be determined.
Recorded total length: 30 cm
Recorded blade width: 4 cm
Recorded diameter socket: 2.5 cm
Type: Siegmund Lan1.1b
Rhineland phase: 4
Rhineland date: 530-555
Type: Siegmund Lan1.1a
Rhineland phase: 6
Rhineland date: 570-585
Spiral bands (parallels: Niederstotzingen grave 6; Mungersdorf graves 37 and 66): seventh century.
Location: Archaeological restoration company
Restaura



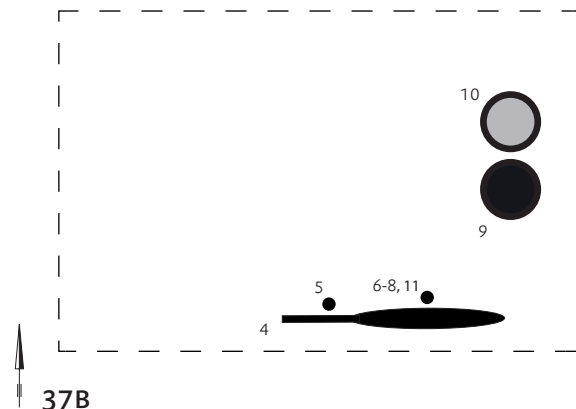
37A



37A-2-1



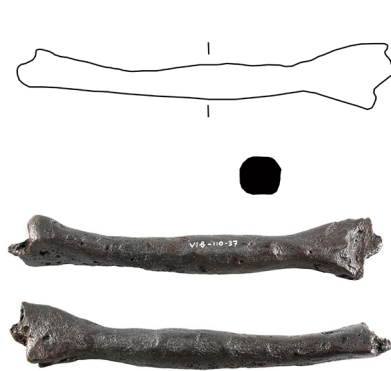
37A-3-1



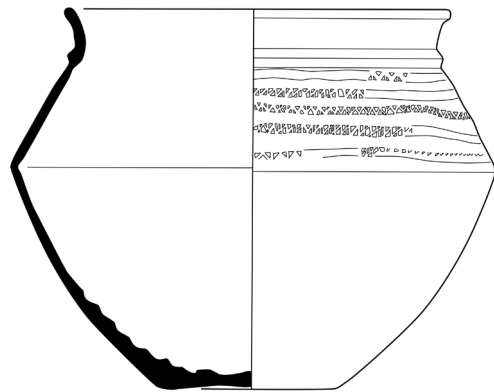
37B



37B-5-1



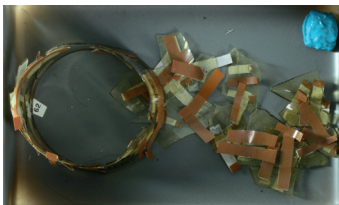
37B-6-1



37B-9-1



37B-7-1, 8-1, 11-1



37B-10-1

- 5

Knife, iron
Find number: 37-5-1
Original find number: VIB 109
Find depth: 150
Part of an iron knife; the tip of the knife is gone, wood remains are preserved around the hilt. Length blade: 10.8 cm
Location: Archaeological Museum Stein
- 6

Arrow head, iron?
Find number: 37-6-1
Original find number: VIB 110
Find depth: 150
Socket of probably an iron arrow head.
Length: 10.1 cm
Location: Archaeological Museum Stein
- 7

Belt fitting, iron
Find number: 37-7-1
Original find number: VIB 111-1
Find depth: 150
Simple iron buckle with oval loop.
Length loop max: 4.9 cm
Length loop min: 3.5 cm
Location: Archaeological Museum Stein
- 8

Belt fitting, iron
Find number: 37-8-1
Original find number: VIB 111-2
Find depth: 150
Simple iron buckle with rectangular loop.
Length loop max: 3.9 cm
Length loop min: 2.9 cm
Location: Archaeological Museum Stein
- 9

Pottery vessel
Find number: 37-9-1
Original find number: VIB 114
Dark grey biconical pot with a weathered smoked surface. Found in fragmented condition but now restored and completed; approximately 85% of the original pot is present. The upper wall is decorated with five single lines of complex roulette stamps of vertical and oblique stripes and crosses.
Height: 20.1 cm
Type: Siegmund Kwt3.11
Rhineland phase: 6-beginning 7
Rhineland date: 570-c.600
Type: Siegmund Kwt3.12
Rhineland phase: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5G (5-6: 565-610/20)
Location: Archaeological Museum Stein
- 10

Glass vessel, bell beaker
Find number: 37-10-1
Original find number: VIB 113
Fragments of an olive green glass vessel, with faint diagonal ribs and slightly thickened rim. The fragments seem to be a of a bell beaker.
Type: Feyeux T.53.3I (decoration)
Date: 550-600
Alternative type: Koch Pleidelsheim (SD7: 580-600)
Alternative type: Siegmund bell beakers (4-8A: 530-625)
Alternative type: FAG bell beakers (4-6: 510/25-610/20)
Alternative type: L/P/V 450 (second half MA2-MR1: 520/30-630/40)
Location: Archaeological restoration company Restaura
- 11

Indeterminate object, iron
Find number: 37-11-1
Original find number: VIB 111-3
Triangular iron object of connecting plates with 3 rivets. One side of the triangle consists of two plates with a space in between them.
Length: 3.3 cm
Location: Archaeological Museum Stein

- 12

Fragments, iron
Find number: 37-12-1
Fragments which might be of the grip of a shield.
Location: Archaeological restoration company Restaura

38

INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	290
Grave pit width	220
Grave pit depth	130
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. Pottery fragments, copper alloy fragments

and iron nails were found scattered throughout the grave, which might indicate that the grave was reopened.

GRAVE DATE
O-OM I+II: 510/20-670/80
FAG 4-9: 510/20-710

FINDS
1 Pottery vessel
Find number: 38-1-1
Original find number: VIB 116
Fragments of a grey biconical pot without decoration. Approximately 25% of the original pot is present.
Type: Siegmund Kwt2.41/2.42/2.43
Rhineland phases: 4-9
Rhineland date: 530-670
Alternative type: FAG Kwt4A (4-7: 510/25-640/50)
Alternative type: FAG S-Kwt2.43 (6-9: 580/90-710)
Location: Archaeological restoration company Restaura

- 2

Rivets, iron
Find number: 38-2-1
Original find number: VIB 117
Three iron rivets, probably of a shield boss.
Head diameter: 2.5 cm
Location: Archaeological restoration company Restaura
- 3

Fragments and sword belt fitting, copper alloy
Find number: 38-3-1
Original find number: VIB 109?
Two small indeterminate copper alloy fragments and one diamond shaped sword belt plate with three (of originally four) small rivets.
Length plate: 4.1
Width plate: 2.7
Location: Archaeological restoration company Restaura



37B-4-1, 12-1 (SCALE 1:2)



37B-4-1, 12-1 (SCALE 1:2)

39

CREMATION GRAVE

Grave structure	vessel with cremated human remains
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DESCRIPTION
Merovingian cremation grave. Cremation rests and finds were found deposited in a large vessel. Dimensions of a pit were not provided; its dimensions on the original cemetery plan are inaccurate.

PHYSICAL ANTHROPOLOGY
The cremation rests from this grave are human and represent at least one individual of c. 14 years. The biological sex of the individual could not be determined on the basis of the available remains. Pathological bone changes could not be identified. Animal remains were not identified among the cremation rests.

GRAVE DATE
O-OM III: 640/50-670/80
FAG 8: 640/50-670/80

- FINDS**
- 1 Pottery, cremation vessel
Find number: 39-1-1
Original find number: VIB 119

Grey-black large and complete elongated globular pot with a considerably weathered and smoked(?) surface, a flat bottom and a nearly horizontal outward folded rim with indentation.
Height: 27.5 cm
Location: Archaeological Museum Stein

- 2 Belt fitting, iron
Find number: 39-2-1
Original find number: VIB 129
Iron plate buckle with a triangular plate with undulating outline and three ‘fake’ copper alloy rivets and one loop at its back side. The front side shows silver plating and geometric copper alloy and silver inlays with animal style elements. The plate is attached to an oval buckle loop with D-shaped section and shield tongue, also decorated with silver and copper alloy inlays. Not burned.
Length plate: 5.3 cm
Width plate: 3.2 cm
Length loop max: 5.0 cm
Type: Siegmund Gür4.7
Rhineland phase: 9
Rhineland date: 640-670
Alternative type:
Location: Archaeological Museum Stein

- Belt fitting, iron
Find number: 39-2-2
Original find number: VIB 121
Iron triangular counter plate with undulating outline, three ‘fake’ copper alloy rivets and one loop at its back side. The front side shows silver plating and geometric copper alloy and silver inlays with animal style elements.
Length plate: 6.3 cm
Width plate: 3.1 cm
Type: Siegmund Gür4.7
Rhineland phase: 9
Rhineland date: 640-670
Alternative type:
Location: Archaeological Museum Stein

- 3 (Counter) plate, iron
Find number: 39-3-1
Original find number: VIB 121
Iron triangular (counter) plate with two of originally three small iron rivets with domed heads and silver inlays around their bases. The plate has a silver plated middle field and copper alloy inlays applied at the corners of the base of the plate.
Length: 6.4 cm
Width: 3.1 cm
Type: Siegmund Gür4.7/4.8
Rhineland phase: 9
Rhineland date: 640-670
Alternative type:
Location: Archaeological Museum Stein

- 4 Rivet, copper alloy
Find number: 39-4-1
Original find number: VIB 120
Copper alloy rivet with carved rim and domed but flat hollow head. Probably of a seax scabbard. Not burned.
Head diameter: 2.1 cm
Type: Siegmund Sax 4.4
Rhineland phase: 9
Rhineland date: 640-670
Alternative type: FAG S-Sax4.4 (end 7-8: 640/50-670/80)
Location: Archaeological Museum Stein
- 5 Oil lamp, iron?
Find number: 39-5-1
Original find number: VIB 121
Iron fragments, indeterminate; of the recorded oil lamp?
Location: missing

40A

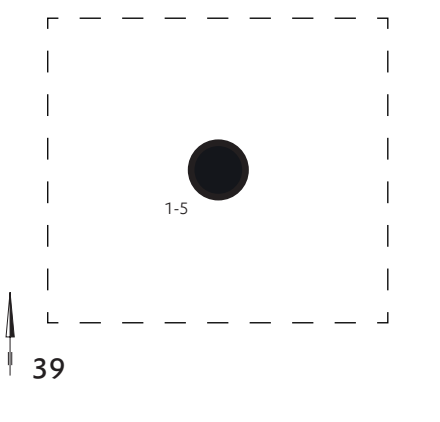
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	170
Grave pit width	120
Grave pit depth	130
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was partly destroyed which hindered the identification of the find locations of some finds. The other finds from this at first sight single grave (40) were discovered at different depths on the basis of which it is identified as a grave with a second burial (40A and 40B). The single find of the upper burial was found at a depth of 50 cm.

GRAVE DATE
O-OM II: 565-670/80
FAG 4-8: 510/20-670/80

- FINDS**
- 1 Pottery vessel
Find number: 40-1-1
Original find number: VIB 123
Find depth: 50
Grey biconical pot with a considerably weathered and smoked surface without decoration. Found in fragmented condition but now restored and completed; approximately 95% of the original pot is present.
Height: 12.3-13.5 cm
Type: Siegmund Kwt2.42
Rhineland phase: 7
Rhineland date: 585-610
Type: Siegmund Kwt2.43
Rhineland phase: 8-9
Rhineland date: 610-670
Alternative type: FAG Kwt4A (4-7: 510/25-640/50)
Location: Archaeological Museum Stein

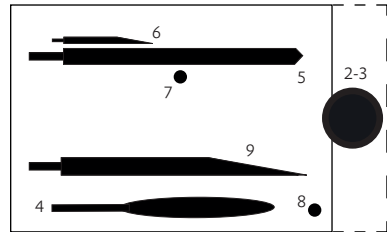


40B
INHUMATION GRAVE

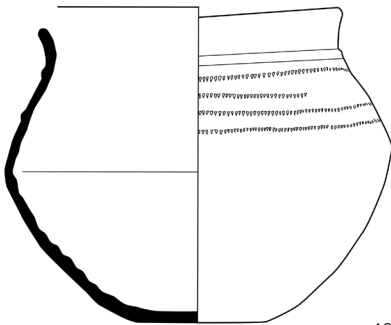
Grave structure	trench grave?
Grave pit length	170?
Grave pit width	120
Grave pit depth	130
Orientation	W-E

Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was partly destroyed which hindered the identification of the find locations of some finds. The other finds from this at first sight single grave (40) were discovered at different depths on the basis of which it is identified as a double grave (40A and 40B). The finds of the lower burial were found at a depth of 130 cm and identified it as the burial of a man. The two pots from this grave were recorded as finds discovered 200 cm from the western wall. Since the recorded length of single grave 40 was 170 cm grave 40B is considered to have been longer with a length of approximately 200 cm.

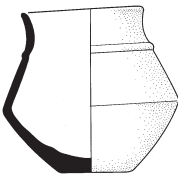
GRAVE DATE
O-OM IIb: 565-640/50
FAG 3-9: 460/80-710



40B



40B-2-1

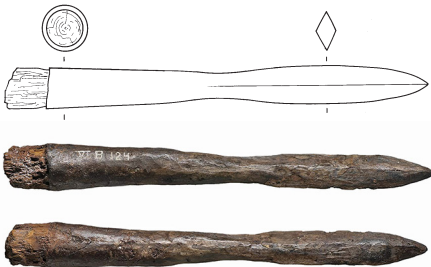


40B-3-1



- 2 Pottery vessel
Find number: 40-2-1
Find depth: 131
Black biconical pot with a shiny (burnished?) surface. Found in fragmented condition but now restored and completed; approximately 85% of the original pot is present. The upper wall is decorated with a ridge above which two single lines of rectangular roulette stamp impressions are applied and beneath which three single lines of similar roulette stamp impressions are applied.
Height: 15.8-16.5 cm
Type: Siegmund Kwt3.11
Rhineland phase: 6-beginning 7
Rhineland date: 570-c.600
Type: Siegmund Kwt3.12
Rhineland phase: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Location: Archaeological Museum Stein

- 3 Pottery vessel
Find number: 40-3-1
Original find number:
Find depth: 130
Small brown biconical pot without decoration. Found in fragmented condition but now restored and completed; approximately 90% of the original pot is present.
Height: 8.5 cm
Type: Siegmund Kwt2.42



40B-4-1

- Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Kwt4A (4-7: 510/25-640/50)
Location: Archaeological Museum Stein

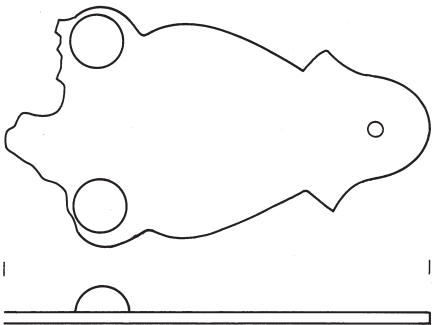
- 4 Lance head, iron
Find number: 40-4-1
Original find number: VIB 124
Find depth: 130
Iron lance head with narrow blade.
Length: 20.0 cm
Type: Siegmund Lan1.5
Rhineland phase: 3
Rhineland date: 485-530
Type: Siegmund Lan2.2
Rhineland phase: 7
Rhineland date: 585-610
Location: Archaeological Museum Stein

- 5 Sword, iron
Find number: 40-5-1
Original find number: VIB 129?
Find depth: 130
Two corroded iron sword parts and a fragment of the hilt.
Length: c. 65 cm
Location: Archaeological Museum Stein

- 6 Knife, iron
Find number: 40-6-1
Original find number: VIB 129



40B-6-1



40B-7-1

- Find depth: 130
Iron knife with a recorded length of 20.0 cm and an actual remaining length of 11.1 cm; it is for now considered as a mistake in the catalogue and this knife is assigned to grave 40.
Length blade: 9.9 cm
Location: Archaeological restoration company Restaura

- 7 Plate buckle, iron
Find number: 40-7-1
Original find number: VIB 127
Find depth: 130
Iron plate buckle with copper alloy rivets.
Maximum length: 10.2 cm
Type: Siegmund Gür4.5
Phase: Rhineland phase 8
Rhineland date: 610-640
Location: Archaeological Museum Stein

- 8 Shield boss, iron
Find number: 40-8-1
Find depth: 130
Location: missing

- 9 Seax, iron
Find number: 40-9-1
Original find number: VIB 129
Find depth: 130
Recorded total length: 47.0 cm
Length blade: c.32.0-37.0 cm?

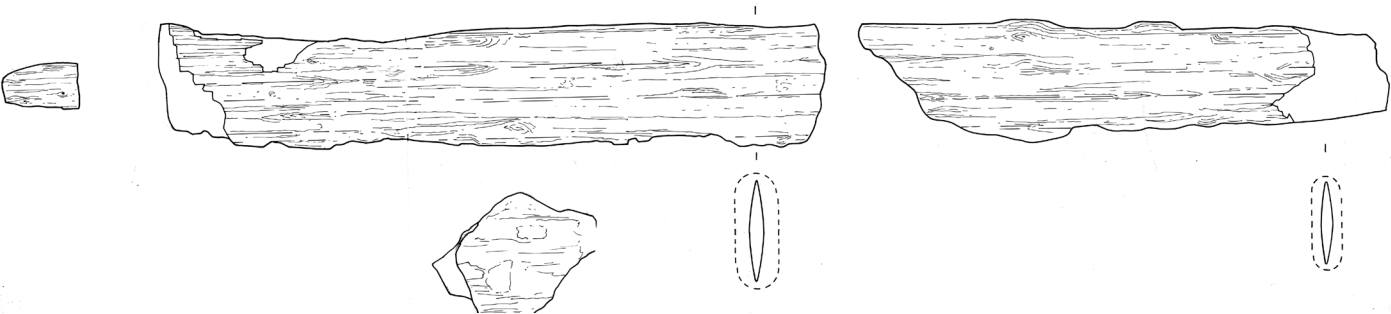
- Recorded blade width: 5 cm
Type: FAG Sax2.1/2.2
FAG phase: 5-9
FAG date: 565-710
Alternative type: Siegmund Sax2.1/2/2 (7-10: 585-705)
Location: Archaeological restoration company Restaura

41
INHUMATION GRAVE

Grave structure	trench grave?
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. It could not be excavated due to not further specified difficulties regarding the terrain.

GRAVE DATE
Cannot be dated



40B-5-1



40-9-1 (SCALE 1:1)

42
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	180
Grave pit width	150
Grave pit depth	110
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. The grave was without finds.

GRAVE DATE
Cannot be dated

43
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	200
Grave pit width	160
Grave pit depth	150
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found. The black-grey soil discoloration indicating the former presence of a wooden container became clearly visible at a depth of 115 cm. The wooden container had a length of 180 cm and a width of 85 cm; it was standing close to the eastern wall of the burial pit. Since it was recorded that the pottery vessel was found inside the wooden container, 30 cm from the southern wall (presumably the burial pit wall), it is assumed that the wooden container was standing close to the southern wall of the burial pit.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 5-7: 565-640/50

- FINDS**
1 Pottery vessel
Find number: 43-1-1
Original find number: VIB 133
Grey biconical pot with a weathered smoked surface showing the red paste underneath. Found in fragmented condition but now restored and completed; approximately 80% of the original pot is present. The upper wall is decorated with single lines of complex roulette stamp impressions. An isolated part of the stamp consists of one rectangular grid filled with four columns and four rows of rectangular impressions, four mirrored S-shapes, one cross, one S-shape and two crosses again; two lines are applied beneath the neck and two above the carination.
Height: 13.5 cm
Type: Siegmund Kwt3.22
Rhineland phase: end 7-beginning 8B
Rhineland date: c.600-c.630
Alternative type: FAG Kwt5F (5-7: 565-640/50)
Location: Archaeological Museum Stein

44
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	180
Grave pit width	140
Grave pit depth	140
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
O-OM III: 640/50-670/80
FAG 8-10: 640/50- >725

- FINDS**
1 Knife, iron
Find number: 44-1-1
Original find number: VIB 134
Iron knife with angled back and leather remains preserved on the blade.
Length blade: 10.4 cm
Type: Siegmund Ger1.2
Rhineland phase: 10-11
Rhineland date: 670-740
Alternative type: FAG Ger1.2 (end 7-10: 640/50- 710)
Location: Archaeological Museum Stein

- 2 Fragment, iron
Find number: 44-2-1
Iron indeterminate fragment with mineralised remains (wood and textile?)
Location: Archaeological Museum Stein

45
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	230
Grave pit width	150
Grave pit depth	150
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found. The black band shaped soil discoloration, indicating the former presence of a wooden container, became visible at a depth of 120 cm. It had a width of 85 cm but its length could not be established and its exact location within the burial pit was not recorded.

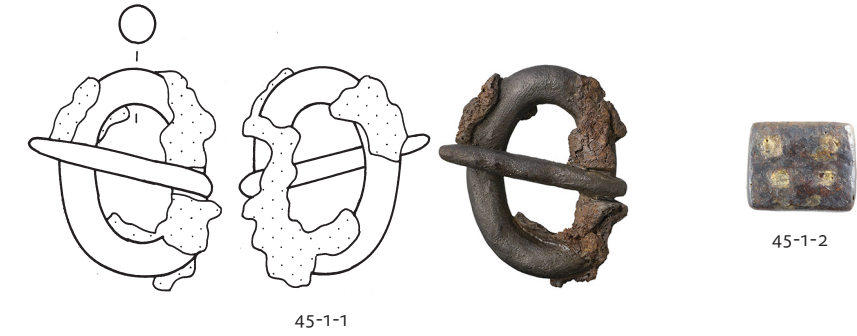
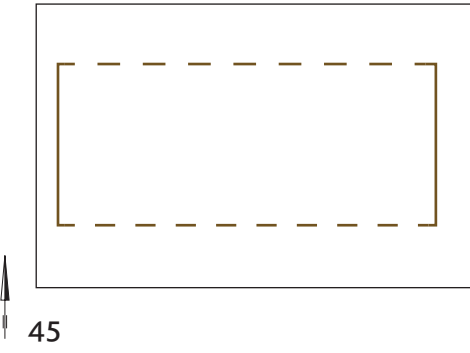
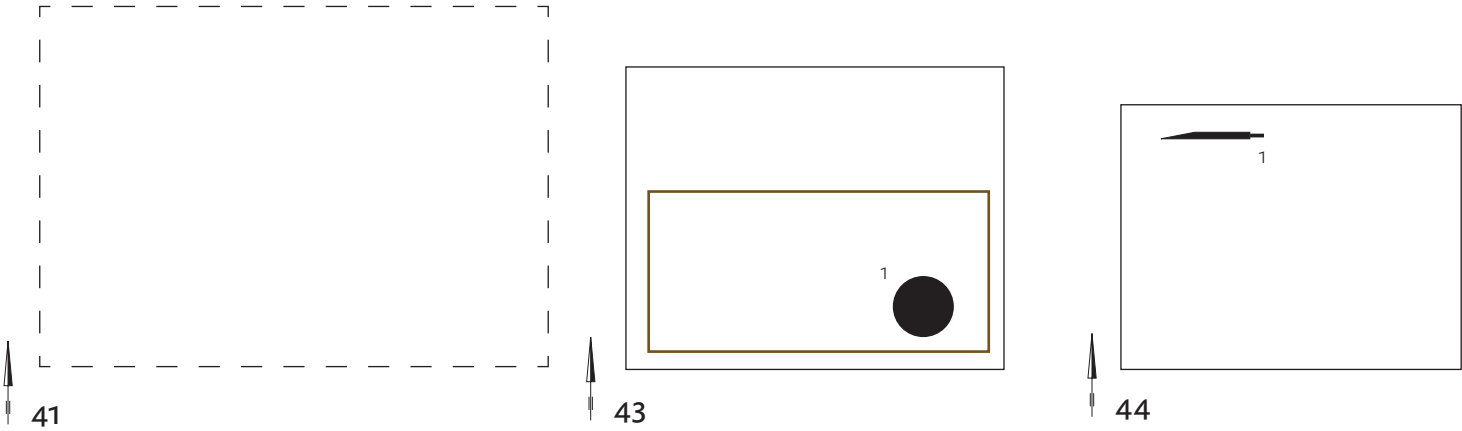
GRAVE DATE
OM I+IIc: 510/20-640/50
FAG 3-7: 460/80-640/50

- FINDS**
1 Belt fitting, iron
Find number: 45-1-1
Original find number: VIB 136
Buckle loop with mineralised textile remains.
Length loop: 5.6 cm
Location: Archaeological Museum Stein

Belt fitting, iron
Find number: 45-1-2
Original find number: VIB 136
Small iron back plate, rectangular, with four rivet holes and one rivet pin visible at the back side.
Length: 2.8
Width: 2.3
Location: Archaeological Museum Stein

Belt fitting, iron
Find number: 45-1-3
Original find number: VIB 136
Plate buckle with oval buckle loop with oval section and rectangular plate with one rivet hole. Mineralised textile or leather is preserved around the loop.
Length loop: 4.7 cm
Length plate: 2.5 cm
Width plate: 2.8 cm
Location: Archaeological Museum Stein

- 2 Knife, iron
Find number: 45-2-1
Original find number: VIB 135
Iron knife, with leather preserved on the blade and wood around the iron hilt core.
Length blade: 11.1 cm
Blade width: 2.7 cm
Location: Archaeological Museum Stein
- 3 Unidentifiable object, iron
Find number: 45-3-1
Indeterminate object with some mineralised remains (textile?)
Length: 4.3 cm
Width: 1.5 cm
Location: Archaeological Museum Stein
- 4 Spindle whorl, ceramic
Find number: 45-4-1
Original find number: VIB 144
Ceramic biconical spindle whorl
Diameter: 2.4
Type: L/P/V 347
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein



46

INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	300
Grave pit width	250
Grave pit depth	170
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
O-OM IIc: 610/20-640/50
FAG 4-9: 510/20-710

FINDS
1 Seax, iron
Find number: 46-1-1
Original find number: VIB 151
Iron seax in fragmented and corroded condition; its length cannot be established independently from the dimensions recorded by Beckers and Beckers. Recorded length: 46.0 cm
Recorded blade width: 5.0 cm
Type: FAG Sax2.1/2.2
FAG phase: 5-9
FAG date: 565-710

Alternative type: Siegmund Sax2.1/2.2 (7-10: 585-705)
Location: Archaeological restoration company Restaura

2 Lance head
Find number: 46-2-1
Original find number:
Iron lance head of which it is recorded that it has a prominent mid rib and two copper alloy rivets attached to the socket; some fragments of the lance head are present in a box holding remnants of this grave. The rivets can be identified as domed copper alloy rivet with carved rims. Recorded length: 42.0 cm
Recorded blade width: 4.0 cm
Type: Siegmund Lan2.1
Rhineland phase: 7-8A
Rhineland date: 585-625
Rivet type: L/P/V 44 ((MA2) MA3-MR1: (520/30-560/70) 560/70-630/40)
Location: Archaeological restoration company Restaura

3 Plate buckle, iron
Find number: 46-3-1
Original find number: VIB 140
Iron plate buckle with tongue shaped plate and three copper alloy domed rivets with silver geometric inlays and leather/mineralised textile preserved on the backside of plate which is attached to an oval buckle loop with D-shaped section.

Plate length: 8.4 cm
Plate width: 4.6 cm
Length loop: 6.1 cm
Type: Siegmund Gür4.6
Rhineland phase: 8B
Rhineland date: 625-640
Alternative type: FAG S-Gür4.6 (7: 610/20-640/40)
Location: Archaeological Museum Stein

Back plate, iron
Find number: 46-3-2
Original find number: VIB 143
Iron back plate with four copper alloy domed rivets and silver geometric inlays and leather/mineralised textile preserved on the backside of plate. Length: 5.2 cm
Width: 4.6 cm
Type: Siegmund Gür4.6
Rhineland phase: 8B
Rhineland date: 625-640
Alternative type: FAG S-Gür4.6 (7: 610/20-640/40)
Location: Archaeological Museum Stein

4 Knife, iron
Find number: 46-4-1
Iron knife; fragments of this object might be present in a box holding remnants of this grave. Recorded length: 12.0 cm
Location: Archaeological restoration company Restaura



46-1-1, 2-1, 4-1

5 Fire steel, iron
Find number: 46-5-1
Original find number: VIB 143
Iron fire steel, triangular with curved extremities. Length: 9.9 cm
Type: Siegmund Ger5
Location: Archaeological Museum Stein

6 Pottery vessel
Find number: 46-6-1
Original find number: VIB 146
Large red biconical pot with a wide mouth, foot stand, pronounced carination and a nearly vertical upper wall decorated with two parallel undulating grooves above a ridge and two zones of three grooves beneath it. It shows some small black spots on its outer surface and it is tempered with fine sand and pebbles. Found in fragmented condition but now restored and completed; approximately 95% of the original pot is present. Height: 19.7-20.0 cm
Type: Siegmund Kwt4.3
Rhineland phase: 8B-9
Rhineland date: 625-670
Alternative type: FAG S-Kwt4.3 (7 (8): 610/20-640/50 (670/80))
Location: Archaeological Museum Stein

7 Pottery vessel
Find number: 46-7-1
Original find number: VIB 147
Small black complete biconical pot without decoration and with a relatively low lower wall and a slightly sagging base.



46-3-1

46-3-2

Height: 6.5 cm
Type: Siegmund Kwt2.41?
Rhineland phase: 4
Rhineland date: 530-555
Location: Archaeological Museum Stein

47

INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	250
Grave pit width	106
Grave pit depth	140
Orientation	W-E

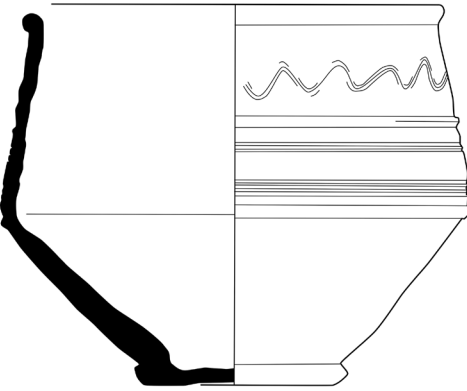
DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. A black band shaped discoloration of the soil indicated the former presence of a wooden container but its dimensions could not be established or were not recorded. Pottery fragments were found scattered throughout the grave and one rim fragment was found high in the grave, which might indicate that the grave was reopened.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 5-7: 565-640/50

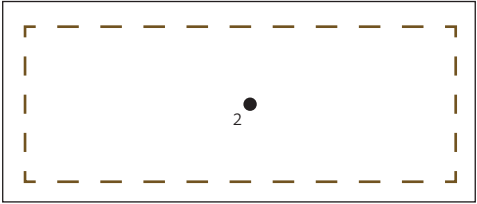
FINDS
1 Pottery, vessel
Find number: 47-1-1
Original find number: VIB 14
Fragments of a brown-black biconical pot of which the upper wall is decorated with at least three single lines of complex interrupted roulette stamp impressions consisting of grids filled with small rectangles. Type: Siegmund Kwt3.21/3.22/3.23
Rhineland phase: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5F (5-7: 565-640/50)
Location: Archaeological Museum Stein

2 Plate, copper alloy
Find number: 47-2-1
Indeterminate copper alloy plate, considerably weathered, with two domed copper alloy rivets. Length: 1.9 cm
Width: 1.9 cm
Location: Archaeological Museum Stein

3 Find number: 47-3-1
Original find number: VIB 148
Bottom and wall fragments of a grey black pot; thick walls.
Location: Archaeological Museum Stein



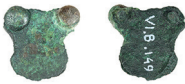
46-6-1



47



47-1-1



47-2-1

48
INHUMATION GRAVE

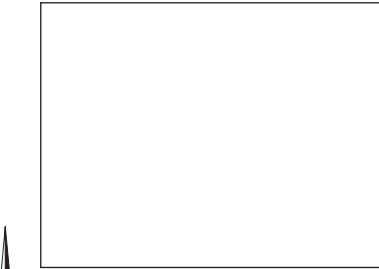
Grave structure	trench grave?
Grave pit length	180
Grave pit width	140
Grave pit depth	130
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found.

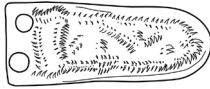
GRAVE DATE
OM I+IIc: 510/20-640/50
FAG 3-7: 460/80-640/50

FINDS
1 Fragment, iron
Find number: 48-1-1
Indeterminate iron fragment.
Archaeological restoration company Restaura

2 Strap end, copper alloy
Find number: 48-2-1
Original find number: VIB 150
Copper alloy strap end with engraved decoration of two rows of short oblique stripes along the edges and two domed copper alloy rivets going through the base of the plate.
Length: 5.4 cm
Type: L/P/V type 199
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein



48



48-1-1

48-2-1

49
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	300
Grave pit width	180
Grave pit depth	170
Orientation	W-E

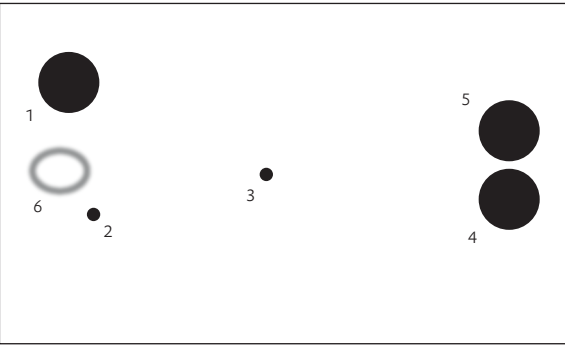
DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was west-east, based on the skull fragments found close to the western wall.

PHYSICAL ANTHROPOLOGY
The severely corroded inhumation remains present are some skull fragments and a part of the mandibula. The indications for the biological sex and age at death are ambiguous. As overall conclusion it is suggested that the remains were of an adult, probably a man.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 3-9: 460/80-710

FINDS
1 Pottery, vessel
Find number: 49-1-1
Original find number: VIB 153
Bottom fragment of a grey biconical pot.
Location: Archaeological Museum Stein

2 Bead, glass
Find number: 49-2-1.1
Original find number: VIB 159
Green, opaque, biconical.
Number: 2
Type: GO20
Location: Archaeological Museum Stein



49



49-1-1

Bead, glass
Find number: 49-2-1.2
Original find number: VIB 159
Orange, opaque, biconical.
Number: 1
Type: OO20 / S-Per 34.1 (groups: (G) H-I)
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.3
Original find number: VIB 159
Red, opaque, biconical.
Number: 1
Type: RO20 / S-Per 35.6
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.4
Original find number: VIB 159
Blue, transparent, biconical.
Number: 1
Type: BT20/ S-Per 37.1
Kombinationsgruppe: (H) I
Rhineland phase: (8) 10-(8) 10
Rhineland date: (610) 670-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.5
Original find number: VIB 159
Yellow, opaque, stretched biconical/almond.
Number: 1
Type: YO44
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.6
Original find number: VIB 159



49-2-1

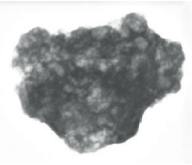
Red, opaque, barrel.
Number: 2
Type: RO19 / S-Per 35.6?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.7
Original find number: VIB 159
Yellow, opaque, globular compressed.
Number: 2
Type: YO30 / S-Per33.3
Kombinationsgruppe: D-H
Rhineland phase: 3-10
Rhineland date: 485-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.8
Original find number: VIB 159
Yellow, opaque, globular compressed, double connected.
Number: 1
Type: YO25 / S-Per 33.6
Kombinationsgruppe: G-H
Rhineland phase: 6-10
Rhineland date: 570-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.9
Original find number: VIB 159
Red, opaque, globular compressed, four connected.
Number: 1
Type: RO24+1
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.10
Original find number: VIB 159
Red-brown, opaque, globular compressed, triple connected.
Number: 1
Type: RO24
Number: 1
Type: RO24 / S-Per 35.7
Kombinationsgruppe: H



49-3-1

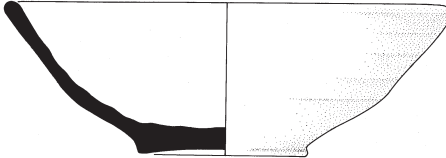
Rhineland phase: 8-10
Rhineland date: 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.11
Original find number: VIB 159
Red, opaque, globular compressed.
Number: 4
Type: RO2/18 / S-Per 35.6
Kombinationsgruppe: (G) H-I
Rhineland phases: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.12
Original find number: VIB 159
Red, opaque, globular compressed, double connected.
Number: 2
Type: RO25 / S-Per 35.7
Kombinationsgruppe: H
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.13
Original find number: VIB 159
Red, opaque, globular compressed, triple connected.
Number: 1
Type: RO24 / S-Per 35.7
Kombinationsgruppe: H
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 49-2-1.14
Original find number: VIB 159
Grey, opaque, biconical.
Number: 1
Type: WO20 / S-Per 32.3
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein



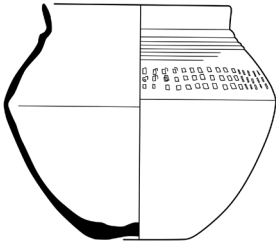
49-4-1

3 Plate buckle, iron
Find number: 49-3-1
Original find number:-
Iron plate buckle with a square iron plate with four copper alloy rivets. The fragment present might be of this recorded plate buckle.
Location: missing / Archaeological restoration company Restaura

4 Pottery, vessel
Find number: 49-4-1
Original find number: VIB 157
Red carinated asymmetric bowl with a badly finished foot stand, a slightly convex lower wall and straight the upper wall. Found in fragmented condition but now restored; the bowl is complete.
Height: 7.8 cm
Type: Siegmund Sha2.21
Rhineland phase: 5-8
Rhineland date: 555-640
Location: Archaeological Museum Stein

5 Pottery vessel
Find number: 49-5-1
Original find number: VIB 158
Grey-brown biconical pot with a considerably weathered (smoked) surface. The upper wall is decorated with four grooves just beneath the neck and multiple lines of rectangular roulette stamp impressions beneath the grooves. Found in fragmented condition but now restored and completed; approximately 80% of the original pot is present.
Height: 12.6 cm
Type: Siegmund Kwt3.22
Rhineland phase: end 7-beginning 8B
Rhineland date: c.600-c.630
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Location: Archaeological Museum Stein

6 Human remains
Find number: 49-6-1
Fragments of the skull and jaw
Location: Archaeological Museum Stein



49-5-1

50
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	300
Grave pit width	160
Grave pit depth	170
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
Cannot be dated

- FINDS**
- 1 Fragment, pottery
Find number: 50-1-1
Fragment of a black pot, not decorated, forms approximately 2% of the original pot.
Location: Archaeological restoration company Restaura

- 2 Knife, iron
Find number: 50-2-1
Original find number: VIB 10-4/VIB 162
Recorded blade width: 3 cm
Location: Archaeological restoration company Restaura
- 3 Buckle, iron
Find number: 50-3-1
Original find number: VIB 160
Small iron buckle.
Length loop: 3.6 cm
Location: Archaeological Museum Stein
- 4 Buckle, iron
Find number: 50-4-1
Original find number: VIB 161
Small iron buckle.
Length loop: 3.3 cm
Location: Archaeological Museum Stein
- 5 Beads, glass
Find number: 50-5-1
Various beads.
Number: 20
Location: missing

51A
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	300
Grave pit width	280
Grave pit depth	130
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave; upper burial in a ‘double grave’. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found. Grave 51 was identified as a grave with two superimposed bodies since finds were discovered at a depth of 90 cm and 130 cm. The upper burial, 51A, is on the basis of its finds identified as that of a man.

GRAVE DATE
Cannot be dated

- FINDS**
- 1 Seax, iron
Find number: 51-1-1
Find depth: 90
Three seaxes have find numbers matching with grave 51; none of these seaxes have a length comparable to the length recorded in the catalogue of Beckers and Beckers. The seax is for now considered missing and classified and dated on the basis of its description in the first catalogue.
Recorded length blade: 50.0 cm
Recorded width blade: 4.5 cm
Recorded total length: 61.0 cm
Type: Siegmund Sax3
Rhineland phases: 10B-11
Rhineland date: c.685-740
Alternative type: FAG (end8-10: c.650-750)
Location: missing

- 2 Lance head, iron
Find number: 51-2-1
Original find number: VIB 169
Find depth: 90
Iron lance head with diamond shaped blade and seemingly a split socket (this is not certain since the socket is damaged).
Length: 29.4 cm
Type: Siegmund Lan2.5
Rhineland phase: 8B-9
Rhineland date: 625-670
Type: Siegmund Lan1.4
Rhineland phase: 7 (6-8A)
Rhineland date: 585-610 (570-625)
Location: Archaeological restoration company Restaura
- 3 Fragments, iron
Find number: 51-3-1
Indeterminate iron fragments
Location: Archaeological Museum Stein

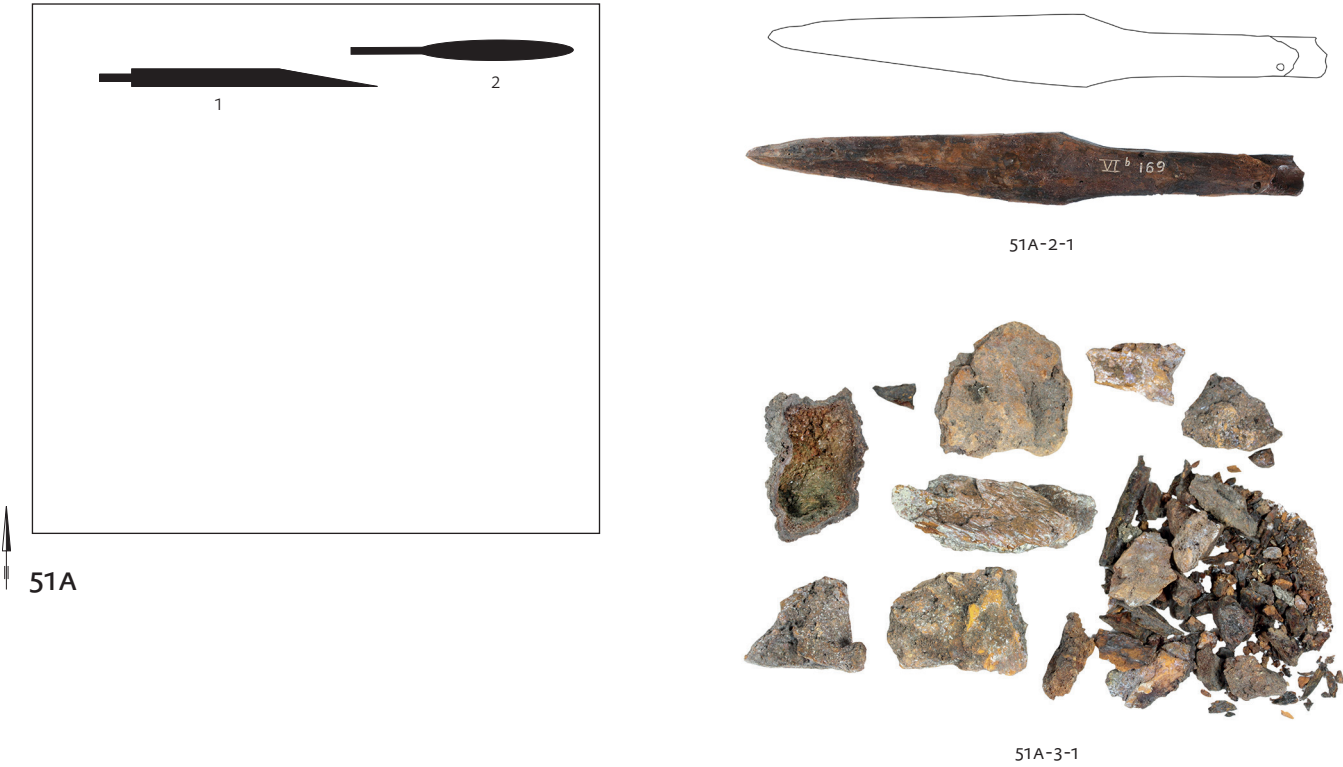
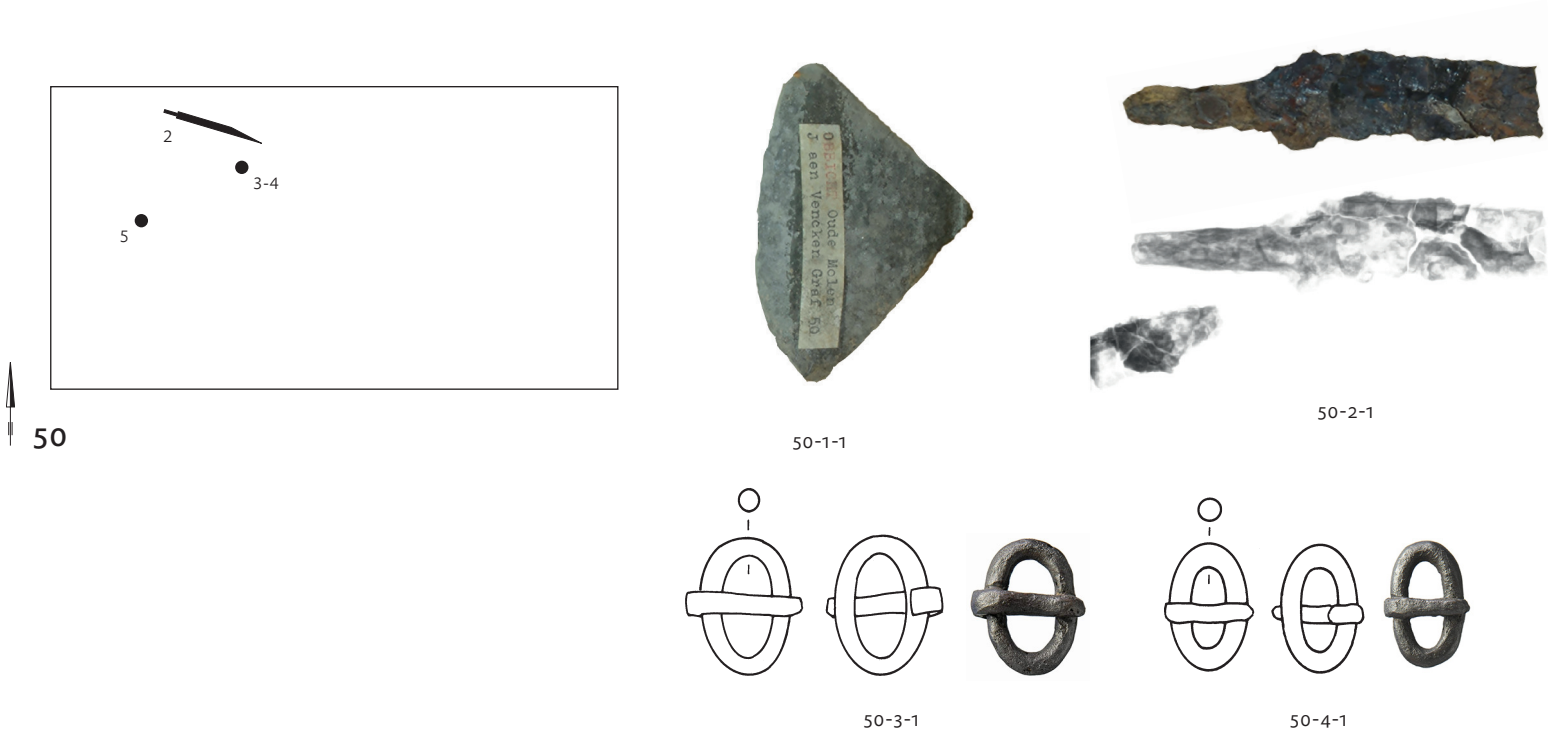
51B
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	300
Grave pit width	280
Grave pit depth	130
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave; lower burial in a reused grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were found. Grave 51 was identified as a grave with two superimposed bodies since the finds were found at a depth of 90 cm and 130. The lower burial, 51B, is on the basis of its finds identified as that of a man.

GRAVE DATE
O-OM IIc: 610/20-640/50
FAG 4-7: 510/20-640/50

- 3 Seax, iron
Find number: 51-3-1.1
Original find number: VIB 164/166
Find depth: 130
Iron seax recorded as find. Three seaxes have find numbers matching with grave 51; this is presumably an error and it cannot be established which one was actually part of grave 51B. It is decided to date the grave on the basis of the other finds since the description in the catalogue of Beckers and Beckers offers two plausible options for its classification and it cannot be certain which is the accurate one.
Recorded length blade: 43.0 cm
Recorded width blade: 5.0 cm
Recorded total length: 54.0 cm
Location: Archaeological restoration company Restaura
- 4 Plate buckle, iron
Find number: 51-4-1
Original find number: MS 127?
Find depth: 130
Iron plate buckle, triangular plate with three copper alloy rivets and an oval buckle loop with shield tongue.
Length plate: 7.2 cm
Length buckle loop: 4.0 cm
Type: Siegmund Gür4.5
Phase: Rhineland phase 8
Rhineland date: 610-640
Location: Archaeological Museum Stein
- 5 Back plate, iron
Find number: 51-5-1
Original find number: MS 127-5
Find depth: 130
Iron back plate, considerably weathered, with four copper alloy rivets with carved rims (with silver inlays?)
Length: 5.5 cm
Width: 5.3 cm
Type: Siegmund Gür4.5
Phase: Rhineland phase 8
Rhineland date: 610-640
Location: Archaeological Museum Stein



- 6

Back plate, iron
Find number: 51-6-1
Original find number: VIB-168-51
Find depth: 130
Iron back plate with four copper alloy rivets and leather remnants preserved on its back side; it is associated with a thinner plate.
Length: 6.3 cm
Width: 4.9 cm
Type: Siegmund Gür4.5
Phase: Rhineland phase 8
Rhineland date: 610-640
Location: Archaeological Museum Stein
- 7

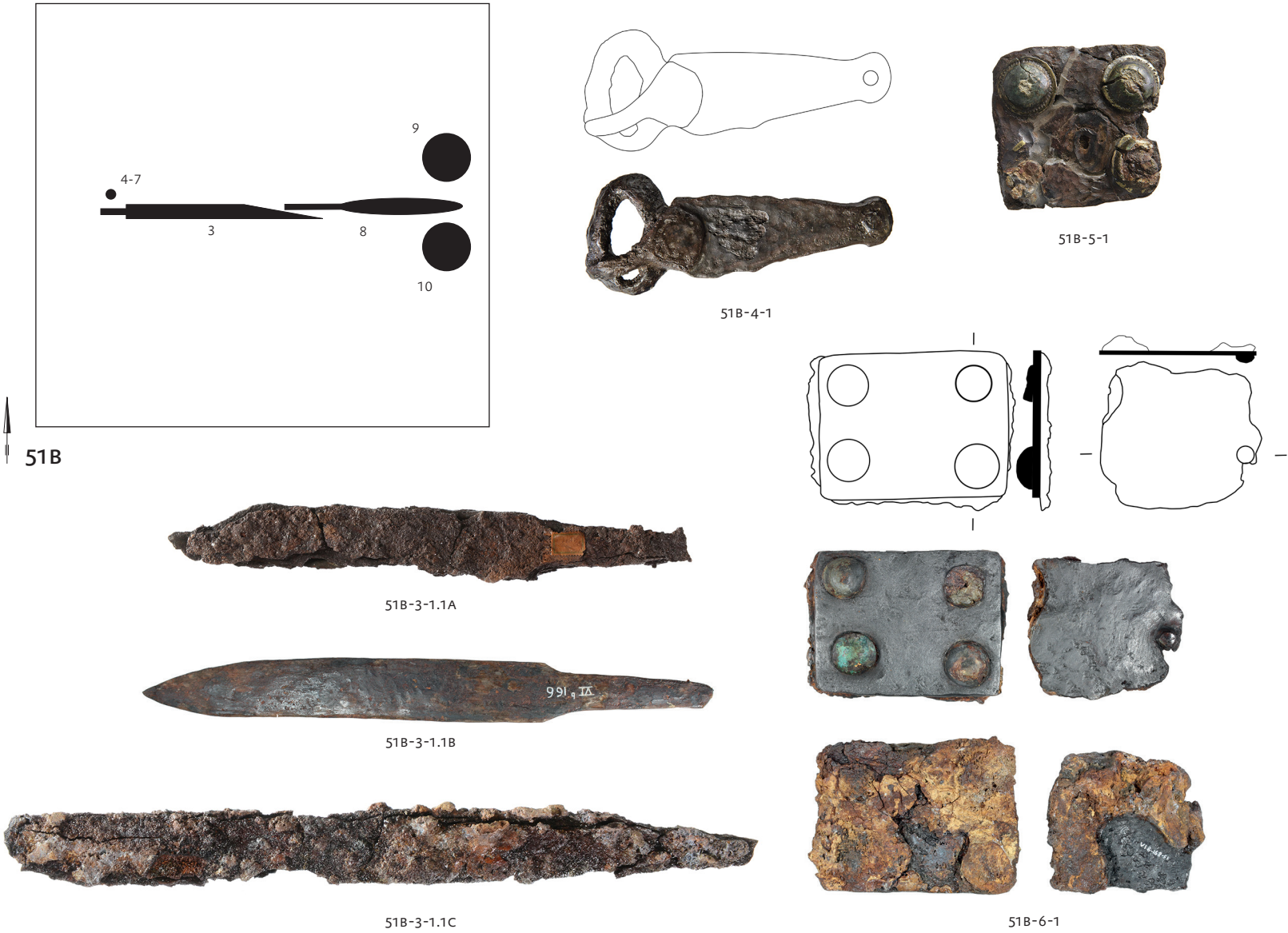
Tweezers, iron
Find number: 51-7-1
Original find number: VIB 170
Find depth: 130
Pair of iron tweezers.
Length: 10.0 cm
Type: L/P/V 322
L/P/V phases: MA2-MA3
L/P/V date: 520/30-600/10
Location: Archaeological Museum Stein
- 8

Lance head, iron
Find number: 51-8-1
Find depth: 130
Recorded length: 45.0 cm
Recorded blade width: 3.0 cm
Location: missing
- 9

Pottery, vessel?
Find number: 51-9-1
Original find number:
Find depth: 130
Red- brown spouted pot, without decoration.
Found in fragmented condition but now restored; it is a complete specimen. The pot was without find number but present as a find from Obbicht in Museum het Domein; on the basis of the descriptions in the catalogue of Beckers and Beckers it is for now assigned to this grave, but this remains uncertain.
Height: 17.0 cm
Type: Siegmund Kwt2.43
Rhineland phase: 8-9
Rhineland date: 610-670
Alternative type: FAG Kwt4A (4-7: 510/25-640/50)
Location: MuseumHet Domein in Sittard
- 10

Pottery, vessel
Find number: 51-10-1
Original find number: VIB 172
Find depth: 130
Brown-grey complete biconical pot without decoration.
Height: 10.0 cm
Type: Siegmund Kwt2.42
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Kwt4A (4-7: 510/25-640/50)
Location: Archaeological Museum Stein
- 11

Fragment, iron
Find number: 51-11-1
Fragment of a knife
Original find number: VIB 164
Location: Archaeological restoration company Restaura



52

INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	250
Grave pit width	150
Grave pit depth	120
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
O-OM IIb: 565-640/50
FAG: 565-640/50

- 1

Pottery vessel
Find number: 52-1-1
Original find number VIB 173
Fragments of a brown-grey biconical pot; approximately 50% of the original pot is present.



The decoration on the upper wall with presumably a ridge is considerably weathered and difficult to identify. It seems to be a complex roulette stamp decoration consisting of single uninterrupted lines of rectangular grids filled with small rectangular impressions of two columns and three rows, alternating with rectangular grids filled with radial lines.
Type: Siegmund Kwt3.11/3.12/3.13
Rhineland phase: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5G/5H (5-6: 565-640/50)
Location: Archaeological Museum Stein

- 2

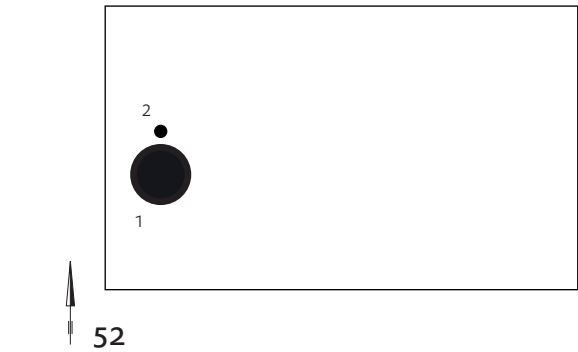
Glass, fragments
Find number: 52-2-1
Location: missing

53

INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	280
Grave pit width	260
Grave pit depth	140
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.



GRAVE DATE
O-OM I+IIc: 510/20-640/50
FAG 4-7: 510/20-640/50

FINDS

1

Shield boss, iron
Find number: 53-1-1
Original find number: VIB 174
Iron shield boss with grip; corroded boss and two rivets and fragments available.
Height: 7.5 cm
Diameter: 18.0 cm
Diameter rivets: 2.7 cm
Type: Sbu3-Sbu5
Rhineland phases: 4-8
Rhineland date: 530-640
Location: Archaeological Museum Stein

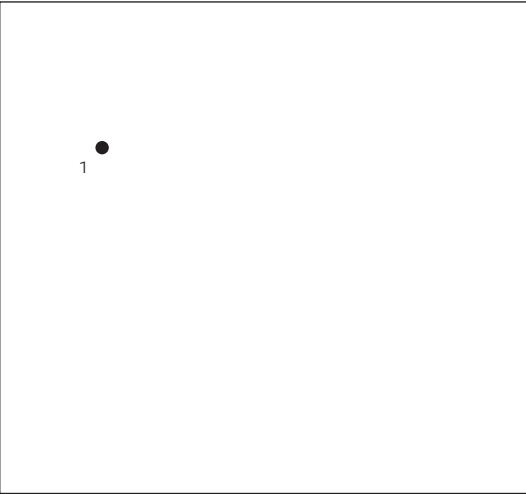
Shield boss, iron
Find number: 53-1-2
Iron shield boss fragments and rivets.
Type: Sbu3-Sbu5
Rhineland phases: 4-8
Rhineland date: 530-640
Location: Archaeological restoration company Restaura

54
INHUMATION GRAVE

Grave structure	-
Grave pit length	-
Grave pit width	-
Grave pit depth	-
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. Dimensions were not identified or recorded. The grave was without finds. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

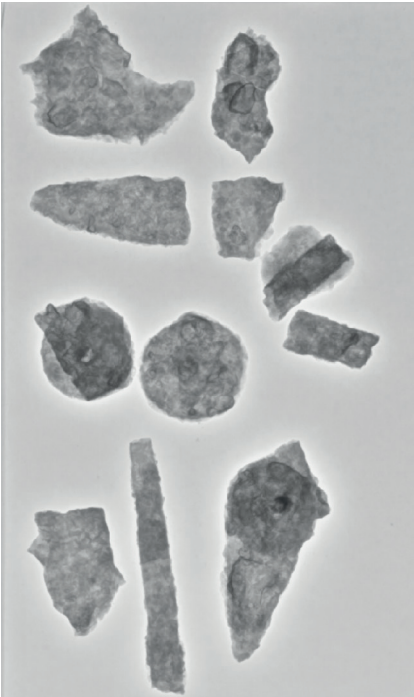
GRAVE DATE
Cannot be dated



53



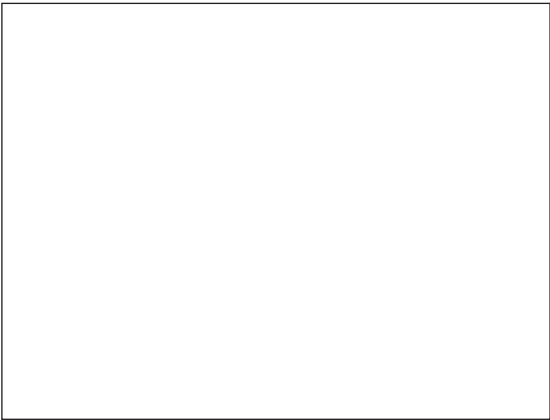
53-1-2



53-1-1



54



55

55
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	290
Grave pit width	220
Grave pit depth	170
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. It was without finds.

GRAVE DATE
Cannot be dated

56
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	290
Grave pit width	220
Grave pit depth	160
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. A dark greasy substance was discovered in the middle of the grave indicating the former presence of the further completely decomposed body.

GRAVE DATE
Cannot be dated

- FINDS**
- 1 Seax or knife, iron
Find number: 56-1-1
Original find number: VIB 175
Iron knife seax fragments.
Location: Archaeological restoration company Restaura

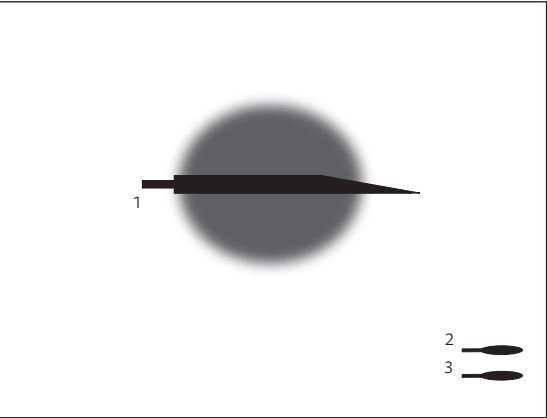
- 2 Arrow head, iron
Find number: 56-2-1
Length: 12.0 cm
Blade width: 2.0 cm
Location: missing

- 3 Arrow head, iron
Find number: 56-3-1
Length: 10.0 cm
Blade width: 2.0 cm
Location: missing

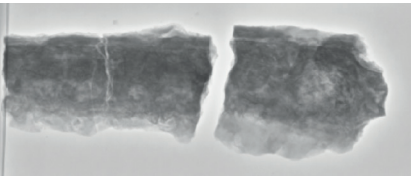
57
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	280
Grave pit width	150
Grave pit depth	150
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.



56



56-1-1

GRAVE DATE
O-OM Ilc: 610/20-640/50
FAG 5-9: 565-710

- FINDS**
- 1 Knife, iron
Find number: 57-1-1
Find depth: 80
Recorded length: 17.0 cm
Recorded blade width: 2.5 cm
Location: missing

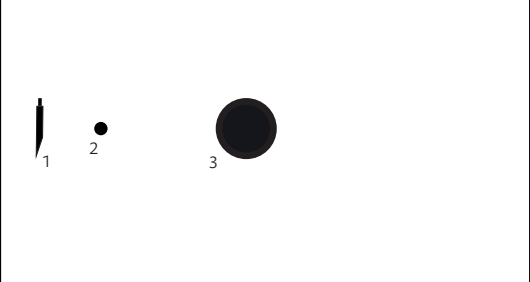
- 2 Bead, glass
Find number: 57-2-1.1
Original find number: VIB 179
Find depth: 150
Orange opaque, barrel.
Number: 1
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

- Bead, glass
Find number: 57-2-1.2
Original find number: VIB 179
Find depth: 150
Blue opaque, almond shaped.
Number: 1
Type: BO44
Location: Archaeological Museum Stein

- Bead, amber
Find number: 57-2-1.3
Original find number: VIB 179
Find depth: 150
Amber, almond shaped.
Number: 1
Type: A44
Location: Archaeological Museum Stein

- Bead, amber
Find number: 57-2-1.4
Original find number: VIB 179
Find depth: 150
Amber, irregular.
Number: 1
Type: A44
Location: Archaeological Museum Stein

- 3 Pottery vessel
Find number: 57-3-1
Original find number: VIB 180
Red globular bottle with horizontal outward folded rim. Complete, apart from some missing rim fragments.
Height: 20.0 cm
Type: Siegmund Fla1.2
Rhineland phase: 8
Rhineland date: 610-640
Alternative type: Koch Pleidelsheim Form E/G (E: SD 8 (600-620); G: SD 9 (620-650))
Alternative type: S-Fla1.1 (5-7: 565-640/50)
Location: Archaeological Museum Stein



57



57-2-1



57-3-1

58

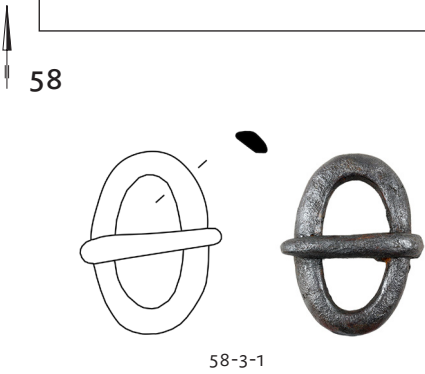
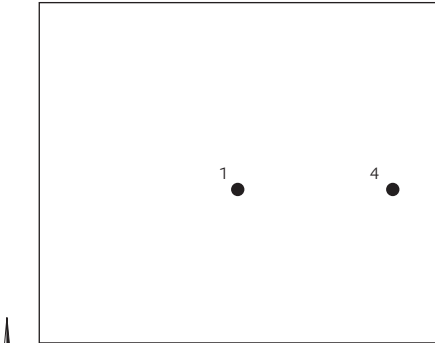
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	210
Grave pit width	180
Grave pit depth	130
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
Cannot be dated

- FINDS**
- 1 Wood remains
Find number: 58-1-1
Original find number: VIB 59?
Large wooden fragment.
Location: Archaeological restoration company Restaura
- 2 Wood remains
Find number: 58-2-1
Wood fragments.
Location: Archaeological restoration company Restaura
- 3 Buckle, iron
Find number: 58-3-1
Original find number: VIB-58
Simple buckle with oval loop, oval section, and straight simple iron tongue.
Length loop: 4.9 cm
Location: Archaeological Museum Stein



- 4 Fragment, iron
Find number: 58-4-1
Iron fragment, round.
Location: missing

59

INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	-
Grave pit width	-
Grave pit depth	-
Orientation	W-E?

DESCRIPTION
Merovingian inhumation grave. The dimensions and exact location of this grave were not recorded; it was located underneath the mills and destroyed. The indicated location, outline and orientation of this grave and the pottery vessel inside it on the original cemetery plan are not accurate.

GRAVE DATE
O-OM IIa: 565-610/20
FAG 5-8: 565-670/80

- FINDS**
- 1 Pottery vessel
Find number: 59-1-1
Fragments of a grey spouted pot with horizontal outward folded rim and decorated with multiple lines of rectangular roulette stamp impressions. Approximately 40% of the original pot is present.
Type: Siegmund Kwt3.22/3.23
Rhineland phase: end7-8



Rhineland date: c.600-640
Alternative type: FAG Kwt5B/5C (5-8: 565-670/80)
Location: Archaeological Museum Stein

- 2 Pottery vessel
Find number: 59-2-1
Original find number: VIB 184
Fragments of grey biconical pot decorated with single lines of rectangular roulette stamp impressions. Approximately 30% of the original pot is present.
Type: Siegmund Kwt3.11/3.12/3.13
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Location: Archaeological Museum Stein

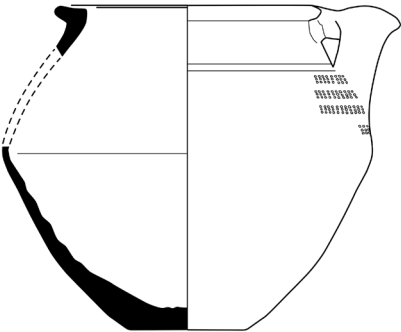
60

INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	200
Grave pit width	150
Grave pit depth	140
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. It was without finds.

GRAVE DATE
Cannot be dated



61

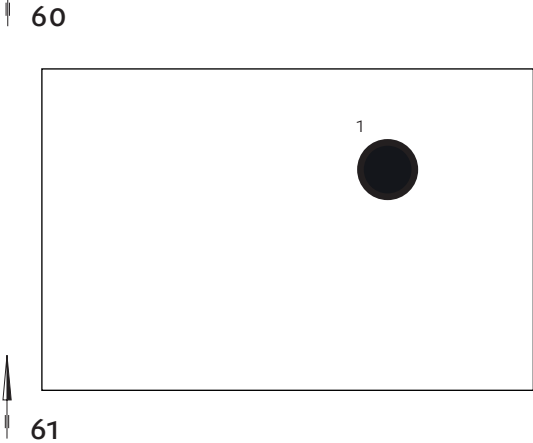
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	170
Grave pit width	260
Grave pit depth	130
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 4-7: 510/20-640/50

- FINDS**
- 1 Pottery vessel
Find number: 61-1-1
Original find number: VIB 185
Red biconical pot with rounded carination. The pot is complete apart from the weathered rim.



Height: 8.8 cm
Type: Siegmund Kwt4.2
Rhineland phase: 7
Rhineland date: 585-610
Alternative type: FAG Kwt4A (510/25-640/50)
Location: Archaeological Museum Stein

62

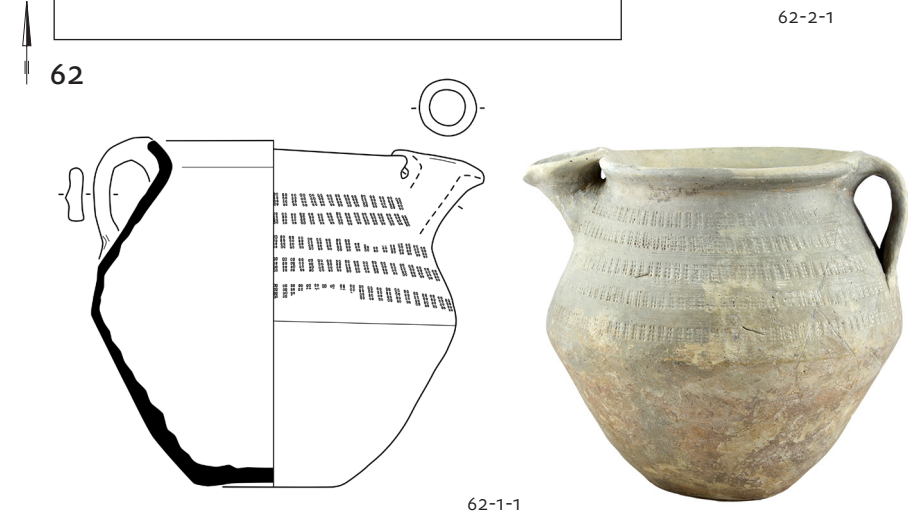
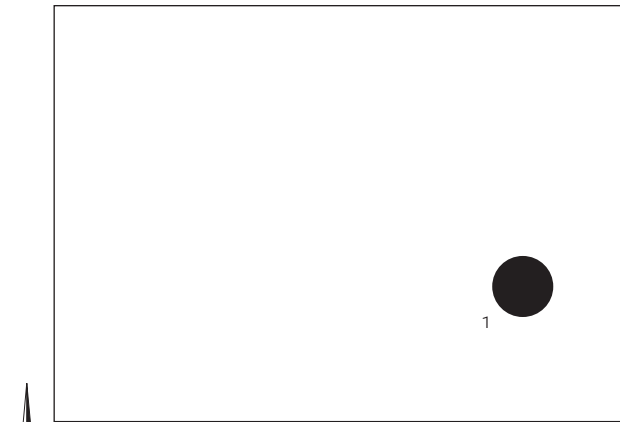
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	300
Grave pit width	220
Grave pit depth	180
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found.

GRAVE DATE
O-OM IIb: 565-640/50
FAG 5-7: 565-640/50

- FINDS**
- 1 Pottery vessel
Find number: 62-1-1
Original find number: VIB 188



Grey spouted pot with outward folded not thickened rim. The upper wall is decorated with five single lines of complex roulette stamp impressions consisting of rectangular grids of two columns and five or four rows of small rectangles; the roulette stamp seems to be uninterrupted, but might be interrupted; this is difficult to establish unambiguously. Found in fragmented condition but now restored and completed; approximately 80% of the original pot is present but the added parts are difficult to tell apart from the original parts.
Height: 17.9 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6-7
Rhineland date: 570-610
Type: Siegmund Kwt3.22
Rhineland phase: end 7-beginning 8B
Rhineland date: c.600-c.630
Alternative type: FAG Kwt5F (5-7: 565-640/50)
Alternative type: FAG Kwt5G (5-6: 565-610/20)
Location: Archaeological Museum Stein

- 2 Knife, iron
Find number: 62-2-1
Original find number: VIB 186
Fragments of an iron knife.
Location: Archaeological restoration company Restaura
- 3 Fragments, copper alloy
Find number: 62-3-1
Indeterminate copper alloy fragments.
Location: Archaeological restoration company Restaura



63

INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	240
Grave pit width	220
Grave pit depth	140
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was west-east, based on the skull fragments found close to the western wall of the grave. A black band shaped soil discoloration indicated the former location of the northern wall of a wooden container.

PHYSICAL ANTHROPOLOGY
Small fragments of the skull of a least one individual are present; they are of a woman of 18-30 years.

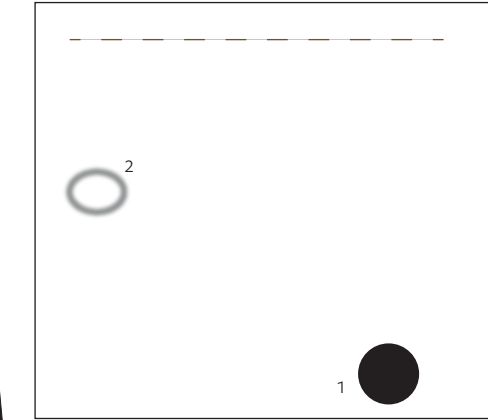
GRAVE DATE
O-OM IIa: 565-610/620

- 1
- Pottery vessel

Find number: 63-1-1

Original find number: VIB 190

Fragments of a black biconical pot; approximately 25% of the original pot is present. The fragments are decorated with single uninterrupted lines of complex roulette stamp impressions consisting of rectangular grids of two columns and two rows of small rectangles. The stamp impressions are present on a carination fragment and a rim fragment, which



63



63-1-1

seems to indicate that the entire upper wall was decorated.

Type: Siegmund Kwt3.11/3.12/3.13

Rhineland phase: 6-7

Rhineland date: 570-610

Alternative type: FAG Kwt5G (5-6: 565-610/20)

Location: Archaeological Museum Stein

- 2
- Human remains

Find number: 63-2-1

Original find number: VIB 189

Fragments of the skull and upper jawbone, and a nearly complete lower jawbone and teeth of non-adult individual recorded in the catalogue of Beckers and Beckers; now considerably fewer fragments are available; they are of a woman of 18-30 years.

Location: Archaeological Museum Stein

64

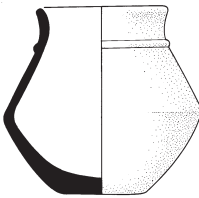
POSSIBLE INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	-
Grave pit width	-
Grave pit depth	-
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since no human remains were



64



64-1-1



64-2-1

found. The locations of the finds within the grave were not identified or recorded.

GRAVE DATE
O-OM IId: 610/20-670/80

FAG 4-7: 510/20-640/50

- 1
- Pottery vessel

Find number: 64-1-1

Original find number: VIB 191

Grey biconical pot without decoration. Found in fragmented condition but now restored and completed; approximately 70% of the original pot is present.

Height: 9.9 cm

Type: Siegmund Kwt2.42

Rhineland phase: 7

Rhineland date: 585-610

Type: Kwt2.43

Rhineland phase: 8-9

Rhineland date: 610-670

Alternative type: FAG Kwt4A (4-7: 510/25-640/50)

Location: Archaeological Museum Stein

- 2
- Pottery vessel

Find number: 64-2-1

Original find number: VIB 192

Lower part of a small red pot; approximately 30% of the original pot is present

Bottom diameter: 4 cm

Location: Archaeological restoration company Restaura

65

INHUMATION GRAVE

Grave structure	-
Grave pit length	-
Grave pit width	-
Grave pit depth	-
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The indicated location, orientation and dimensions of the grave on the original cemetery plan are incorrect since the grave was mentioned to have been found in another parcel at some distance from the cemetery. Dimensions of the grave were not given but two finds were recorded.

GRAVE DATE
O-OM I: 510/20-565

FAG 3-4: 460/80-565

- 1
- Pottery vessel

Find number: 65-1-1

Globular fine burnished beaker on a foot with a straight neck.

Height: 9.5 cm

Date: late Roman?

Location: missing
- 2
- Glass vessel

Find number: 65-2-1

Glass jug, on a stand ring, decorated with similar coloured horizontal glass threads.

Height: 13.1 cm

Type: ‘Obbicht glass jug’

Phase: early Merovingian

Date: 450-550

Location: Archaeological Museum Stein



65



65-2-1



FINDS WITHOUT FIND NUMBER OR CONTEXT INFORMATION

Nail, iron

Find number: 0-0-1

Original find number: VIB

Corroded iron nail

Location: Archaeological restoration company Restaura



0-0-1

Pottery, fragments

Find number: 0-0-2

Original find number: VIB 72A

Biconical pot fragments, probably of more than one pot. Some fragments show a interrupted complex roulette stamp decoration consisting of rectangular grids filled with two columns and four rows of small rectangular impressions.

Type: Siegmund Kwt3.21/3.22/3.23

Rhineland phase: 7-8

Rhineland date: 585-640

Alternative type: FAG Kwt5F (5-7: 565-640/50)

Location: Archaeological Museum Stein



0-0-2

Seax, iron

Find number: 0-0-3

Original find number: VIB 86/88?

Iron seax in corroded condition. The original find number is not clear, but might be VIB 88, which indicates that it belonged to either grave 31, 32 or 33. The seaxes from these graves recorded in the catalogue of Beckers and Beckers are identified, so it is not certain to which grave this seax actually belonged. It is classified as type Sax2.2 or Sax3 since its actual blade length cannot be established precisely because of its corroded condition.

Length blade: c. 45.5 cm

Width blade: c. 5.7 cm

Type: Siegmund Sax2.2 (640-705)

Type: Siegmund Sax3 (10B-11: c.685-740)



0-0-3

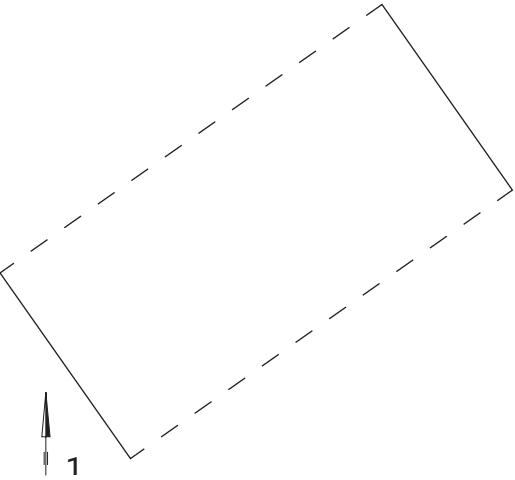
1
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit width	120
Grave pit depth	170
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The length and shape of the burial pit could not be established but it was observed that the vertical walls were straight and that the bottom consisted of a sandy clay layer of 3 cm. The grave had a grey-black greasy fill with stones. The pottery fragments were found scattered throughout the grave which may indicate that the grave was reopened.

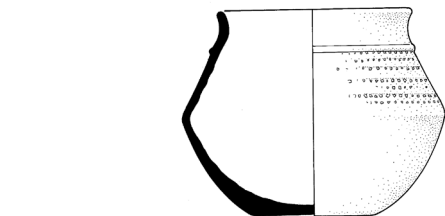
GRAVE DATE
S-GB IIb: 565-640/50
FAG 5-7: 565-640/50

- FINDS**
- 1 Pottery, fragments
Find number: 1-1-1
Various pottery fragments
Location: missing
- 2 Pottery, fragments
Find number: 1-2-1
Various pottery fragments
Location: missing

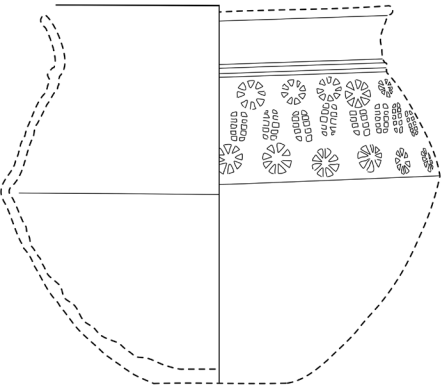


- 3 Pottery, fragments
Find number: 1-3-1
Various pottery fragments
Location: missing
- 4 Pottery, fragments
Find number: 1-4-1
Various pottery fragments
Location: missing
- 5 Pottery vessel
Find number: 1-5-1
Grey biconcial pot, restored and completed. The upper wall is decorated with three or four zones of multiple lines (two?) of irregular rectangular roulette stamp impressions. It is difficult to tell some of the added parts apart from the original; approximately 30% of the original pot seems to be present.
Height: 11.0
Type: Siegmund Kwt3.22
Rhineland phase: 8A
Rhineland date: 600-625
Type: Siegmund Kwt3.21
Rhineland phases: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Location: Archaeological Museum Stein

- 6 Pottery vessel
Find number: 1-6-1
Original find number: VIA 6
Large white-grey biconical pot, found in fragmented condition but now restored and completed. It is difficult to tell the completed and original parts of the pot apart; approximately 75% of the original pot seems to be present. The entire upper wall is decorated with three rows of single stamp impressions: the upper and lower row consist of



1-5-1



1-6-1



1-6-1

circular outlines filled with radial lines, the middle row consists of rectangular grids with rounded corners filled with two columns and five rows of small rectangular impressions.
Height: 19.9 cm
Type: Siegmund Kwt2.22
Rhineland phase: 8A
Rhineland date: 610-625
Alternative type: FAG Kwt2A (4-5: 510/20-580/90)?
Location: Archaeological Museum Stein

2
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	325
Grave pit width	140
Grave pit depth	185
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but this is not certain since no human remains were found. The burial pit seemed to be slightly oval. The grave had a grey-black greasy fill with stones. It was without finds. The trunk of a recent oak was present on top of the grave. It is suggested that the content of the grave was removed when the oak was planted.

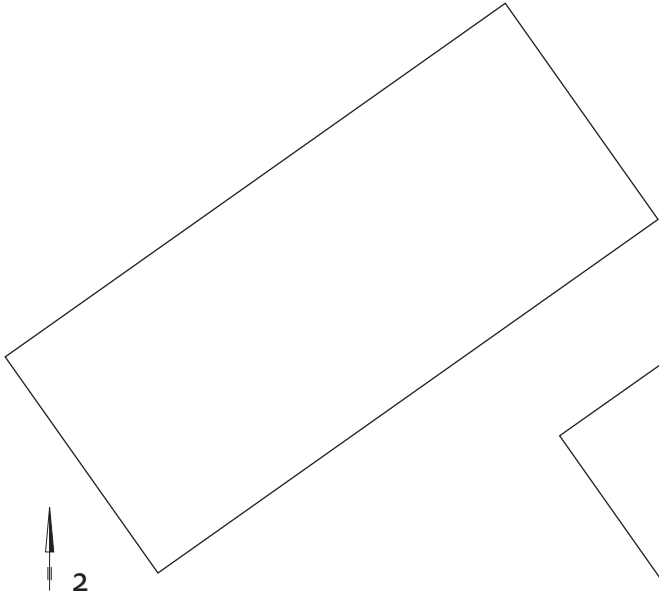
GRAVE DATE
Cannot be dated

3
INHUMATION GRAVE

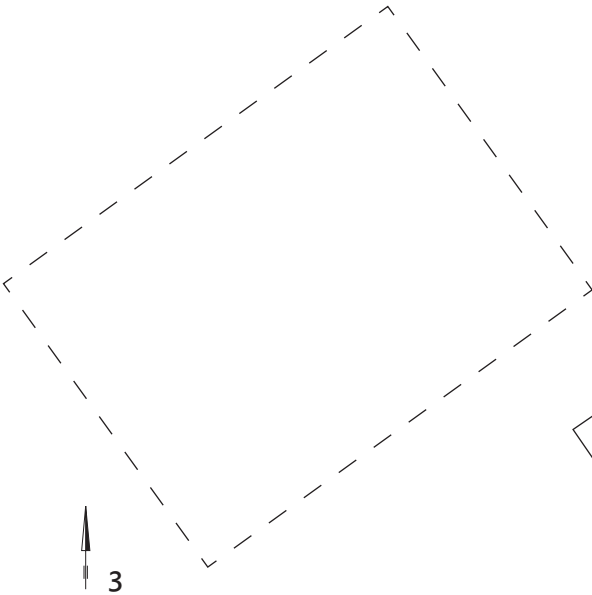
Grave structure	trench grave?
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DESCRIPTION
Merovingian inhumation grave. The dimensions and shape of the burial pit could not be recorded, but appeared to be smaller than grave 3 and 4. The grave had a grey-black greasy fill with stones. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate. The grave was without finds.

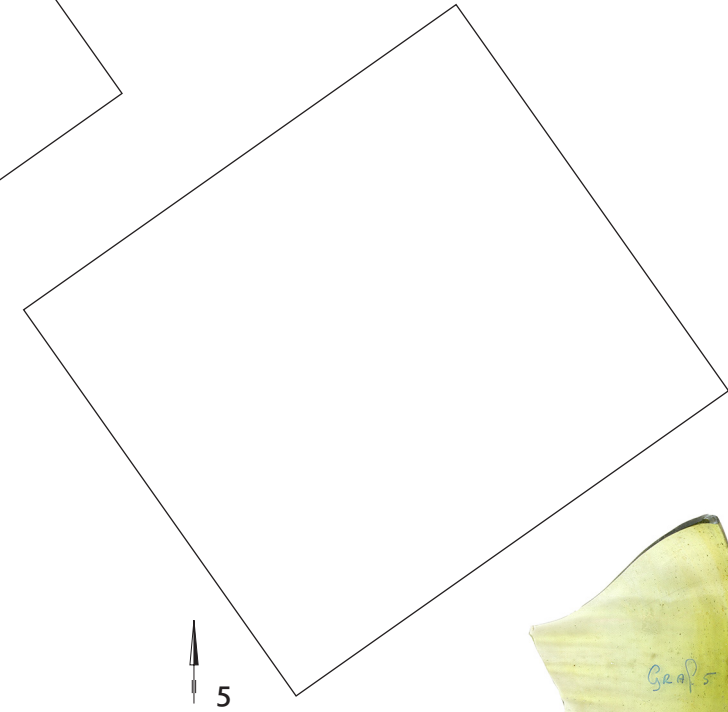
GRAVE DATE
Cannot be dated



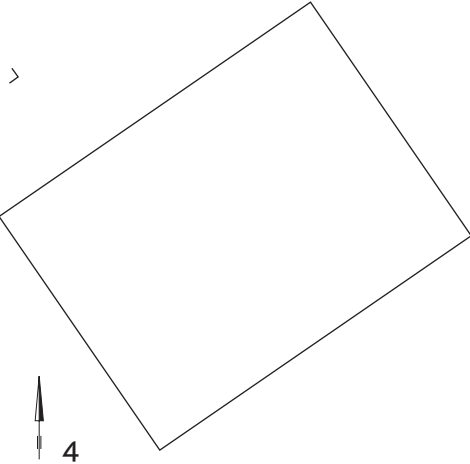
2



3



5



4

4
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	200
Grave pit width	150
Grave pit depth	180
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but this is not certain since no human remains were found. The grave has straight walls, a black greasy fill with sand and stones, and the bottom consist of a sandy clay layer. The grave is partly disturbed by a recent pit in which a chopped tree trunk was found.

GRAVE DATE
Cannot be dated

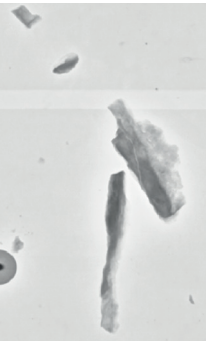
- FINDS**
- 1 Pottery vessel
Find number: 4-1-1
Terra sigillata bowl with a stand ring foot and barbotine leaf decoration.
Recorded height: 3.5 cm
Date: Roman
Location: missing

5
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	280
Grave pit width	250
Grave pit depth	120
Orientation	SW-NE



5-3-1 (SCALE 1:2)



5-4-1

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but this is not certain since no human remains were found. The grave has straight walls, a black greasy fill with sand and stones, and the bottom consist of a sandy clay layer of 3 cm.

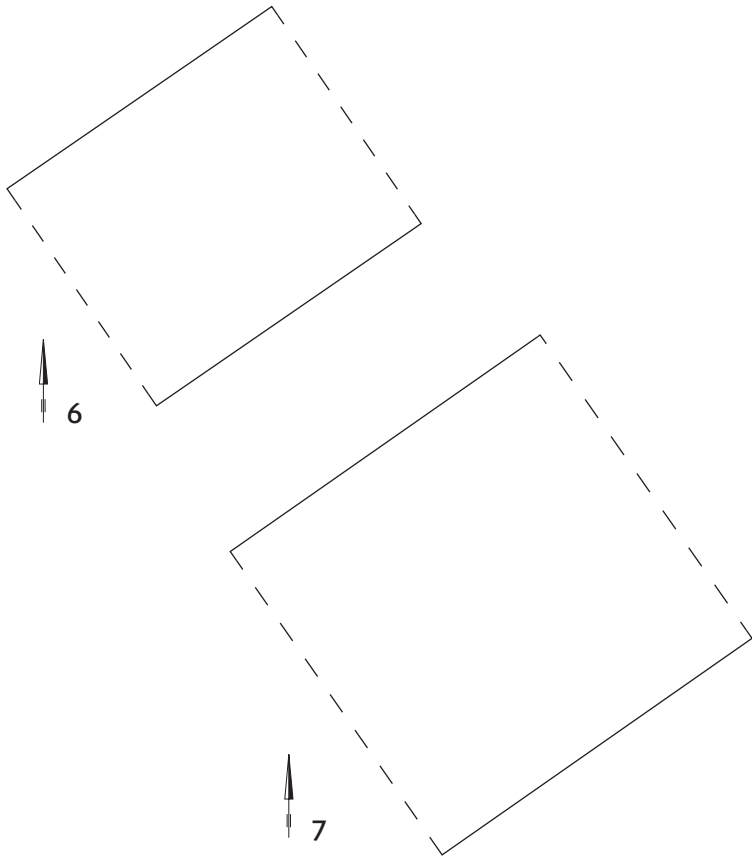
GRAVE DATE
Cannot be dated

- FINDS**
- 1

Pottery vessel
Find number: 5-1-1
Terra sigillata beaker, Dragendorff 33.
Date: Roman
Location: missing
- 2

Pottery vessel
Find number: 5-2-1
Terra sigillata beaker: foot and wall fragments
Recorded height: 5.5 cm
Date: Roman
Location: missing
- 3

Fragments, glass vessel
Find number: 5-3-1
Original find number: VIA 11
Two rim fragments of olive green glass (three were recorded in the catalogue of Beckers and Beckers) with air bubbles and faint vertical ribs of a cone beaker or bell beaker. The rim is straight and slightly thickened.
Maximum length fragments: 5.8 cm
Location: Archaeological Museum Stein



- 4

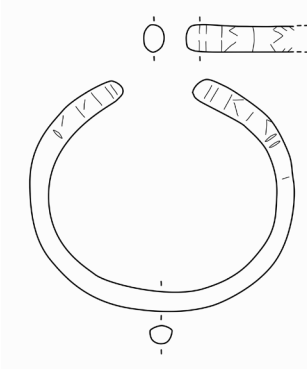
Fragments, iron
Find number: 5-4-1
Indeterminate iron fragments
Location: Archaeological restoration company Restaura

6 INHUMATION GRAVE

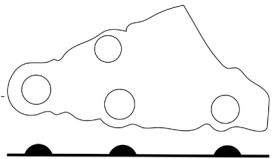
Grave structure	trench grave?
Grave pit length	170
Orientation	SW-NE?

DESCRIPTION
Merovingian inhumation grave. This grave was considerably disturbed and only traces of it were observed in the wall of the gravel extraction pit. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE
Cannot be dated



7-1-1



7-2-1

7 INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	200
Grave pit depth	90
Orientation	SW-NE?

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but this is not certain since no human remains were found. Only a small part of this grave remained but its length and depth could be established.

GRAVE DATE
S-GB IIc: 610/20-640/50
FAG 3-9: 460/80-710

- FINDS**
- 1

Bracelet, copper alloy
Find number: 7-1-1
Original find number: VIA 12
Copper alloy open bracelet with expanding extremities decorated with an engraved or cast pattern of six circular lines in between which two zones of V-shapes or triangles.
Diameter: 7.0 cm
Type: FAG S-Rng1.2
FAG phases: (5-8) 6-7
FAG date: (565-670/80) 580/90-640/50
Alternative type: Siegmund Rng1.2 (8: 610-640)
Alternative type: Wührer 2000 (JM: 600-720)
Alternative type: L/P/V 338 (MA1-MA3: 470/80-600/10)
Location: Archaeological Museum Stein

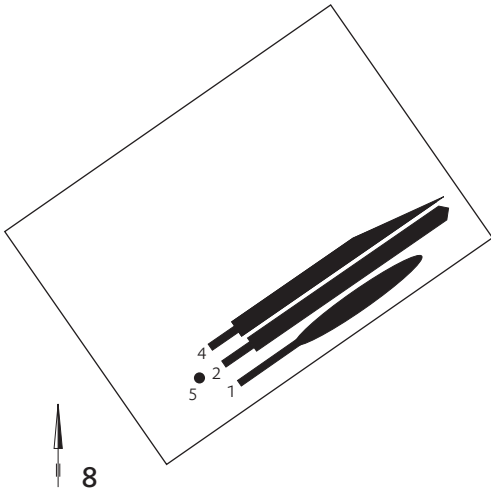
- 2

Belt fitting, iron
Find number: 7-2-1
Original find number: VIA 13
Iron counter plate or plate of plate buckle. Four (of originally five) domed iron/copper alloy rivets are present.
Length: 7.0 cm
Width: 3.4 cm
Type: Siegmund Gür4.5
Rhineland phase: 8
Rhineland date: 610-640
Location: Archaeological Museum Stein

8 INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	210
Grave pit width	150
Grave pit depth	130
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but this is not certain since no human remains were found. It was observed that the grave was already partly emptied. The locations of a considerable number of finds could nonetheless be recorded.



8-2-1.1

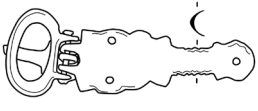
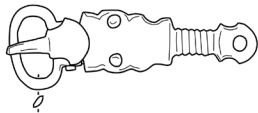
GRAVE DATE
S-GB IIc: 610/20-640/50
FAG 3-9: 460/80-710

- FINDS**
- 1

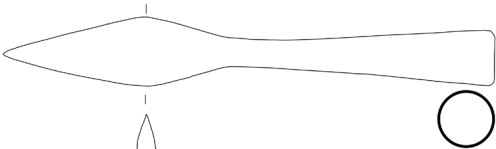
Lance head, iron
Find number: 8-1-1
Original find number: VIA 14
Iron lance head with diamond shaped blade; heavily restored.
Length: 25.9 cm
Length blade: 11.5
Type: Siegmund Lan2.2
Rhineland phases: end 7- begin 8
Rhineland date: c.600-c.625
Location: Archaeological Museum Stein
- 2

Sword, iron
Find number: 8-2-1.1
Original find number: VIA 15
Iron sword.
Length: 68.4
Length blade: 65.5 cm
Location: Archaeological Museum Stein

Sword belt fitting, copper alloy
Find number: 8-2-1.2
Original find number: VIA 20
Copper alloy plate buckle with a triangular hollow plate with undulating outline, two slightly domed copper alloy rivets, and a rod shaped extension with ribs ending in a protruding shield shaped extremity with a similar rivet. The plate was attached to the loop with a hinged construction. A major part



8-2-1.2



8-1-1



8-2-1.3

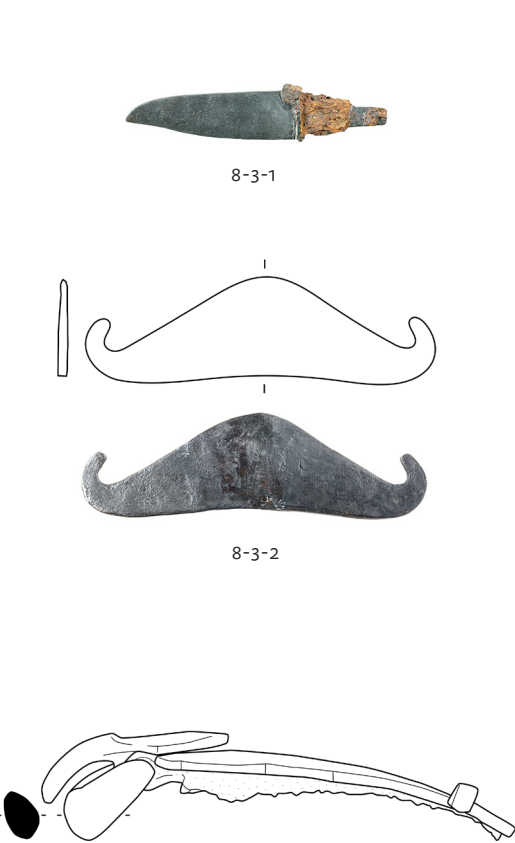
of the oval buckle loop with D-shaped section is completed.
Length plate: 4.6 cm
Width plate base: 1.5 cm
Width plate max: 1.7 cm
Length loop (reconstructed): 2.2 cm
Type: variant of Siegmund Gür3.3/3.4
Rhineland phases: 8
Rhineland date: 610-640
Location: Archaeological Museum Stein

Sword belt fitting, copper alloy
Find number: 8-2-1.3
Original find number: VIA 20
Copper alloy mount with a rectangular base, curved outline, straight extremity and two copper alloy rivets. Some leather remains are preserved underneath the rectangular base. It was found attached to the sword and in association with plate buckle 8-2-1.2. It was probably originally attached to the now completely decayed sword scabbard and fixed the sword belt to the scabbard.
Length: 5.2 cm
Width: 1.5-2.0 cm
Type: variant of Siegmund Gür3.3/3.4
Rhineland phases: 8
Rhineland date: 610-640
Location: Archaeological Museum Stein

3 Knife, iron
Find number: 8-3-1
Original find number: VIA 14
Iron knife with wood remains preserved on the iron hilt core. A small rivet was attached to the blade.
Length blade: 9.2 cm
Location: Archaeological Museum Stein

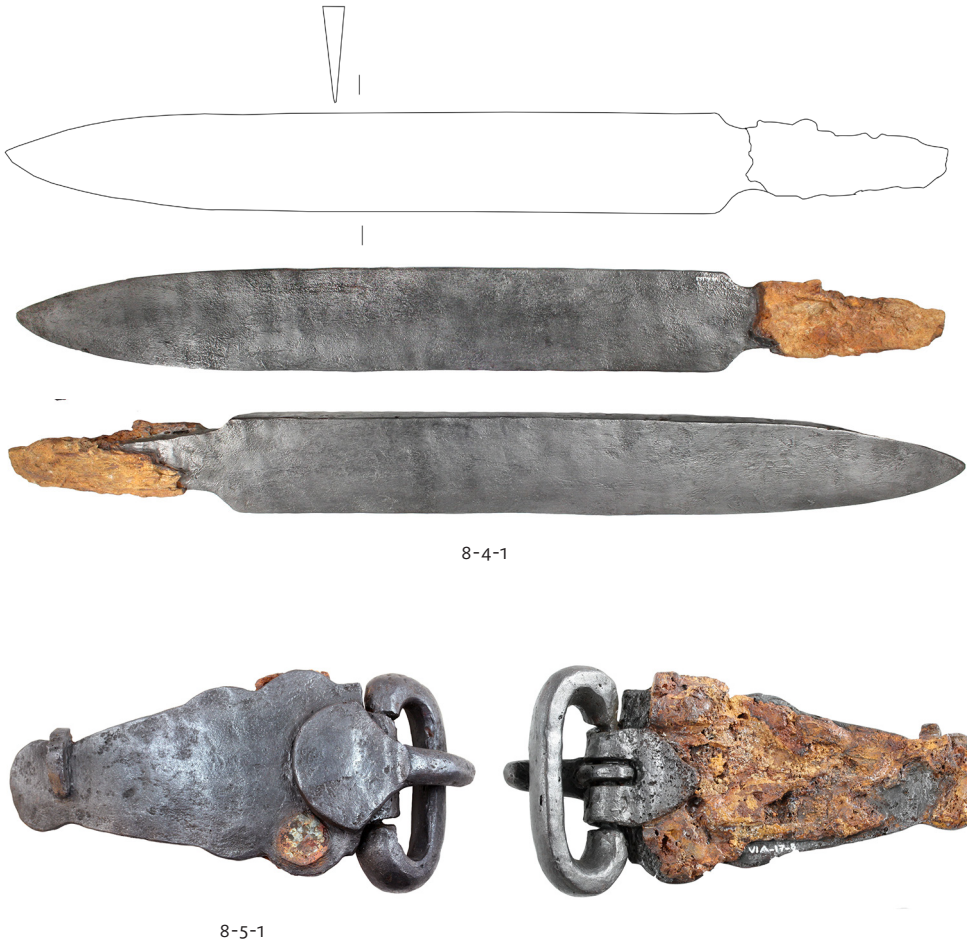
Fire steel, iron
Find number: 8-3-2
Original find number: VIA 15
Iron fire steel, triangular with curved extremities, for approximately 50% completed.
Length: 9.2 cm
Type: Siegmund Gers
Location: Archaeological Museum Stein

4 Seax, iron
Find number: 8-4-1
Original find number: VIA 16
Iron seax with wood remains preserved around the iron hilt.
Length: 48.7 cm
Length blade: 37.5 cm
Type: FAG Sax2.2
FAG phases: (6-9) end 7-8
FAG date: (580-710) 640-670/80
Alternative type: Siegmund Sax 2.2 (640-705)
Location: Archaeological Museum Stein



5 Plate buckle, iron
Find number: 8-5-1
Original find number: VIA 17
Triangular plate buckle with a plate with undulating outline and remnants of one of originally three copper alloy rivets. The plate is attached with a wrapped and slotted construction to the oval buckle loop with shield tongue. Leather remains are preserved at the back of the plate and the extremity shows a small iron remnant.
Length plate: 9.8 cm
Length loop: 6.1 cm
Type: Siegmund Gür4.5
Rhineland phase: 8
Rhineland date: 610-640
Location: Archaeological Museum Stein

Back plate, iron
Find number: 8-5-2
Original find number: VIA 18
Square iron back plate with three complete but considerably weathered rivets and remnants of the fourth. Mineralised textile/leather remains are preserved on the front and back side of the plate.
Length: 5.7 cm
Width: 4.6 cm
Type: Siegmund Gür4.5
Rhineland phase: 8
Rhineland date: 610-640
Location: Archaeological Museum Stein



Fragments, iron, decorated
Find number: 8-5-3
A number of iron fragments with copper alloy identified as parts of the belt fittings were recorded as find from this grave. They were presumably remnants of the copper alloy rivets of the plate buckle and not remnants with decorative inlays since the iron plate buckle and back plate from this grave do not show any traces of decoration.
Type: Siegmund Gür4.5
Rhineland phase: 8
Rhineland date: 610-640
Location: missing

Fragments, copper alloy
Find number: 8-5-4
Numerous copper alloy fragments (remnants belonging to the plate buckle and back plate?)
Location: missing

6 Sword (?) belt fitting, copper alloy
Find number: 8-6-1
Original find number: VIA 22
Small copper alloy plate buckle with a triangular plate with undulating outline. The pins of the rivets with domed heads are visible at the back side of the plate. The hollow loop has a trapezium cut out space forming a rod to which the shield tongue is attached as is the plate with a wrapped and slotted construction.
Length plate: 4.3 cm
Length loop: 3.0 cm
Location: Archaeological Museum Stein

Sword (?) belt fitting, copper alloy
Find number: 8-6-2
Original find number: VIA 21
Small copper alloy plate buckle with a hollow triangular plate with undulating outline and three copper alloy rivets. The plate is attached to the remnants of a buckle loop with shield tongue with a hinged construction; the dimensions of the buckle loop could not be established. Leather remains are preserved at the back of the plate.
Length plate: 4.9 cm
Type: variant of Siegmund Gür3.3/3.4
Rhineland phases: 8
Rhineland date: 610-640
Alternative type: L/P/V 138 (MR1-MR2: 600/10-660/70)
Location: Archaeological Museum Stein

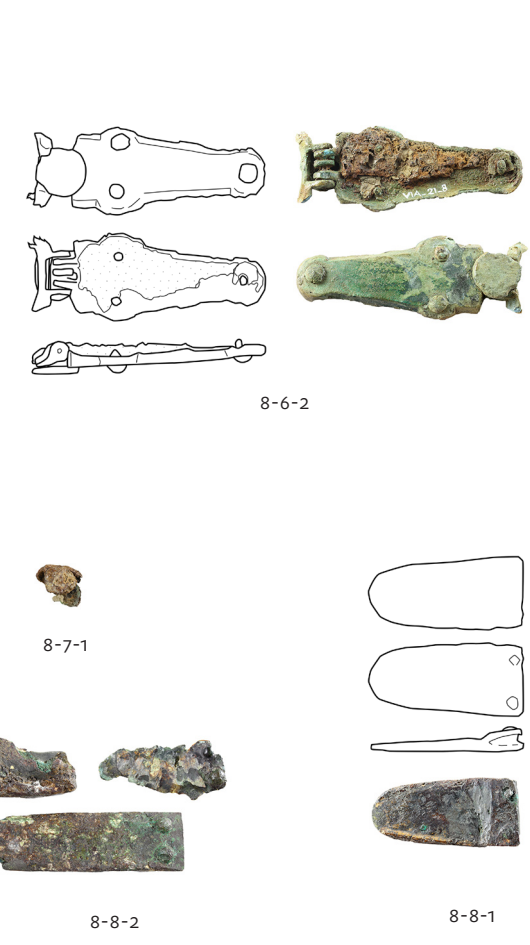
7 Fragment, copper alloy
Find number: 8-7-1
Fragment of a copper alloy rivet?
Original find number: VIA 14
Diameter: 1.3
Location: Archaeological Museum Stein

8 Strap end, iron.
Find number: 8-8-1
Original find number: VIA 19
Tongue shaped iron strap end with split base and two small copper alloy rivets.
Length: 3.9 cm
Width: 1.8 cm
Type: L/P/V 199
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein



Strap end, copper alloy
Find number: 8-8-2
Original find number: VIA 19
Tongue shaped copper alloy strap end with solid base (not split) and two small copper alloy rivets. The extremity of the strap end is gone. Two additional copper alloy fragments are associated with this find; it is not certain whether they were originally part of it.
Length: 5.4 cm
Type: L/P/V 199
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein

9 Shield boss, iron
Find number: 8-9-1
Original find number: VIA 23
Iron restored shield boss (and some additional fragments) with a slightly oblique rim, slightly oblique wall and a pronounced transition from wall to cone.
Height: 5.1 cm
Diameter: 15.2-15.9 cm
Type: Siegmund Sbu5
Rhineland phases: 8
Rhineland date: 610-640
Alternative type: Fag Sbu5A (6-9: 580/90-710)
Location: Archaeological Museum Stein



10 Glass vessel
Find number: 8-10-1
Original find number: VIA 24
Blue palm cup without decoration and with a lenticular and indented bottom and outward rolled rim. Air bubbles are visible. The vessel was found in fragmented condition but is now restored and completed. Approximately 80% of the original vessel is present.
Height: 6.6 cm
Type: Maul (2002) Tumbler B1a
Maul date: 570-680
Alternative type: Feyuex 55.0 (550-620)
Location: Archaeological Museum Stein

9
INHUMATION GRAVE

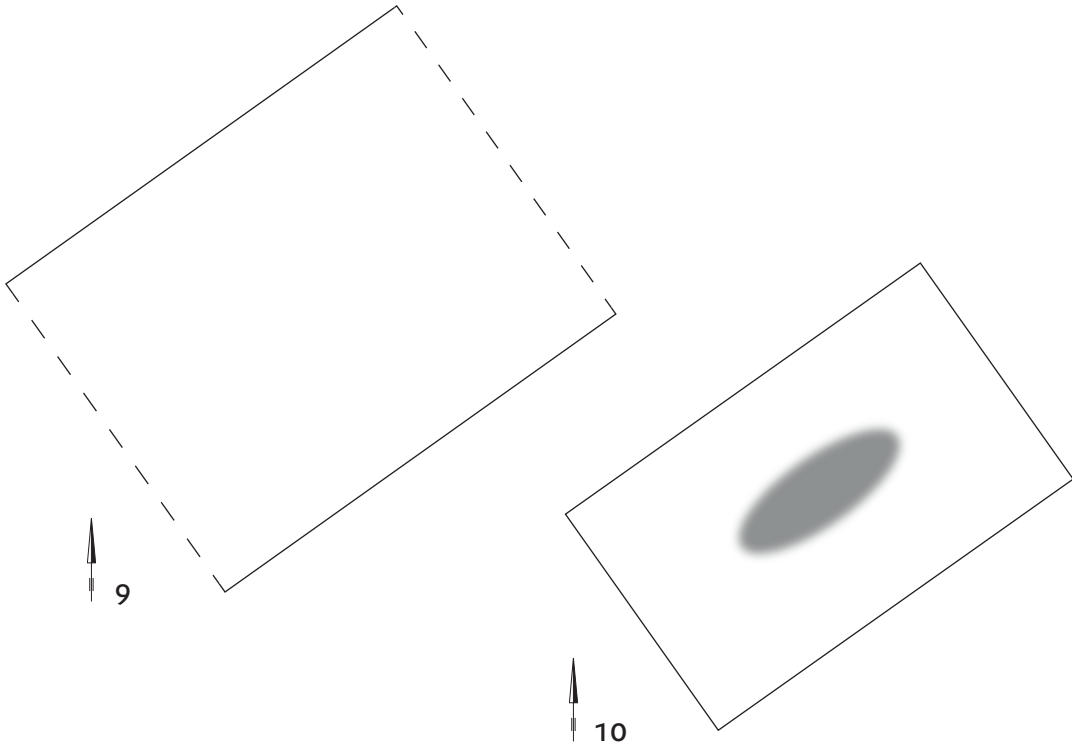
Grave structure	trench grave?
Grave pit width	200
Grave pit depth	150
Orientation	SW-NE?

DESCRIPTION
Merovingian inhumation grave. This grave was nearly completely destroyed; only the width and the depth of the burial pit could be established. The indicated outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE
Cannot be dated

10
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	230
Grave pit width	140
Grave pit depth	90
Orientation	SW-NE



DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no clear human remains were found. A brownish discoloration of the soil, indicating the former presence of a body, was recorded at a depth of 75 cm.

GRAVE DATE
Cannot be dated

11
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	120
Grave pit width	80
Grave pit depth	68
Orientation	S-N

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably south-north, but this is not certain since no human remains were found. It was observed that the grave was emptied and the original locations of the finds could not be recorded.

GRAVE DATE
S-GB IId: 610/20-670/80
FAG 6-9: 580/90-710

FINDS
1 Pottery vessel
Find number: 11-1-1
Small brown-grey pot without decoration; it is restored and completed. Approximately 80% of the original pot is present.
Height: 8 cm
Type: Siegmund Kwtz.43
Rhineland phases: 8-9
Rhineland date: 610-670
Alternative type: FAG S-Kwtz.43 (6-9: 580/90-710)
Location: Archaeological Museum Stein

2 Bead, glass
Find number: 11-2-1.1
Original find number: VIA 28
Red/brown, opaque, long cylindrical. Decoration: yellow dots.
Number: 1
Location: Archaeological restoration company Restaura

Bead, glass
Find number: 11-2-1.2
Yellow, rectangular. Decoration: red.
Location: missing

3 Brooch, copper alloy
Find number: 11-3-1
Bow of a copper alloy Roman brooch.
Length: 4.1 cm
Date: Roman; second century
Location: Archaeological Museum Stein



12
INHUMATION GRAVE

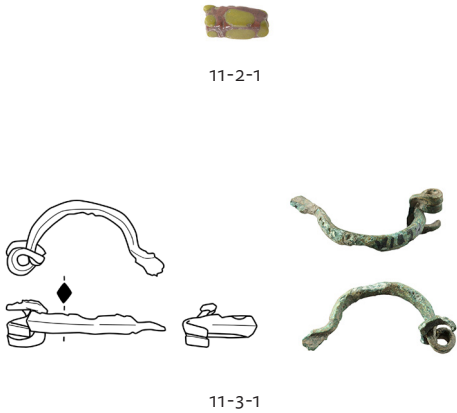
Grave structure	trench grave?
Grave pit length	220
Grave pit width	180
Grave pit depth	100
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since the imprint of the body did not leave a clear silhouette. A greasy grey substance was observed at the bottom of the grave; it might have been the body imprint referred to.

GRAVE DATE
S-GB IIa: 565-610/20
FAG 7-8: 565-610/20

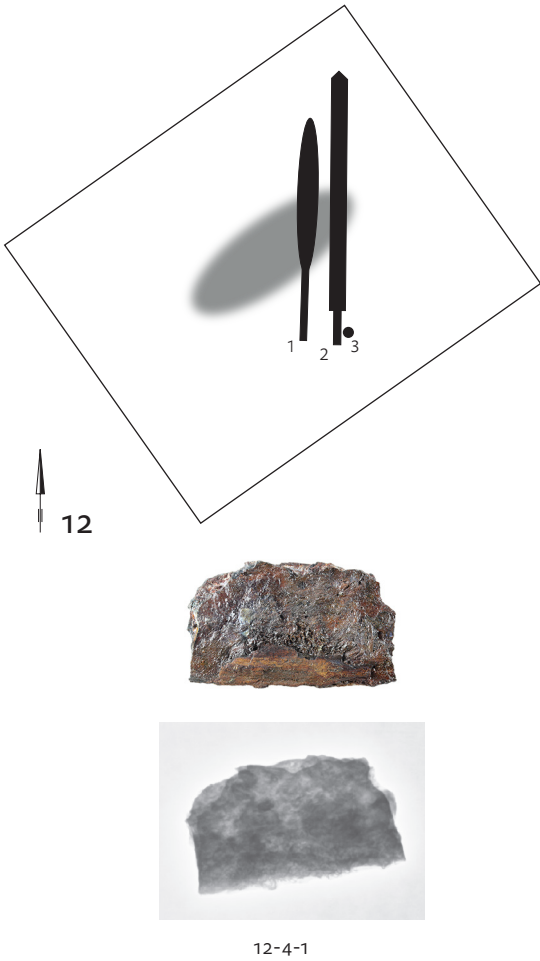
FINDS
1 Lance head, iron
Find number: 12-1-1
Find depth: 80
Recorded length: 18.0 cm
Location: missing

2 Sword, iron
Find number: 12-2-1
Iron sword.
Recorded length: 85 cm
Location: missing



3 Belt fitting, copper alloy, gilded, with wooden base plate, gold foil and garnets
Find number: 12-3-1.1
Find depth: c. 95
Copper alloy plate buckle, originally gilded, with a D-shaped hollow plate with three domed copper alloy rivets and an oval buckle loop. The plate is decorated with cut out spaces and an engraved geometric decoration of dots-in-circles on the ‘bands’ and four swastikas where the ‘bands’ cross. The locations of the cut out spaces match with the locations of the sunken fields in the wooden plate underneath it which were all originally filled with gold foil and garnet stones.
Length plate: 6.0 cm
Length loop: 5.0 cm
Type: variant of Siegmund Gür3.2b
Rhineland phase: 6
Rhineland date: 570-585
Location: Archaeological Museum Stein

Belt fitting, copper alloy, gilded, with wooden base plate, gold foil and garnets
Find number: 12-3-1.2
Original find number:
Find depth: c. 95
Copper alloy, originally gilded, rectangular hollow back plate with four copper alloy domed rivets and decorated with engraved ornaments of dots-in-circles on the ‘bands’ and seven swastika’s where the ‘bands’ cross and with fourteen cut out spaces. The locations of the cut out spaces match with the locations of the sunken fields in the wooden plate underneath it which were all originally filled with gold foil and garnet stones.



Length: 5.4 cm
Width: 3.9 cm
Type: variant of Siegmund Gür3.2b
Rhineland phase: 6
Rhineland date: 570-585
Location: Archaeological Museum Stein

Belt fitting, copper alloy, gilded, with wooden base plate, gold foil and garnets
Find number: 12-3-1.3
Original find number:
Find depth: c. 95
Copper alloy, originally gilded, rectangular hollow mount, incomplete condition, with three of originally four copper alloy rivets, and probably originally decorated with engraved ornaments similar to those on the associated belt fittings and with originally nine cut out spaces. The locations of the cut out spaces match with the locations of the sunken fields in the wooden plate underneath it which were all originally filled with gold foil and garnet stones.
Length: 3.8
Width: 3.2
Type: variant of Siegmund Gür3.2b
Rhineland phase: 6
Rhineland date: 570-585
Location: Archaeological Museum Stein



Belt fitting, copper alloy, gilded, with wooden base plate, gold foil and garnets
Find number: 12-3-1.4
Original find number:
Find depth: c. 95
Copper alloy, originally gilded, additional oval and hollow belt plate, with two copper alloy rivets and decorated with two cut out spaces. The locations of the cut out spaces match with the locations of the sunken fields in the wooden plate underneath it which are filled with gold foil and garnet stones.
Length: 3.4 cm
Width: 1.3 cm
Type: variant of Siegmund Gür3.2b
Rhineland phase: 6
Rhineland date: 570-585
Location: Archaeological Museum Stein

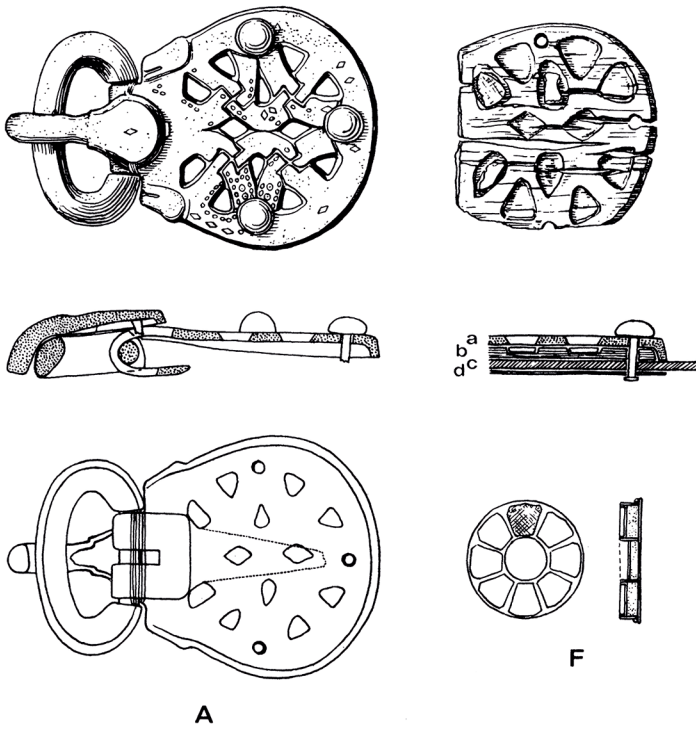
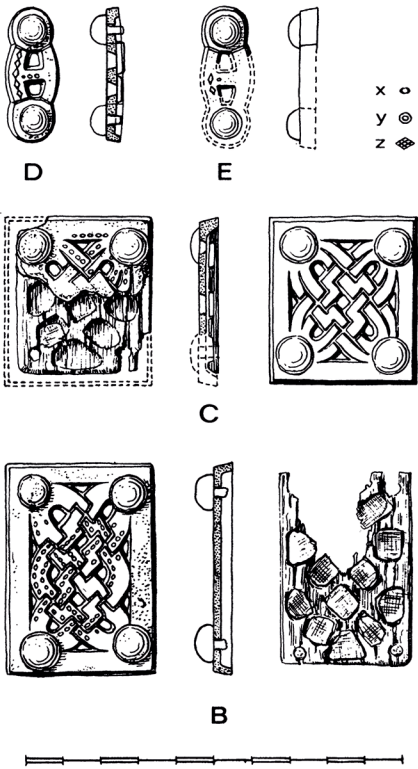
Belt fitting, copper alloy, gilded, with wooden base plate, gold foil and garnets
Find number: 12-3-1.5
Original find number:
Find depth: c. 95
Copper alloy, originally gilded, additional oval and hollow belt plate, with two copper alloy rivets and decorated with two cut out spaces. The locations of the cut out spaces match with the locations of the sunken fields in the wooden plate underneath it which are filled with gold foil and garnet stones.
Length: 3.4 cm
Width: 1.3 cm
Type: variant of Siegmund Gür3.2b
Rhineland phase: 6
Rhineland date: 570-585
Location: Archaeological Museum Stein

Fragments, iron
Find number: 12-3-1.6
Original find number:
Iron fragments, corroded (with mineralised leather?); probably part of the belt from this grave.
Location: Archaeological Museum Stein

Wood fragments
Find number: 12-3-1.7
Numerous wood fragments, probably of the base plates of the belt fittings form this grave.
Location: Archaeological Museum Stein

4 Fragment, iron
Find number: 12-4-1
Original find number: VIA 29
Indeterminate iron fragment with wood remains.
Length: 5.5 cm
Location: Archaeological Museum Stein

5 Fragment, iron
Find number: 12-5-1
Original find number: VIA 30
Three indeterminate iron fragments, of which one is triangular and one seems to be the hilt of a knife. They might be all fragments of a knife.
Length hilt: 6.4 cm
Length triangular fragment: 6.1 cm
Length small fragment: 3.0 cm
Location: Archaeological Museum Stein



13 INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	85
Grave pit width	60
Grave pit depth	120
Orientation	SW-NE

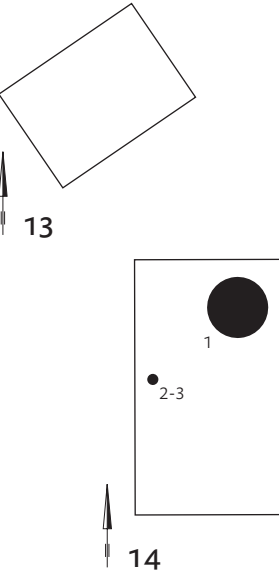
DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The burial pit has an irregular outline and a grey greasy fill.

GRAVE DATE
Cannot be dated

14 INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	135
Grave pit width	77
Grave pit depth	64
Orientation	S-N

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found.

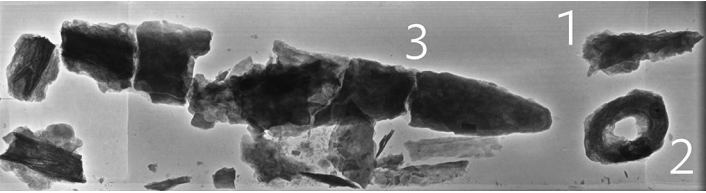
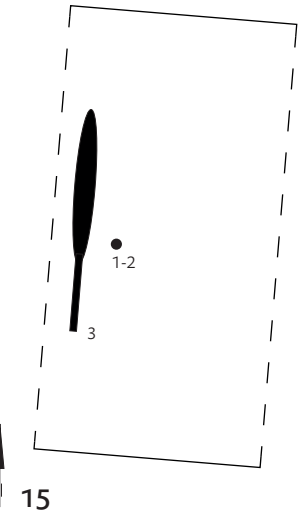


GRAVE DATE
S-GBIID: 610/20-670/80
FAG 7-10: 610/20-725

FINDS
1 Pottery vessel
Find number: 14-1-1
Original find number: VIA 36
Grey globular pot of coarse ware with sand and volcanic inclusions. Broken but restored; the pot is complete.
Height: 10 cm
Type: globular pots (seventh century)
Date: 600- >700
Location: Archaeological Museum Stein

2 Belt fitting, iron
Find number: 14-2-1
Iron buckle.
Recorded (maximum) length: 7 cm
Recorded (maximum) width: 4 cm
Location: missing

3 Rivets, copper alloy
Find number: 14-3-1
Original find number:
The remnants of two copper alloy rivets; found underneath the belt fitting, in corroded and fragmented condition.
Location: missing



15 INHUMATION GRAVE

Grave structure	trench grave?
Grave pit width	120
Grave pit depth	120
Orientation	S-N

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. The grave was disturbed and its length and the locations of the finds could not be established. At a depth of 90 cm the dirty grave fill with pebbles changed into a greasy light grey clay fill. Remnants of a coffin or skeleton were not observed.

GRAVE DATE
Cannot be dated

FINDS
1 Fire steel, iron
Find number: 15-1-1
Iron fire steel recorded as find in Beckers and Beckers; it is not certain whether the available fragments are of a fire steel or knife.
Type: Siegmund Ger5
Location: missing /Archaeological restoration company Restaura

2 Indeterminate object, iron
Find number: 15-2-1
Round iron object with a hole in the middle, found near the western wall of the grave.
Location: Archaeological restoration company Restaura

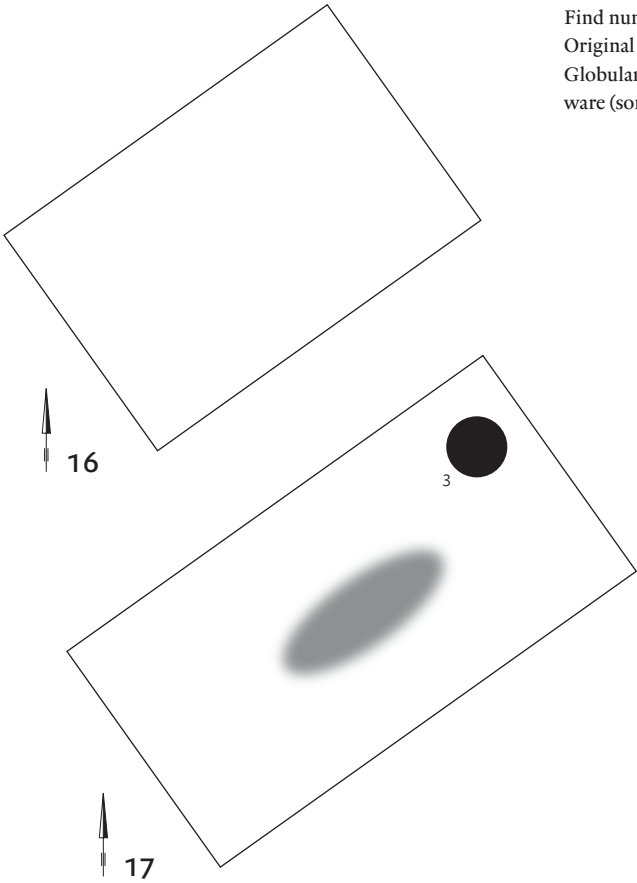
3 Lance head, iron
Find number: 15-3-1
Original find number: VIA 40
Iron lance head; fragments, preserved in articulated position. First identified as a seax in the catalogue of Beckers and Beckers.
Length articulated fragments: 27.0 cm.
Recorded length: 22.0 cm
Location: Archaeological restoration company Restaura

16
INHUMATION GRAVE

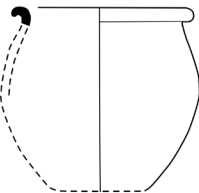
Grave structure	trench grave?
Grave pit length	210
Grave pit width	140
Grave pit depth	100
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably west-east, but we cannot be certain of this since no human remains were found. At a depth of 70 cm the dirty fill with pebbles changed into a greasy light grey clay fill. Finds and remnants of a coffin or skeleton were not observed.

GRAVE DATE
Cannot be dated



17-1-1



17-3-1

17
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	270
Grave pit width	140
Grave pit depth	100
Orientation	SW-NE (60)

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since the imprint of the body found at a depth of 80 cm did not leave a clear silhouette. The find of rivets in the upper fill of the grave might indicate that the grave was reopened.

GRAVE DATE
S-GB IId: 610/20-670/80
FAG 7-10: 610/20-725

FINDS

- 1 Rivet, copper alloy
Find number: 17-1-1
Original find number: VIA 43
Copper alloy rivets found in the upper fill of the grave.
Location: missing/one in Archaeological restoration company Restaura
- 2 Fragments, iron
Find number: 17-2-1
Two indeterminate iron fragments found in the lower part of the grave.
Location: missing
- 3 Pottery vessel
Find number: 17-3-1
Original find number:
Globular pot, dark grey, baked hard, semi-coarse ware (some gravel inclusions and maybe volcanic

inclusions), with a considerably weathered surface. Approximately 70% of the original pot is present, the rest is completed.
Height: 10.0 cm
Belly diameter: 10.5 cm
Type: globular pots (seventh century)
Location: Archaeological Museum Stein

18
INHUMATION GRAVE

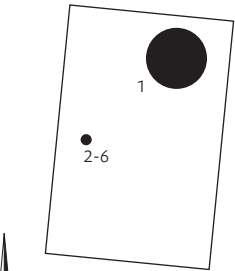
Grave structure	trench grave?
Grave pit length	132
Grave pit width	87
Grave pit depth	70
Orientation	S-N

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably south-north, but we cannot be certain of this since no human remains were found. It was located to the east and at some distance from the other graves in an adjacent parcel.

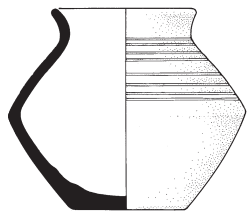
GRAVE DATE
S-GB I+IIa: 510/20-610/20
FAG 4-8: 510/20-670/80

FINDS

- 1 Pottery vessel
Find number: 18-1-1
Biconical pot of fine to coarse ware, found as complete specimen. The upper wall is decorated with seven prominent grooves; a zone of four grooves underneath the neck and a zone of three grooves on the middle of the upper wall.
Height: 10.5 cm
Type: Siegmund Kwtz.32
Rhineland phases 4-5



18



18-1-1

Rhineland date: 530-570
Alternative type: FAG Kwt3A (4-5 (6): 510/20-580/90 (580/90-610/20))
Location: Archaeological Museum Stein

- 2 Belt fitting, iron
Find number: 18-2-1
Original find number: VIA 45
Square iron plate (back plate?), corroded condition.
Type: Siegmund Gür4.10 (square back plate)
Rhineland phases: 8B-9
Rhineland date: 625-670
Location: Archaeological restoration company Restaura

- 3 Rod, iron
Find number: 18-3-1
Seems to be the socket of an arrow head, present in corroded condition
Location: Archaeological restoration company Restaura

- 4 Simple ring, iron
Find number: 18-4-1
Iron fragment with a hole; appears to be a simple iron ring on X-ray photo. The catalogue of Beckers and Beckers mentions that a copper alloy mount was found on top of it; this find is not present in the collection.
Type: L/P/V 357
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: Archaeological restoration company Restaura

- 5 Fragments, copper alloy
Find number: 18-5-1
Copper alloy fragments.
Location: Archaeological restoration company Restaura



18-2, 3, 4, 5, 6

- 6 Buckle, iron
Find number: 18-6-1
Original find number: VIA 48
Iron buckle (buckle of plate buckle?).
Maximum length: c. 3.5 cm
Type: Siegmund Gür4.10 (associated with 18-2-1?)
Rhineland phases: 8B-9
Rhineland date: 625-670
Location: Archaeological restoration company Restaura

19
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	340
Grave pit width	230
Grave pit depth	170
Orientation	SW-NE (65)

DESCRIPTION
Merovingian inhumation grave. The grave's southwest-northeast orientation is identified on the basis of black soil discolorations showing one clear body silhouette. The upper part of the grave consisted of a dirty fill with pebbles which changed into a greasy light grey clay fill at a lower level. A black soil discoloration was observed at a depth of 120 cm near the long south-eastern wall of the grave; a similar discoloration was found at a depth of 125 in the middle of the grave. The rest of the grave was deepened with a trowel. At a depth of 130 cm the discoloration in the middle of the grave became larger showing the silhouette of a body of which the head, chest and legs could be discerned. The length of the silhouette was 210 cm and its largest width 92 cm. A smaller soil discoloration became apparent along the long south-eastern wall and 23 cm from the first identified silhouette; it had a length of 95 cm and

its largest width was 38 cm. A clear body silhouette could not be identified. These soil discolorations might indicate that it was a double grave of an adult and child. The soil discolorations were gone at a depth of 150 cm. Dark grey band shaped traces left by the walls of a wooden container were also observed; the outline of the container had a length of 265 cm and a width of 170 cm. A vertical section showed that the container was narrower at its bottom. The fill bordered by the band shaped soil discoloration was clearly different from its surroundings. It was observed that the ground was disturbed till a depth of 170 cm, which might indicate the former presence of beams on which the wooden container was placed (as we know them from other cemeteries with chamber and coffin graves).

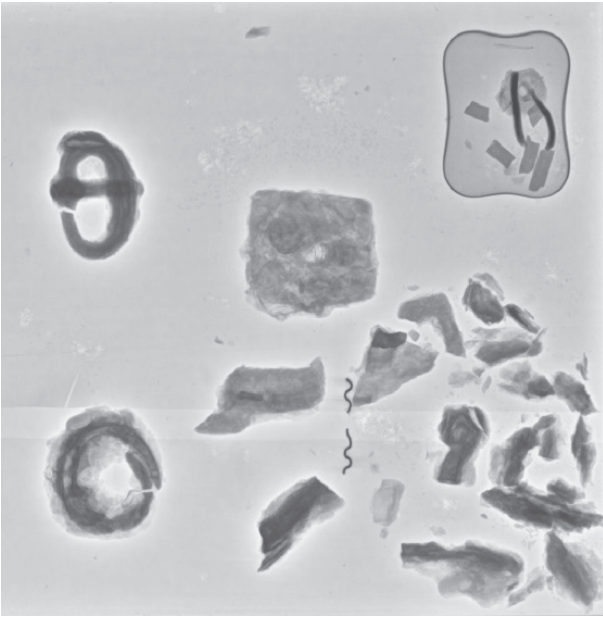
GRAVE DATE
Cannot be dated

FINDS

- 1 Bead, glass
Find number: 19-1-1.1
Find depth: 170 cm
Blue-white.
Number: 1
Location: missing

Beads, glass
Find number: 19-1-1.2
Find depth: 170 cm
Yellow.
Number: 2
Location: missing

Bead, glass
Find number: 19-1-1.3
Find depth: 170 cm
Yellow, with fine copper alloy threads.
Number: 1
Location: missing



2 Pottery vessel
Find number: 19-2-1
Original find number: VIA 50
Find depth: 170 cm
Fragments of a grey pot.
Location: Archaeological Museum Stein

20
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	225
Grave pit width	105
Grave pit depth	76
Orientation	SW-NE (60)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The upper part of the grave consists of a dirty fill with pebbles changing into a greasy light grey clay fill at a lower level. A greasy black soil discoloration, presumably indicating the former presence of a body, was observed in the middle of the grave.

GRAVE DATE
Cannot be dated

21
INHUMATION GRAVE

Grave structure	wooden container grave?
Grave pit length	335
Grave pit width	265
Grave pit depth	170
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s southwest-northeast orientation is identified on the basis of two body silhouettes. Since the dimensions of this grave were in the field identified as comparable to those of grave 19, it was decided to dig a trench along the grave in order to determine its depth. A black greasy and shiny discoloration was observed at a depth of 110 cm. The grave was further deepened with a trowel. The discolorations became bigger and at a depth of 140 cm the contours of the heads and chests of two bodies next to one another became visible. The legs became visible at a depth of 150 cm. The two body silhouettes had a length of 200 cm, and the largest width (where the bodies touched) was 143 cm. The heads had a length of 37 cm; one had a width of 30 cm the other a width of 23 cm. The space in between the heads was 10 to 20 cm. At the location of the breast four large stones were observed, but their significance is not obvious since the ground is rich in pebbles. Band shaped soil discolorations were observed along one of the short walls at a depth of 155 cm and along one of the long walls at a depth of 160 cm (it was not indicated along which walls precisely): their connection could not be established but they might indicate the former presence of a wooden container. The grave was without finds.

GRAVE DATE
Cannot be dated

22
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	115
Grave pit width	100
Grave pit depth	80
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since the body imprint did not leave a clear silhouette. A dark rectangular soil discoloration was observed in the middle of the grave, 20 cm from the (short?) walls; it was formed by the decayed coffin and body.

GRAVE DATE
S-GB IIa: 565-610/20
FAG 4-10: 510/20-710

FINDS
1 Pottery vessel
Find number: 22-1-1
Original find number: VIA 54
Grey biconical pot without decoration; the single relatively deep and broad groove just beneath the neck is not identified as a decorative element of the pot. The pot is complete.
Height: 8.5 cm
Type: Siegmund Kwt2.42
Rhineland phases: 7
Rhineland date: 585-610
Alternative type: FAG Kwt4A (4-7: 510/25-640/50)
Location: Archaeological Museum Stein

2 Bead, glass
Find number: 22-2-1.1
Original find number: VIA 53
Blue, opaque, stretched biconical.
Number: 1
Type: BO26
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.2
Original find number: VIA 53
Blue, transparent, cylindrical twisted.
Number: 2
Type: BT29 / S-from group 47.4
Kombinationsgruppe: (F) H-I
Rhineland phases: (5-9) 8-10
Rhineland date: (555-670) 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.3
Original find number: VIA 53
White, opaque, cylindrical twisted.
Number: 4
Type: WO29 / S-from group 47.4
Kombinationsgruppe: (F) H-I
Rhineland phases: (5-9) 8-10
Rhineland date: (555-670) 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.4
Original find number: VIA 53
Yellow, opaque, cylindrical twisted.
Number: 1
Type: YO29 / S-from group 47.4
Kombinationsgruppe: (F) H-I
Rhineland phases: (5-9) 8-10
Rhineland date: (555-670) 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.5
Original find number: VIA 53
Number: 8
Blue, opaque, globular compressed.
Type: BO18
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.6
Original find number: VIA 53
Number: 3
Red, opaque, cylindrical twisted.
Type: RO29 / S-from group 47.4
Kombinationsgruppe: (F) H-I
Rhineland phases: (5-9) 8-10
Rhineland date: (555-670) 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.7
Original find number: VIA 53
Number: 2
Black, opaque, cylindrical twisted.
Type: BLO29 / S-from group 47.4
Kombinationsgruppe: (F) H-I
Rhineland phases: (5-9) 8-10
Rhineland date: (555-670) 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.8
Original find number: VIA 53
White, opaque, cylindrical, double connected.
Decoration: red waves.
Number: 1
Type: WO25 / S-Per 32.2
Kombinationsgruppe: H-I
Rhineland phase: 8-10
Rhineland date: 610-705
Location: Archaeological Museum Stein

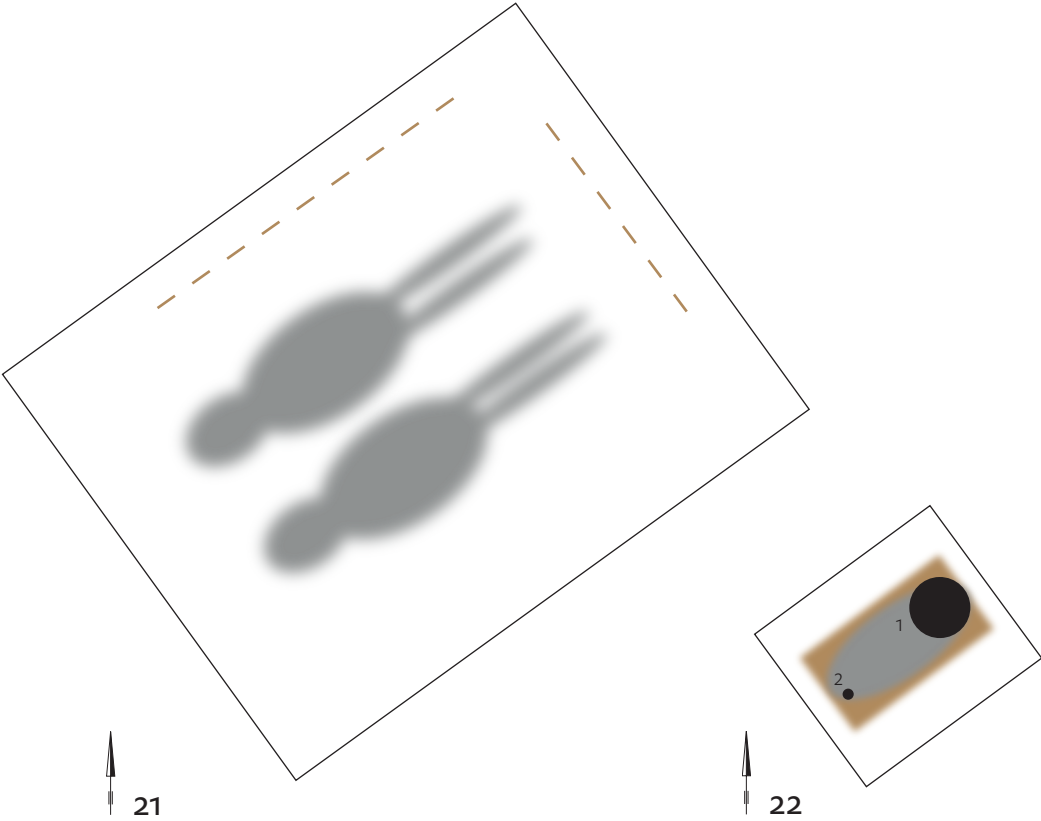
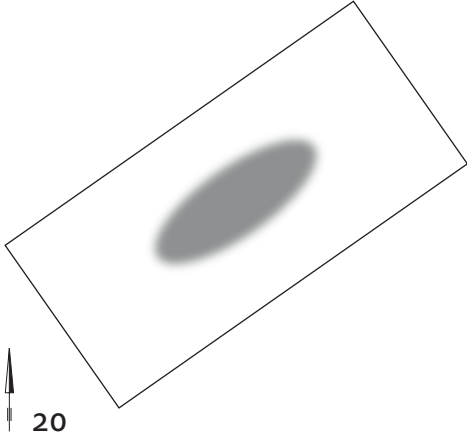
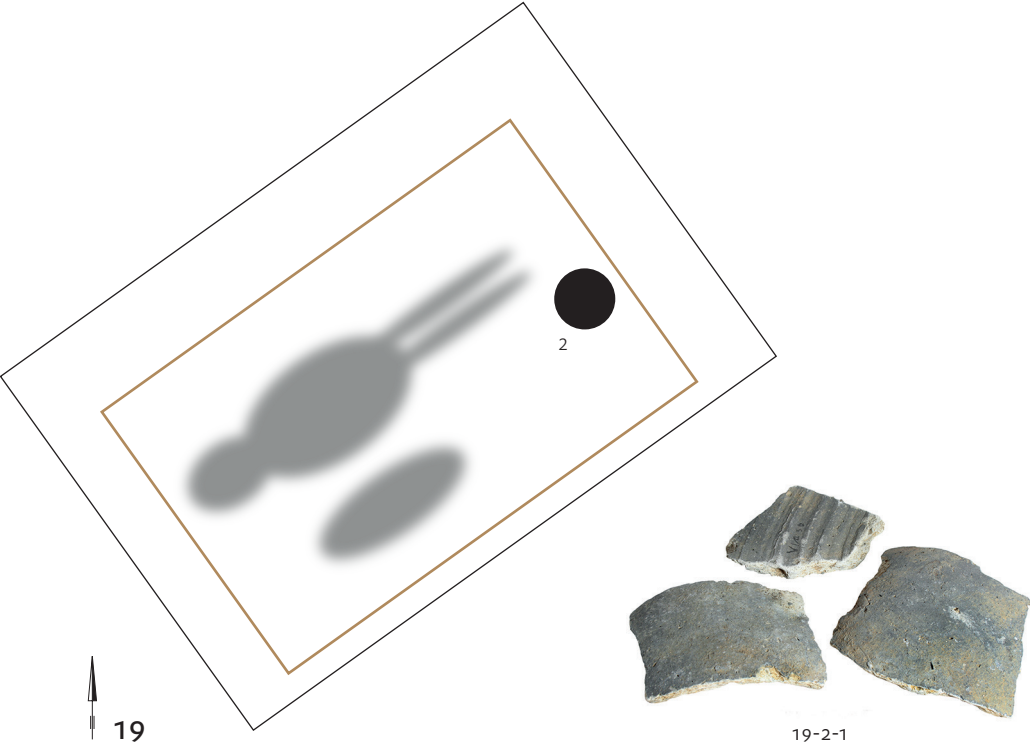
Bead, glass
Find number: 22-2-1.9
Original find number: VIA 53
Red, opaque, cylindrical, double connected.
Decoration: white waves.
Number: 2

Type: RO25 / S-Per 35.7
Kombinationsgruppe: H
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.10
Original find number: VIA 53
Red, opaque, long cylindrical. Decoration: yellow bands.
Number: 1
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.11
Original find number: VIA 53
White, opaque, globular compressed, double connected. Decoration: blue waves.
Number: 2
Koch-Schretzheim 1977; K-S: 34,7
Schretzheim phase: 4
Schretzheim date: 590/600-620/30
Alternative type: S-Per32.6 (Kombinationsgruppe F-H: 555-705)
Alternative type: S-Per32.7 (Kombinationsgruppe E-H: 530-705)
Location: Archaeological Museum Stein

Bead, glass
Find number: 22-2-1.12
Original find number: VIA 53
Yellow, opaque, small globular compressed.
Number: 2
Type: YO30 / S-Per 33.3
Kombinationsgruppe: D-H
Rhineland phases: 3-10
Rhineland date: 485-705
Location: Archaeological Museum Stein



Bead, glass
Find number: 22-2-1.13
Original find number: VIA 53
Green, opaque, cylindrical.
Number: 1
Type: GO11
Location: Archaeological Museum Stein

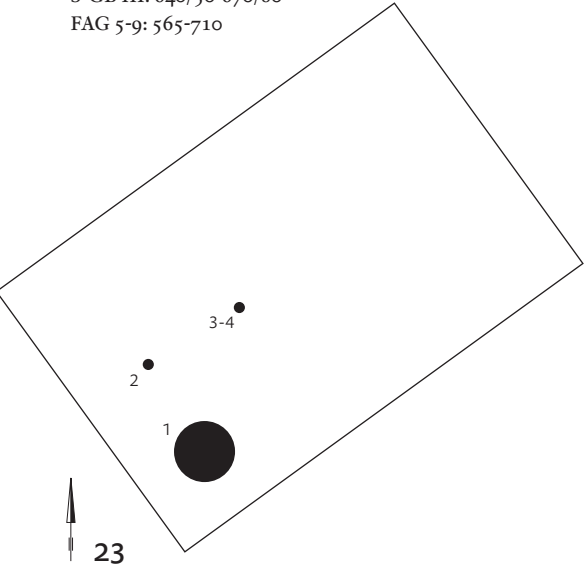
Bead, glass
Find number: 22-2-1.14
Original find number: VIA 53
Bluc, opaque, globular compressed, triple connected.
Number: 1
Type: BO24
Location: Archaeological Museum Stein

23
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	260
Grave pit width	170
Grave pit depth	80
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found.

GRAVE DATE
S-GB III: 640/50-670/80
FAG 5-9: 565-710



23-1-1

FINDS
1 Pottery vessel
Find number: 23-1-1
Original find number: VIA 54
Biconical pot with a black grey wall surface and red brown core, found in fragmented and incomplete condition but is now restored and completed for approximately 30%. The upper wall is decorated with single lines of rectangular roulette stamp impressions covering nearly the entire surface.
Height: 11.3 cm
Type: Siegmund Kwt3.11
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Location: Archaeological Museum Stein

2 Bead, glass
Find number: 23-2-1.1
Original find number: VIA 55
Blue, transparent, cylindrical twisted.
Number: 3
Type: BT29 / S-47.4
Kombinationsgruppe: (F) H-I
Rhineland phases: (5-9) 8-10
Rhineland date: (555-670) 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 23-2-1.2
Original find number: VIA 55
Green, opaque, barrel.
Number: 1
Type: GO19 / S-Per 36.2
Kombinationsgruppe: (F-H) I
Rhineland phases: (5) 8-(9) 10
Rhineland date: (555) 610-(670) 705
Location: Archaeological Museum Stein



23-2-1



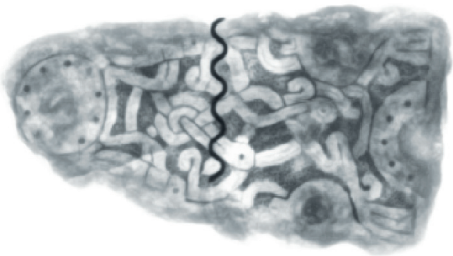
23-3-1

Bead, glass
Find number: 23-2-1.3
Original find number: VIA 55
Yellow, opaque, cylindrical twisted.
Number: 1
Type: YO29 / form group S-47.4
Kombinationsgruppe: (F) H-I
Rhineland phases: (5-9) 8-10
Rhineland date: (555-670) 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 23-2-1.4
Original find number: VIA 55
Yellow, opaque, cylindrical.
Number: 1
Type: YO35
Location: Archaeological Museum Stein

Bead, glass
Find number: 23-2-1.5
Original find number: VIA 55
Blue, transparent, cylindrical.
Number: 1
Type: BT35/ S-Per47.1?
Kombinationsgruppe: A
Rhineland phases: 3-4
Rhineland date: 485-555
Location: Archaeological Museum Stein

Bead, glass
Find number: 23-2-1.6
Original find number: VIA 55
Yellow, opaque, almond.
Number: 1
Type: YO44
Location: Archaeological Museum Stein



23-4-1 (SCALE 1:1)



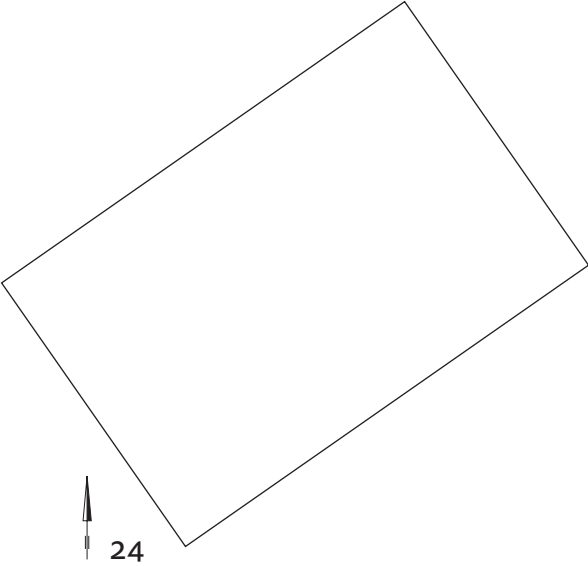
23-5-1

Bead, glass
Find number: 23-2-1.7
Original find number: VIA 55
White, opaque, cylindrical.
Number: 1
Type: WO35
Location: Archaeological Museum Stein

Bead, glass
Find number: 23-2-1.8
Original find number: VIA 56
Green transparent, globular compressed
Number: 1
Type: GT30/Siegmund group 46
Kombinationsgruppe: A / H-I
Rhineland phases: 3-4 / 8-10
Rhineland date: 485-555 / 610-705
Location: Location: Archaeological Restoration company Restaura

Bead, glass
Find number: 23-2-1.9
Original find number: VIA 56
White opaque barrel shaped.
Number: 1
Type: WO19 / Siegmund group 32
Kombinationsgruppe: H-I
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Archaeological Restoration company Restaura

Bead, glass
Find number: 23-2-1.10
Original find number: VIA 56
White opaque, globular compressed
Number: 1
Type: WO30 / Siegmund group 32
Kombinationsgruppe: H-I
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Archaeological Restoration company Restaura

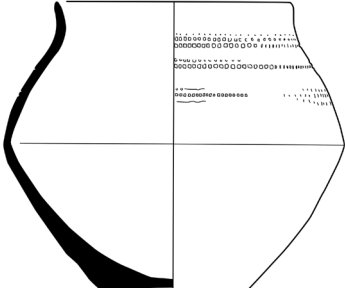


Bead, glass
Find number: 23-2-1.11
Original find number: VIA 56
Yellow opaque, globular compressed
Type: YO30 / S-Per 33.3
Number: 1
Kombinationsgruppe: D-H
Rhineland phases: 3-10
Rhineland date: 485-705
Location: Location: Archaeological Restoration company Restaura

3 Nail, iron
Find number: 23-3-1
Original find number: VIA 55
Fragment of an iron nail
Location: Archaeological restoration company Restaura

4 Belt fitting, iron
Find number: 23-4-1
Original find number: VIA 55
Iron fragment; the X-ray photo shows that it is a decorated iron belt fitting. It is either the plate of a plate buckle or a counter plate. The decoration consists of silver plating intersected by a regular animal style pattern probably with additional silver and/or copper alloy threads; this cannot be established on the basis of the X-ray photo. The decoration covers the entire plate.
Type: Siegmund Gür4.7
Rhineland phase: 9
Rhineland date: 640-670
Alternative type: FAG S-Gür4.7 (8: 640/50-670/80)
Location: Archaeological restoration company Restaura

5 Fragment, pottery
Find number: 23-5-1
Original find number: VIA 55
Round pottery fragment, grey-white (added to this grave on the basis of its presence in the restoration atelier; it was not recorded in the catalogue of Beckers and Beckers)
Location: Archaeological restoration company Restaura



24-1-1



24
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	260
Grave pit width	170
Grave pit depth	100
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found.

GRAVE DATE
S-GB IIa: 565-610/20
FAG 5-6: 565-610/20

FINDS
1 Pottery vessel
Find number: 24-1-1
Original find number: VIA 56
Light grey biconical pot of coarse ware with some sand or small pebble inclusions. The pot has a slightly rounded carination and the upper wall is decorated with three zones of single lines of rectangular roulette stamp impressions. Found in fragmented condition but now restored and completed; approximately 90% of the pot is present.
Height: 15.2 cm.
Type: Siegmund Kwt3.12
Rhineland phase: 6 (7)
Rhineland date: 570-585 (610)
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Location: Archaeological Museum Stein

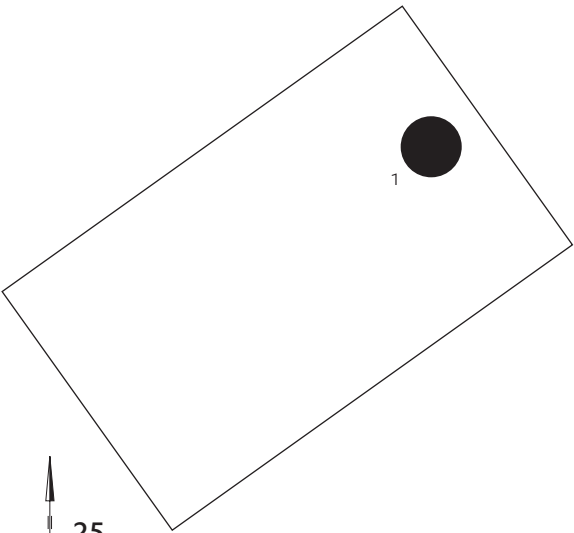
25
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	260
Grave pit width	155
Grave pit depth	120
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The fill of the grave was loamy and rich in pebbles.

GRAVE DATE
S-GB I+IIa: 510/20-610/20
FAG 4-6: 510/20-610/20

FINDS
1 Pottery vessel
Find number: 25-1-1
Original find number: VIA 57
Brown-grey biconical pot, restored and partly completed; approximately 70% of the original pot is present. The upper wall is decorated with one zone of four grooves underneath the neck and one zone of three grooves on the middle of the upper wall,



25-1-1

alternating with two zones with stamp impressions consisting of vertical rectangular grids filled with two columns and four rows of impressed squares. The grids seem to have been applied irregularly which indicates the use of a single stamp but since the restoration makes a clear observation of the decoration difficult it might also be an early roulette stamp.
Height: 18.3 cm
Type: Siegmund Kwt2.12
Rhineland phase: 4
Rhineland date: 530-555
Type: Siegmund Kwt3.12
Rhineland phase: 6 (7)
Rhineland date: 570-585 (610)
Location: Archaeological Museum Stein

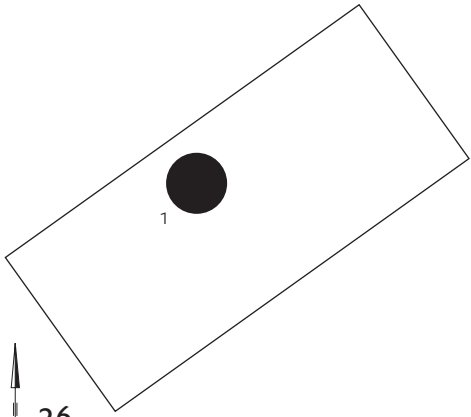
26
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	230
Grave pit width	100
Grave pit depth	80
Orientation	SW-NE (65)

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The grave fill is loamy and rich in pebbles.

GRAVE DATE
Phase S-GB IIb: 565-640/50
FAG 4-7: 565-640/50

FINDS
1 Pottery vessel
Find number: 26-1-1
Original find number: VIA 58
Biconical pot, softly baked, considerably weathered surface. The upper wall is decorated with three zones of complex interrupted roulette stamp impressions consisting of square grids filled with three columns and two rows of small rectangles. The rim was broken but is now restored and small parts are added; approximately 90% of the original pot is present.
Height: 11 cm
Type: Siegmund Kwt3.22
Rhineland phase: 7-8A
Rhineland date: 600-625
Alternative type: FAG 5F (5-7: 565-640/50)
Location: Archaeological Museum Stein



26-1-1

27
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	150
Grave pit width	70
Grave pit depth	90
Orientation	SW-NE

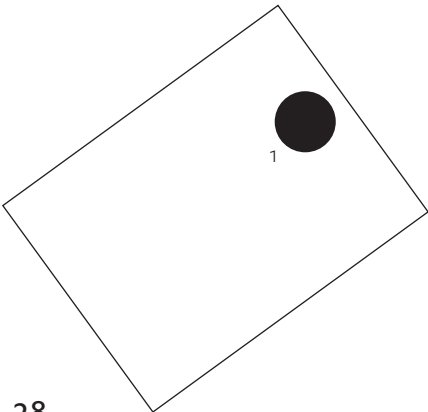
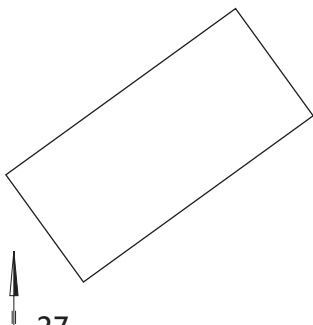
DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The grave fill is loamy and rich in pebbles.

GRAVE DATE
Cannot be dated

28
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	180
Grave pit width	135
Grave pit depth	105
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The grave fill is loamy and rich in pebbles.



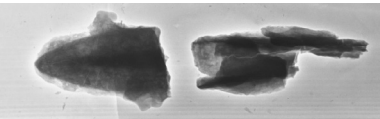
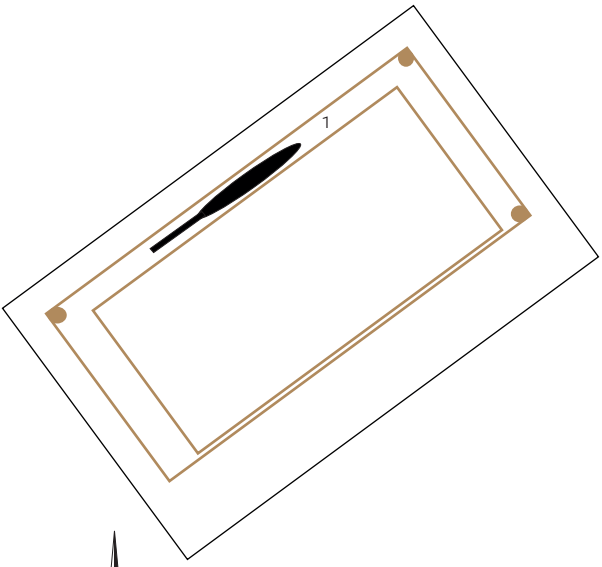
28-1-1

GRAVE DATE
S-GB I: 510/20-565 (585)
FAG 4-5: 510/20-580/90

FINDS
1 Pottery vessel
Original find number: VIA 59
Find number: 28-1-1
Grey-brown biconical pot, restored and parts of the pot were completed; it is difficult to tell the original and completed parts apart. Approximately 80% of the original pot seems to be present. The upper wall is decorated with three grooves, in between which two zones of single stamp impressions of irregular undulating vertical lines of c. 1 cm are applied. It was baked relatively hard and the carination is only slightly pronounced.
Height: 11.5 cm (the completed part is higher: 12.6 cm)
Type: Siegmund Kwt2.12
Rhineland phase: 4
Rhineland date: 530-555
Alternative type: FAG Kwt2A (4-5: 510/25-580/90)
Location: Archaeological Museum Stein

29
INHUMATION GRAVE

Grave structure	wooden chamber with coffin grave
Grave pit length	270
Grave pit width	165
Grave pit depth	120
Orientation	SW-NE



29-1-1

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The grave fill is loamy and rich in pebbles. Grey band shaped soil discolorations with a width of 5-6 cm indicated the former presence of a wooden chamber with coffin. The band shaped traces of the chamber walls were observed at a depth of 87 cm. It was observed that these band shaped traces of the chamber touched the short burial pit walls and that it was standing 30 cm from one long wall and 15 cm from the other long wall; which respective long wall was not specified. At a depth of 100 cm the bands enclosed a rectangle with a length of 235 cm and a width of 110 cm; this might indicate that the chamber became narrower with increasing depth, since it was observed that the chamber wall traces touched the short walls of the burial pit when it was first observed at a depth of 87 cm. In three corners of the chamber traces of what were thought to be posts were discovered; it was not recorded in which corners exactly. Traces of the walls of the second wooden container, the coffin, were also observed at a depth of 87 cm. The coffin had a length of 200 cm and a width of 75 cm. It was recorded that three vertical sections showed that the coffin was placed on the chamber floor. Drawings of these sections are not available.

GRAVE DATE
Phases S-GB IIa: 565-610/20
FAG 4-7: 565-610/20

FINDS

1 Lance head, iron
Find Number: 29-1-1
Original find number: VIA 30
Iron lance head; fragments, preserved in articulated position. First identified as a seax in the catalogue of Beckers and Beckers. The fragments seem to be the remains of a lance head with mid rib.
Recorded length: 40.0 cm
Type: Siegmund Lanz.1
Rhineland phases: 7-8A
Rhineland date: 585-c.625
Alternative type: FAG S-Lanz.1 (end 5-6: c.570-610/20)
Location: Restoration Company Restaura

30
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	185
Grave pit width	140
Grave pit depth	105
Orientation	SW-NE

DESCRIPTION

Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The band shaped imprints of the walls and traces of the floor of a wooden container were found at a depth of 65 cm; the band shaped wall imprints with a width of 8 cm were discovered close to the burial pit walls. The grave fill is loamy and rich in pebbles.

GRAVE DATE

S-GB IIa: 565-610/20
FAG 4-7: 510/20-640/50

FINDS

1 Pottery vessel
Find number: 30-1-1
Original find number: VIA 64
Brown-grey biconical pot, found as complete specimen. The upper wall is decorated with two zones of three grooves in between which single stamps of vertical rectangular grids consisting of two columns and six rows of impressed squares were applied.
Height: 12.8 cm
Type: Siegmund Kwt2.12
Rhineland phase: 4
Rhineland date: 530-555
Alternative type: FAG Kwt2B (4-5: 510/25-580/90)
Location: Archaeological Museum Stein

2 Pottery vessel
Find number: 30-2-1
Original find number: VIA 64/67?
Dark grey biconical pot, found as complete specimen but with a considerably weathered (smoked?) surface. The upper wall is decorated with one zone of one deep groove, two shallower grooves and one shallow groove. Above and beneath the grooves one line of roulette stamp impressions of crosses are applied; it is complex roulette stamp with in all probability uninterrupted impressions (some space, although little, can be observed in between the impressions).
Height: 11.2-11.7 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6 (7)
Rhineland date: 570-585 (610)
Alternative type: FAG Kwt5H (5-7: 565-640/50)
Location: Archaeological Museum Stein

3 Glass vessel
Find number: 30-3-1
Original find number: VIA 62
Glass palm cup of green impure glass with air bubbles. It has straight walls, a rounded base, a rounded but not thickened rim, and fifteen vertical ribs ending in five rounded bosses at the bottom with slight irregular ribs connecting some of the bosses. It was fragmented but now restored; it is a complete specimen.
Height: 7.5 cm
Type: Maul A1b
Maul phase: Stufe AM III-JM I
Maul date: 560/70-630/40
Alternative type: Siegmund Glaz.1 (7: 585-610)
Alternative type: FAG Glaz.1 (6-7: 580/90-640/50)
Alternative type: Feyeux 55.3km (550-610)
Location: Archaeological Museum Stein

4 Bead, glass
Find number: 30-4-1.1
Original find number: VIA 61
Yellow, opaque, small, globular compressed.
Number: 16
Type: YO30 / S-Per 33.3
Kombinationsgruppe: D-H
Rhineland phases: 3-10
Rhineland date: 485-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 30-4-1.2
Original find number: VIA 61
Blue, transparent, globular.
Number: 1
Type: BT1
Location: Archaeological Museum Stein

Bead, glass
Find number: 30-4-1.3
Original find number: VIA 61
Red, opaque, long cylindrical. Decoration: white threads.
Number: 2
Type: Koch-Schreztheim 1977-42,13
Stufe: 3
Date: 565-590/600
Location: Archaeological Museum Stein

Bead, glass
Find number: 30-4-1.4
Original find number: VIA 61
Blue, opaque, short cylindrical.
Number: 1
Location: Archaeological Museum Stein

Bead, amber
Find number: 30-4-1.5
Original find number: VIA 61
Amber, fragmented.
Number: 1
Location: Archaeological Museum Stein

31
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	215
Grave pit width	130
Grave pit depth	80
Orientation	SW-NE

DESCRIPTION

Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The grave fill is loamy and rich in pebbles.

GRAVE DATE

Cannot be dated

32
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	280
Grave pit width	190
Grave pit depth	125
Orientation	W-E

DESCRIPTION

Merovingian inhumation grave. The grave’s orientation was probably west-east, but we cannot be certain of this since this since the body imprint did not leave a clear silhouette. The grave fill is loamy and rich in pebbles and at the bottom a grey loamy layer was found. A body imprint was vaguely present in the middle of the grave at a depth of 100 cm.

GRAVE DATE

S-GB IIId-III: 610/20-670/80
FAG 5-9: 565-710

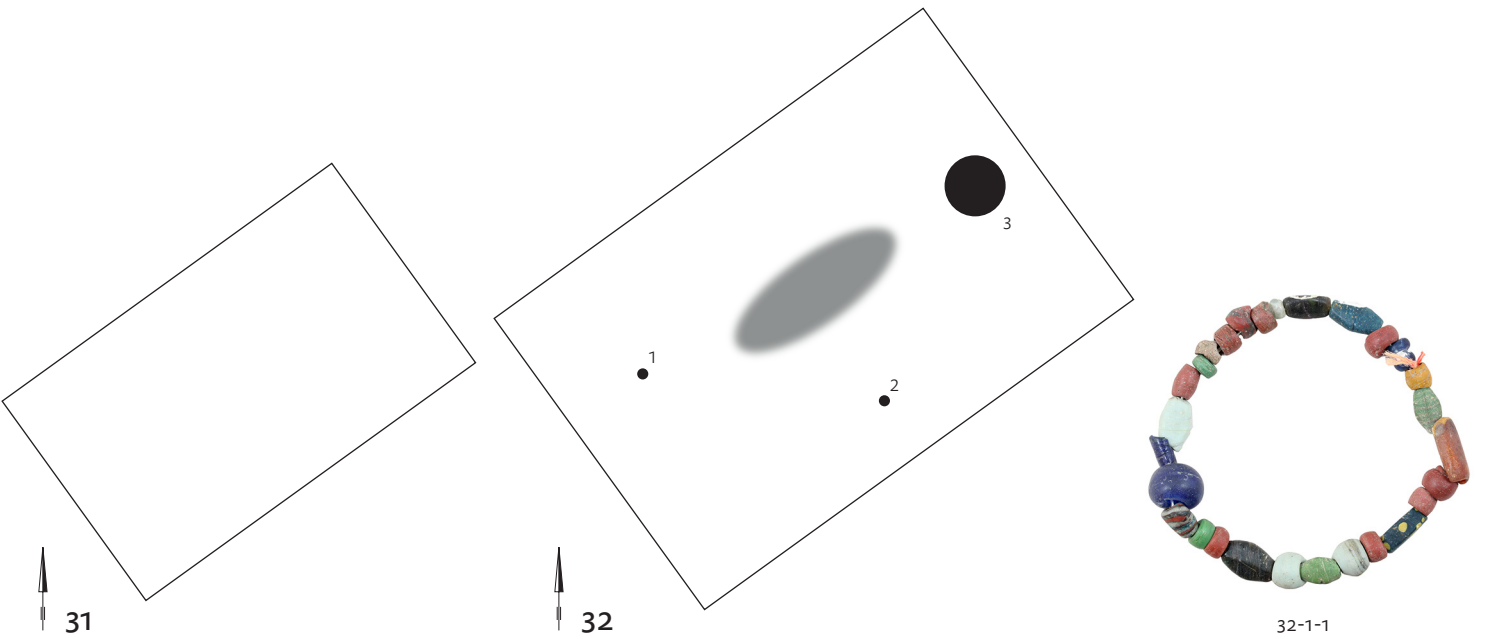
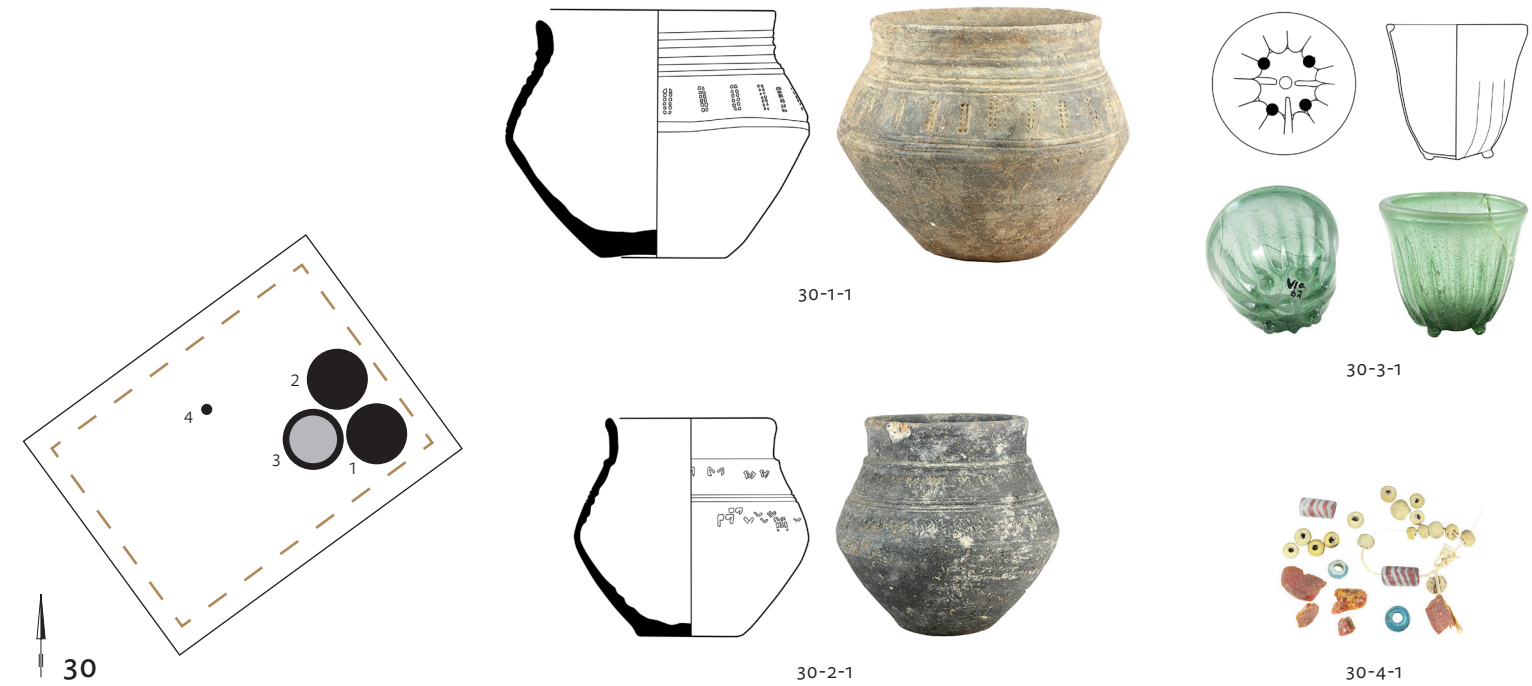
FINDS

1 Bead, glass
Find number: 32-1-1.1
Original find number: VIA 65
Green, opaque, almond.
Number: 2
Type: GO44 / S-Per1.8
Kombinationsgruppe: H-I
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Archacological Museum Stein

Bead, glass
Find number: 32-1-1.2
Original find number: VIA 65
Red, opaque, long cylindrical.
Number: 1
Type: RO27
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.3
Original find number: VIA 65
Red, opaque, barrel shaped.
Number: 8
Type: RO19 / S-Per 35.6?
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.4
Original find number: VIA 65
Blue, opaque, long cylindrical, four sides.
Decoration: yellow dots.
Type: Koch Pleidelsheim 2002 group 3 (3.42?)
Number: 1
Location: Archaeological Museum Stein



Bead, glass
Find number: 32-1-1.5
Original find number: VIA 65
White, opaque, globular.
Number: 2
Type: WO1
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.6
Original find number: VIA 65
Black, opaque, almond.
Number: 2
Type: BLO44 / S-Per1.8
Kombinationsgruppe: H-I
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.7
Original find number: VIA 65
Green, opaque, short cylindrical.
Number: 2
Type: GO35
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.8
Original find number: VIA 65
Black opaque, long cylindrical. Decoration: red, white, blue bands.
Type: Koch Schretzheim 1977-Group 45
Schretzheim phases: 2-3



32-3-1 (SCALE 1:2)

Schretzheim date: 545/50-590/600
Number: 1
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.9
Original find number: VIA 65
Blue, transparent, globular.
Number: 1
Type: BT1
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.10
Original find number: VIA 65
Blue, transparent, long cylindrical.
Number: 1
Type: BT6
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.11
Original find number: VIA 65
White, opaque, almond.
Number: 1
Type: WO44 / S-Per1.8
Kombinationsgruppe: H-I
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.12
Original find number: VIA 65
Red, opaque, stretched biconical.
Number: 1
Type: RO26
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.13
Original find number: VIA 65
Indistinct, opaque, irregular (weathered).
Number: 1
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.14
Original find number: VIA 65
White, opaque, globular compressed.
Number: 1
Type: WO18 / S-Per 32.3
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.15
Original find number: VIA 65
Blue, opaque, almond.
Number: 1
Type: BO44 / S-Per1.8
Kombinationsgruppe: H-I
Rhineland phases: 8-10
Rhineland date: 610-705
Location: Archaeological Museum Stein

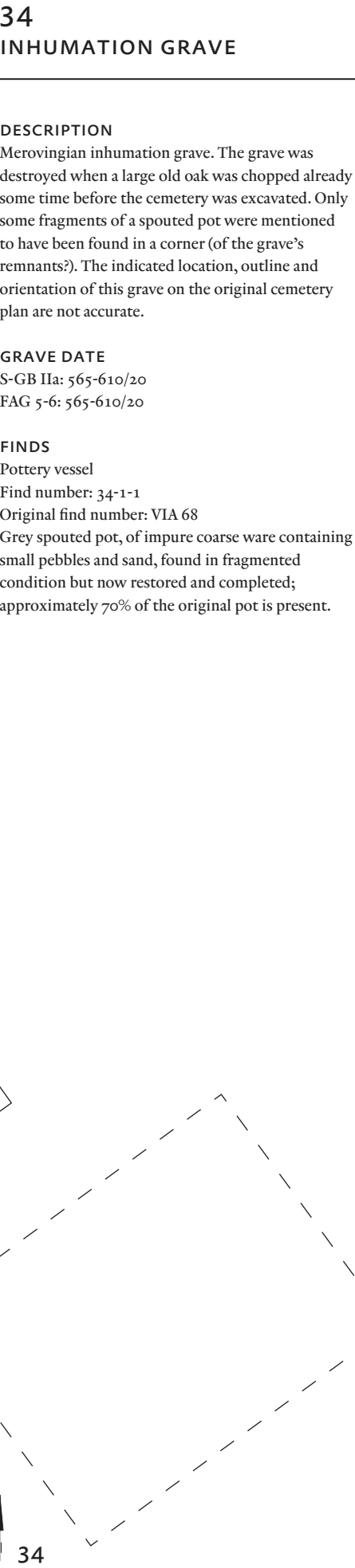
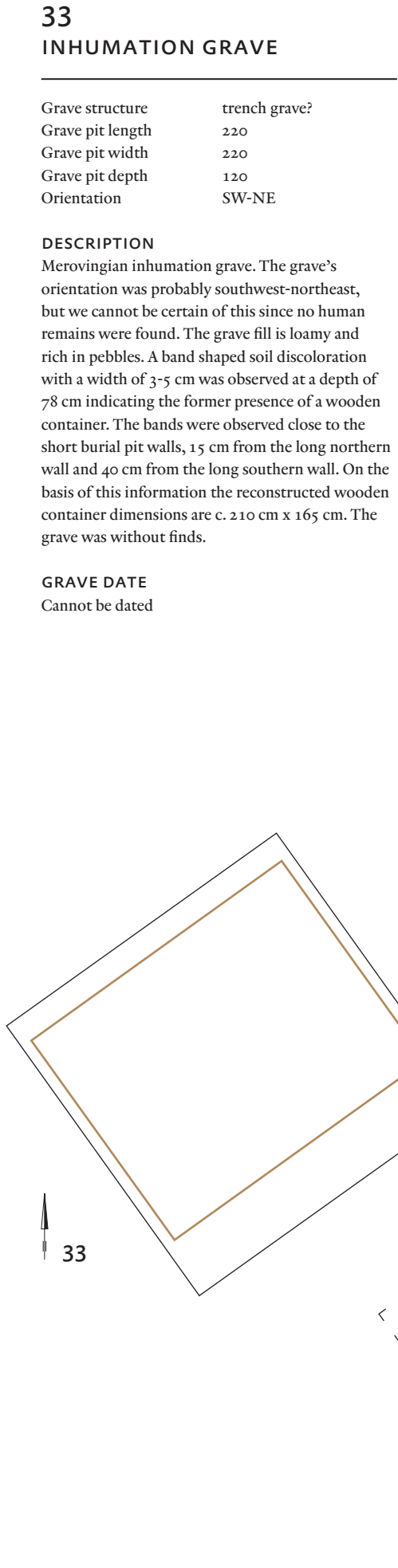
Bead, glass
Find number: 32-1-1.16
Original find number: VIA 65
Blue, transparent, globular compressed.
Number: 2
Type: BT18
Location: Archaeological Museum Stein

Bead, glass
Find number: 32-1-1.17
Original find number: VIA 65
Orange, opaque, barrel shaped.
Number: 1
Type: OO19 / S-Per 34.1
Kombinationsgruppe: (G) H-I
Rhineland phase: (6) 8-(8) 10
Rhineland date: (570) 610-(640) 705
Location: Archaeological Museum Stein

Bead, amber
Find number: 32-1-1.18
Original find number: VIA 65
Broad, flat, amber bead.
Number: 1
Type: A44
Location: missing

2 Purse (belt) fitting, copper alloy
Find number: 32-2-1
Triangular copper alloy plate with an opening (4 cm) at the broad side of the plate.
Location: missing

3 Pottery vessel
Find number: 32-3-1
Find number: VIA 66
Grey fragments of a pottery vessel; could not be reconstructed.
Location: Archaeological restoration company
Restaura



The restoration report mentions that the fragments which formed the carination of the pot were not available; it is therefore not certain whether the rounded carination was originally present or whether it is a (incorrect) result of the restoration process. The rim shows two grooves and the decoration on the upper wall consists of a six single lines of square roulette stamp impressions.
Height: 17.5 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6 (7)
Rhineland date: 570-585 (610)
Alternative type: FAG 5A (5-6: 565-610/20)
Location: Archaeological Museum Stein



34-1-1

35
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	200
Grave pit width	160
Grave pit depth	130
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The grave fill is loamy and rich in pebbles.

GRAVE DATE
Cannot be dated

36
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	200
Grave pit width	145
Grave pit depth	170
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The grave fill is loamy and rich in pebbles.

GRAVE DATE
S-GB I: 510/20-565 (585)
FAG 4-5: 510/20-580/90

FINDS
1 Pottery vessel
Find number: 36-1-1
Original find number: VIA 69
Light grey biconical pot, complete. Some fragments of the rim were found detached; they are now glued together with the pot forming a nearly complete specimen. The upper wall is decorated with seven irregular grooves covering the entire surface. One row of single stamps of rectangular grids consisting of two columns and five rows of small rectangular impressions are applied on the middle of the upper wall; the grooves cross these stamp impressions.
Height: 12.4 cm
Type: Siegmund Kwt2.12
Rhineland phase: 4
Rhineland date: 530-555
Alternative type: FAG Kwt2A (4-5: 510/25-580/90)
Location: Archaeological Museum Stein

37
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	260
Grave pit width	200
Grave pit depth	160
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably SW-NE, but we cannot be certain of this since no human remains were found. The grave fill contains more loam and less sand compared to the other graves. At a depth of 120 cm band shaped soil discolorations with a width of 3-5 cm were discovered. They formed a rectangle with a length of 180 cm and a width of 110 cm and were the wall imprints of a wooden container in which some actual wood remains were preserved. The rectangle was divided in two parts with equal widths by a dark band shaped soil discoloration, also with wood remains. The imprints are identified as remnants of two wooden containers with similar widths of which one is 15 cm longer; they were probably two coffins placed next to one another.

GRAVE DATE
Phase S-GB III: 640/50-670/80
FAG 4-7: 510/20-705

FINDS

- 1 Belt fitting, iron
Find number: 37-1-1
Three corroded iron fragments were recorded in the catalogue of Beckers and Beckers. The X-ray photo shows that the large fragment is a relatively long and broad iron strap end with decoration. The decoration consists of circles and spirals of silver or copper alloy inlays which cover the entire strap end surface.
Length: 6.5 cm
Width: 2.6 cm
Type: spiral inlays (parallels Niederstotzingen grave 6)
Date: 650-700
Location: Archaeological restoration company Restaura

Fragments, iron
Find number: 37-1-2
Three corroded iron fragments were recorded in the catalogue of Beckers and Beckers. The X-ray shows that the smaller fragments are remnants of nails.
Location: Archaeological restoration company Restaura

- 2 Pottery vessel
Find number: 37-2-1
Original find number: VIA 70
Red bowl on a foot stand, with a carination, straight lower wall, and a slightly concave upper wall and outward standing rim, not thickened. The bowl was found in fragmented condition; it is restored and approximately 50% was missing and completed, which is the probable cause of its slight asymmetric appearance.
Height: 5.8 cm

Type: Siegmund Sha2.21
Rhineland phases: 5-8
Rhineland date: 555-640
Alternative type: FAG S-Sha2.21 (4-7: 510/20-640/50)
Location: Archaeological Museum Stein

3 Fragment, iron
Find number: 37-3-1
Fragment of what seems to be the rim of a shield boss.
Location: Archaeological restoration company Restaura

38
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	160
Grave pit width	100
Grave pit depth	100
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The grave fill contains more loam and less sand compared to the other graves.

GRAVE DATE
Cannot be dated

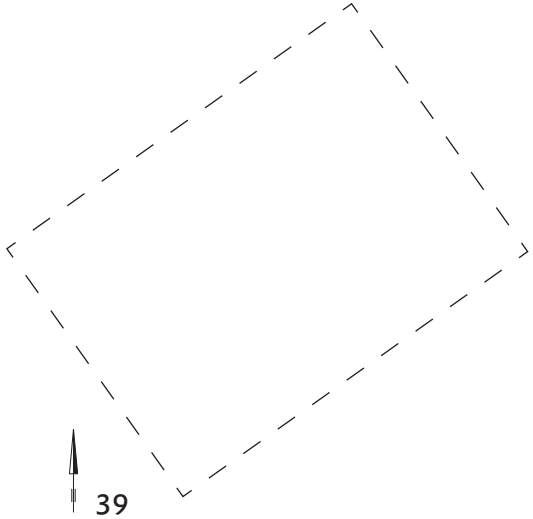
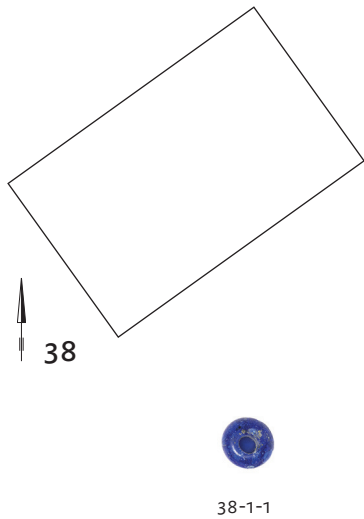
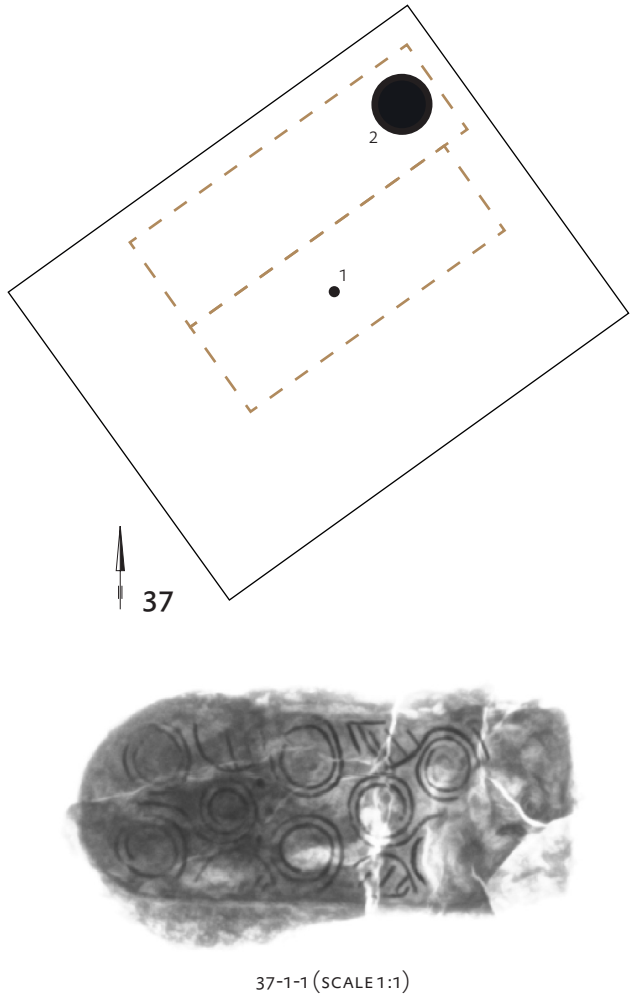
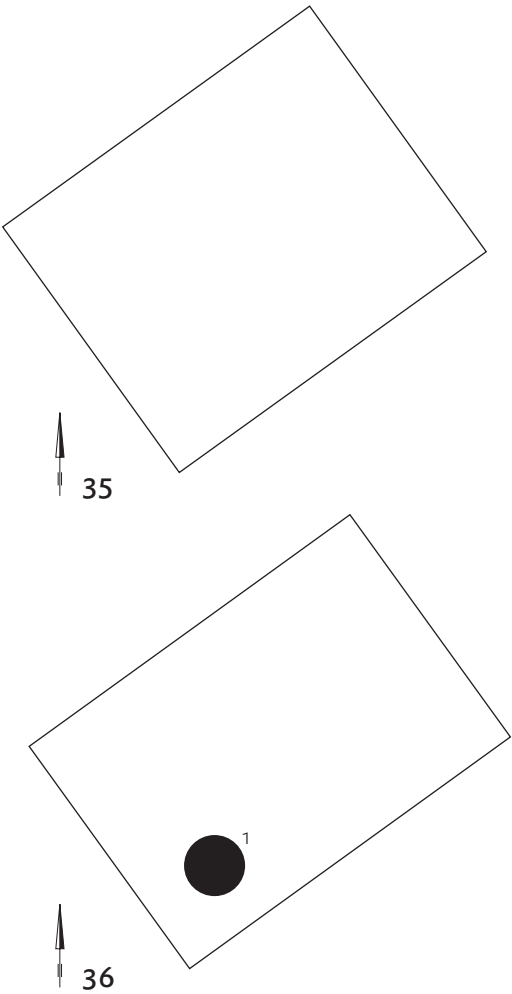
FINDS
1 Bead, glass
Find number: 38-1-1
Blue transparent glass bead, globular.
Diameter: 1.0 cm
Number: 1
Type: BT1 / Siegmund group 47
Kombinationsgruppe: A / F-I
Rhineland phases: 3-4 / 4-10
Rhineland date: 485-705
Location: Archaeological Museum Stein

39
INHUMATION GRAVE

Grave structure	trench grave?
Orientation	SW-NE ?

DESCRIPTION
Merovingian inhumation grave. Only a small part of this grave was observed; its majority was destroyed when the road was broadened. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE
Cannot be dated



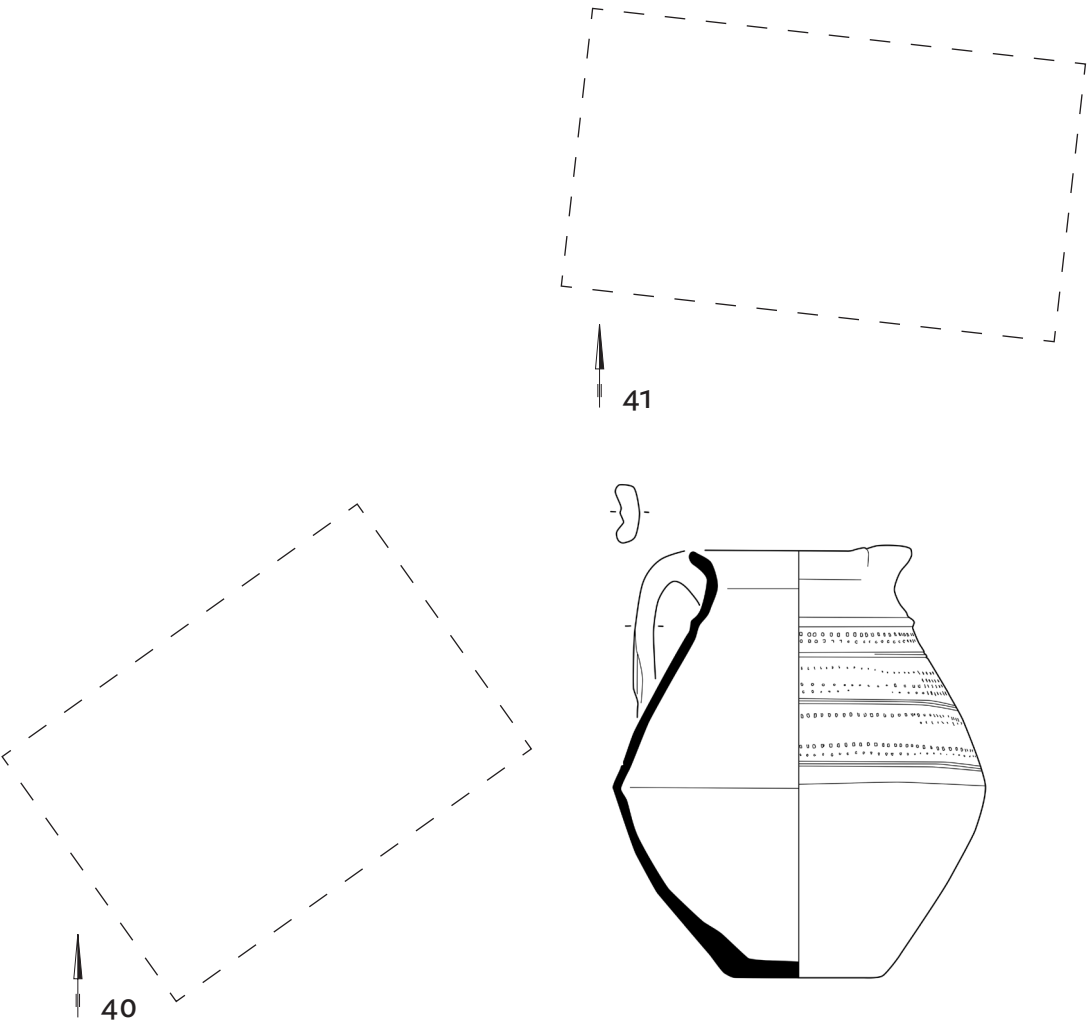
40
INHUMATION GRAVE

Orientation SW-NE?

DESCRIPTION
Merovingian inhumation grave. The grave was discovered in the proximity of grave 19 when a house was built. It was already partly excavated in 1932; this investigation stopped due to difficult terrain conditions and restarted again in June 1936. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE
S-GB I+IIa: 510/20-610/20
FAG 4-6: 510/20-610/20

- FINDS**
- 1 Pottery vessel
Find number: 40-1-1
Fragments of a grey pottery vessel with red stripes.
Location: missing
 - 2 Pottery vessel
Find number: 40-2-1
Biconical pot, grey, decoration similar to that on pot 1-5-1 from grave 1.
Height: 11.5 cm
Location: missing



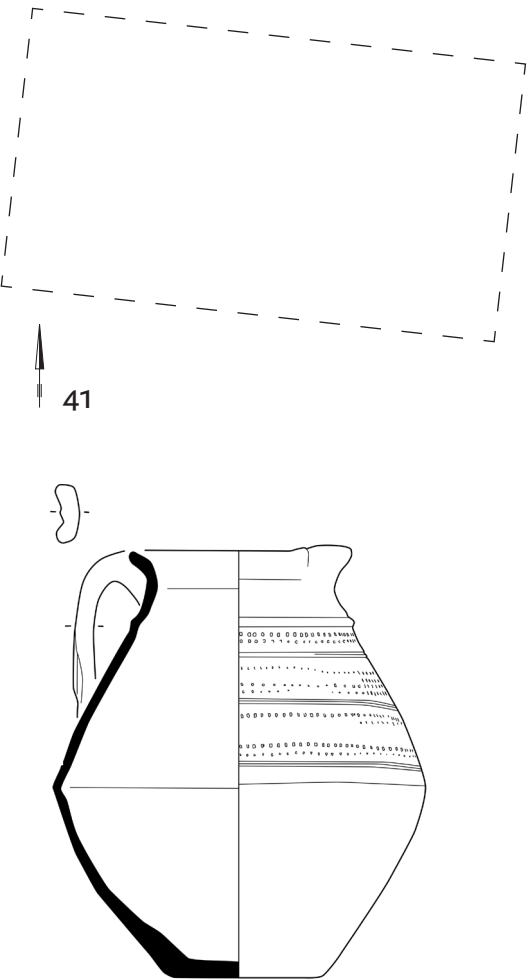
- 3 Seax, iron
Find number: 40-3-1
Severely corroded iron seax.
Recorded length: 30.0 cm
Type: FAG Sax1
FAG phases: (end 3 - end 7) 4-5
FAG date: (510-640/50) 510/25-580/90
Alternative type: Siegmund Sax1 (4-7: 530-610)
Location: missing

41
INHUMATION GRAVE

Orientation NW-SE?

DESCRIPTION
Merovingian inhumation grave. The grave was destroyed by the gravel extraction pit in the middle of the cemetery. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE
S-GB IIc: 610/20-640/50
FAG 7: 610/20-640/50



- FINDS**
- 1 Pottery vessel
Find number: 41-1-1
Original find number: VIA 76
Red biconical jug with one handle with two grooves and a small spout, found in fragmented condition but restored, approximately 75% of the original jug is present; the actual supplemented parts are difficult to discern from the original parts. The upper wall is decorated with three zones of two grooves, in between which four to five lines of single line rectangular roulette stamp impressions are applied. Above the upper grooves a similar roulette stamp is applied twice.
Height: 23.0 cm
Type: Siegmund Kwt4.4?
Rhineland phase: 8
Rhineland date: 610-640
Location: Archaeological Museum Stein



41-1-1

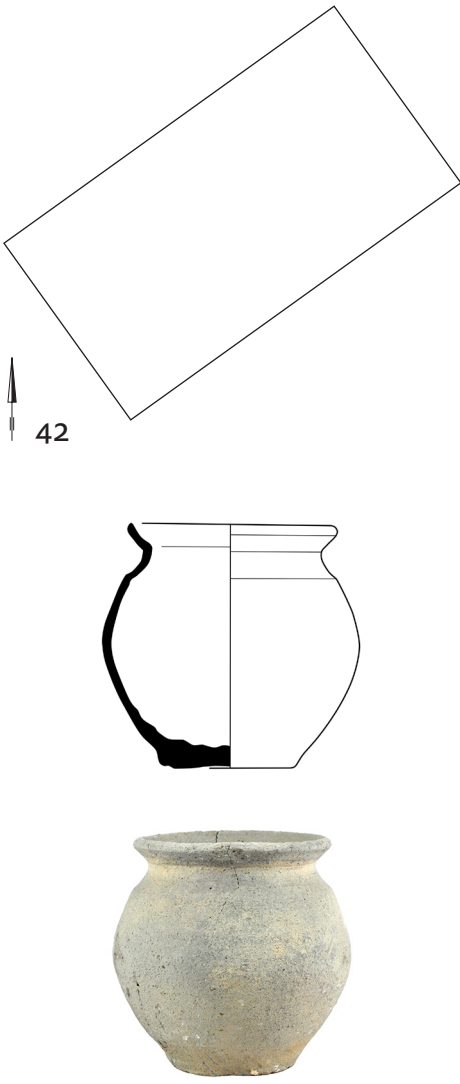
42
INHUMATION GRAVE

Grave structure trench grave?
Grave pit length 215
Grave pit width 115
Grave pit depth 120
Orientation SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. Its fill is loamy and rich in pebbles.

Date
S-GB IIId: 610/20-670/80
FAG 7-10: 610/20-725

- FINDS**
- 1 Pottery vessel
Find number: 42-1-1
Original find number: VIA 77
Grey globular pot of coarse ware tempered with gravel and sand, found as complete specimen. It has a flat bottom and an outward folded rim with a deep groove for a lid.
Height: 12.9 cm



42-1-1

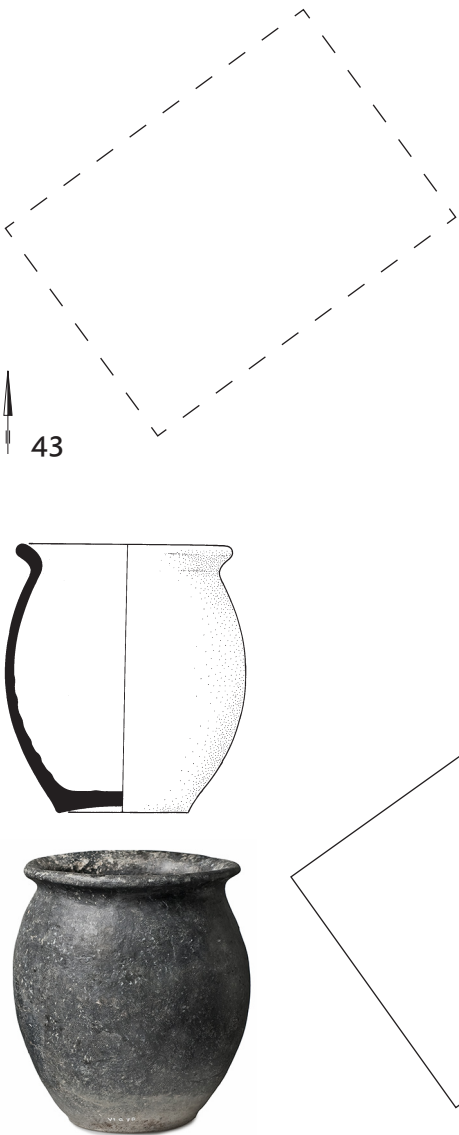
Type: Siegmund Kwt4.12?
Rhineland phase: 10?
Rhineland date: 670-705?
Alternative type: globular pots (seventh century)
Location: Archaeological Museum Stein

43
INHUMATION GRAVE

Grave structure trench grave?
Orientation SW-NE?

DESCRIPTION
Merovingian inhumation grave. Most of the grave was destroyed and it was also presumed to have been reopened since pottery fragments were found in the top layer of the grave. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

Grave data
S-GB III: 670/80-750
FAG 9-10: 670/80-7>725



43-1-1

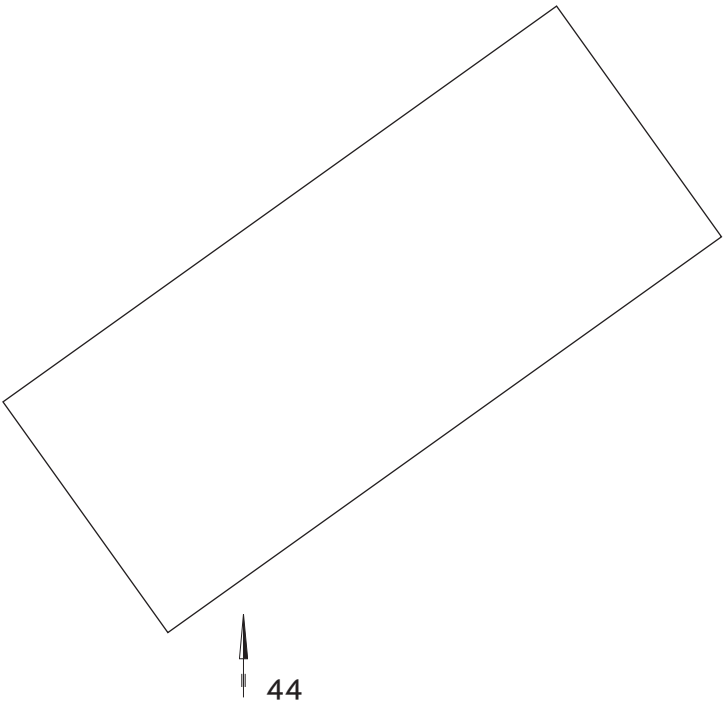
- FINDS**
- 1 Pottery vessel
Find number: 43-1-1
Original find number: VIA 78
Black egg shaped pot with smoked surface, found in fragmented condition, now restored and completed, approximately 55% of the original pot is present.
Reconstructed height: 14.5 cm
Type: Siegmund Wwt2.22
Rhineland phases 10-11
Rhineland date: 670-740
Alternative type: Siegmund Wwt2.21 (10: 670-705)
Location: Archaeological Museum Stein

44
INHUMATION GRAVE

Grave structure trench grave?
Grave pit length 360
Grave pit width 150
Grave pit depth 106
Orientation SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found.

GRAVE DATE
Cannot be dated



44

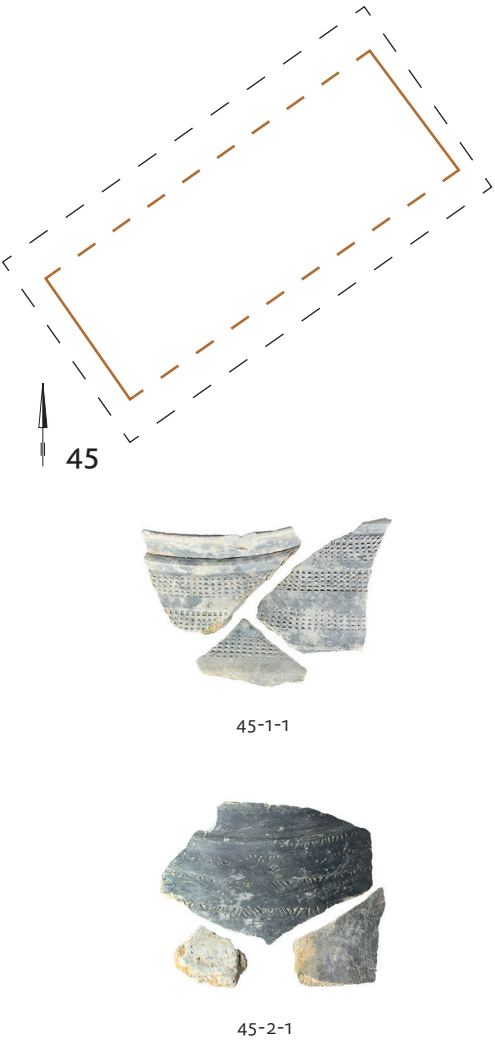
45
INHUMATION GRAVE

Grave structure	wooden container grave
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. The wall imprints of the decayed wooden container became visible at a depth of 125 cm. The width of the coffin was 82 cm but its length was, although observed, not recorded, as were the width, length and depth of the burial pit. Its close proximity to the gravel extraction pit was mentioned; the grave may have been partly destroyed. Since pottery fragments were found scattered throughout the grave it was concluded that it was reopened and partly emptied.

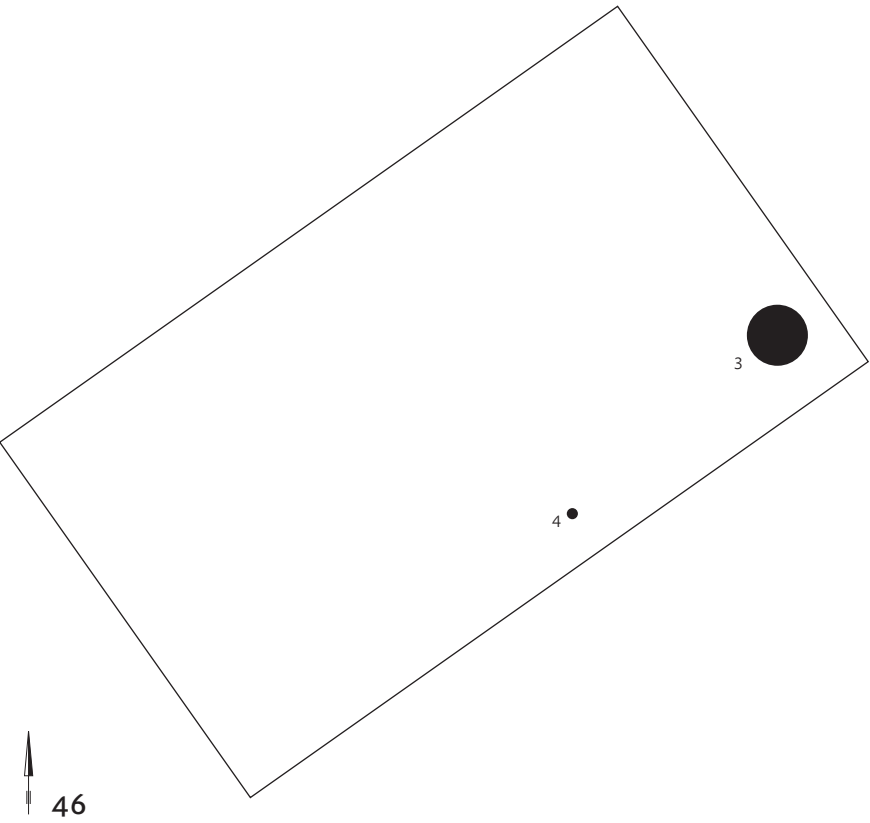
GRAVE DATE
S-GB IIb: 565-640/50
FAG 6-7: 580/90-640/50

- FINDS**
- 1 Pottery vessel
Find number: 45-1-1
Original find number: VIA 79



Wall fragments with rim of a grey biconical pot. The upper wall is decorated with three zones of five lines of rectangular roulette stamp impressions (late roulette stamp group). Approximately 15% of the original pot is present.
Type: Siegmund Kwt3.21/3.22/3.23
Rhineland phases: 7-8
Rhineland date: 585-640
Location: Archaeological Museum Stein

- 2 Pottery vessel
Find number: 45-2-1
Original find number: VIA 80
Wall fragments of a grey-black biconical pot with smoked surface. The upper wall is decorated with single lines of uninterrupted reversed and straight V-shaped roulette stamp impressions. Approximately 10% of the original pot is present.
Type: Siegmund Kwt3.11/3.12/3.13
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5G/H (5-7: 565-640/50)
Location: Archaeological Museum Stein



46
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	400
Grave pit width	230
Grave pit depth	210
Orientation	SW-NE

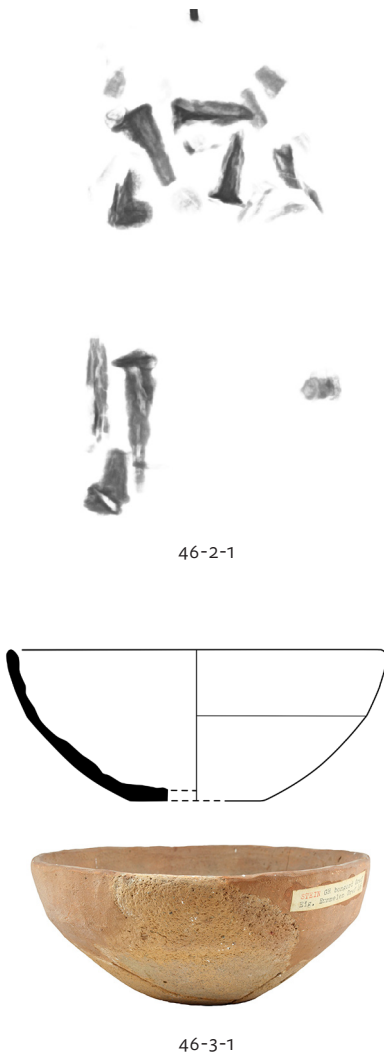
DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. Since the foot of a sigillata bowl was found in the top (secondary) fill of the grave and some iron coffin mounts and nails were found dispersed throughout the grave it was presumed to have been reopened.

GRAVE DATE
S-GB IIb: 565-640/50
FAG 6-8: 580/90-670/80

- FINDS**
- 1 Fragments, iron
Find number: 46-1-1
Find depth: 180 cm
Various iron fragments, among which a corner mount of a wooden container.
Location: missing

- 2 Nails, iron
Find number: 46-2-1
Six iron nails.
Location: Archaeological restoration company Restaura
- 3 Pottery vessel
Find number: 46-3-1
Original find number: VIA 83
Red coarse ware bowl with sand/gravel inclusions, found in fragmented condition but now restored; approximately 30% of the original bowl is present. It has a flat bottom (remnants of the bottom were preserved).
Reconstructed height: 8 cm
Bottom diameter: 6.6 cm
Type: Siegmund Shaz.42
Rhineland phases: 8-9
Rhineland date: 610-670
Type: Siegmund Shaz.5
Rhineland phase: 7-8
Rhineland date: 585-640
Location: Archaeological museum Stein

- 4 Fragment, iron
Find number: 46-4-1
Fragment of an iron knife or seax.
Recorded length: 12.0 cm
Location: missing



47
INHUMATION GRAVE

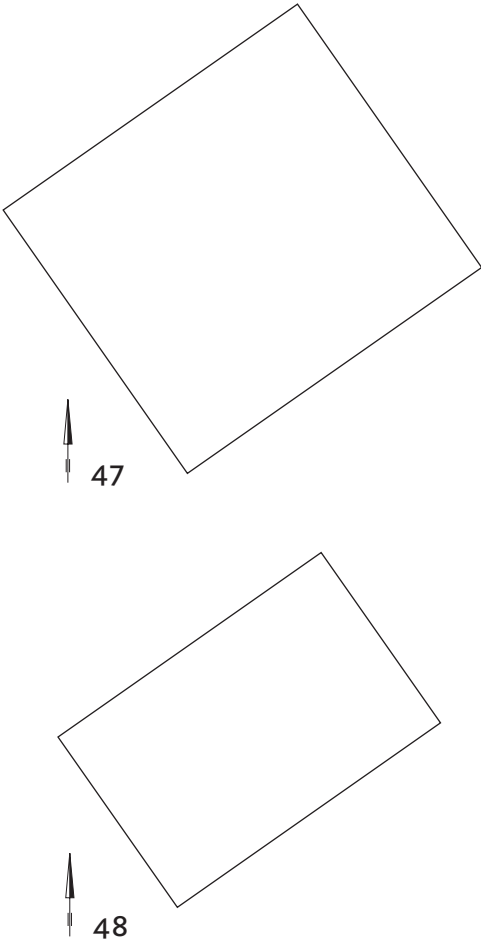
Grave structure	trench grave?
Grave pit length	190
Grave pit width	170
Grave pit depth	75
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found.

GRAVE DATE
Cannot be dated

48
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	170
Grave pit width	110
Grave pit depth	150
Orientation	SW-NE



DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found. It was disturbed by a tree and presumably plundered when the tree was chopped and removed.

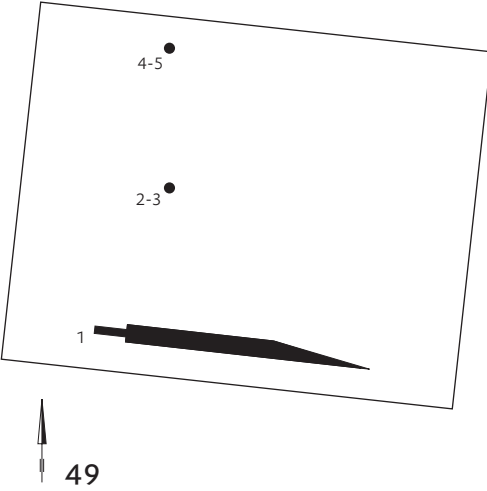
GRAVE DATE
Cannot be dated

49
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	240
Grave pit width	190
Grave pit depth	110
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably northwest-southeast, but we cannot be certain of this since no human remains were found.

GRAVE DATE
S-GB IIc: 610/20-640/50
FAG 6-9: 580/90-710



FINDS

1 Seax, iron
Find number: 49-1-1
Original find number: VIA 86
Find depth: 90 cm
Iron seax with wood remains preserved around the iron hilt core.
Length: 52.5 cm
Length blade: 36.5 cm
Type: FAG Sax2.2
FAG phases: (6-9) end 7-8
FAG date: (580-710) 640-670/80
Alternative type: Siegmund Sax 2.2 (9-10: 640-705)
Alternative type: FAG Sax2.1 (6-7: 580/90-640/50)
Location: Archaeological restoration company Restaura

2 Belt fitting, iron
Find number: 49-2-1.1
Original find number: VIA 89
Iron plate buckle; iron fragments of which the X-ray photo shows that they are detached belt fitting fragments with inlays of a plate buckle of type Bülach.
Recorded length: 13 cm
Recorded width: 4.5 cm and 1.5 cm
Type: Bülach
Date: 610-640
Alternative type: Siegmund Gür4.6 (8: 610-640)
Location: Archaeological restoration company Restaura

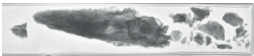
Belt fitting, iron
Find number: 49-2-1.2
Original find number: VIA 89
Iron counter plate; iron fragments of which the X-ray photo shows that they are detached belt fitting fragments with inlays of a counter plate of type Bülach.
Length: 13 cm
Width: 4.5 cm and 1.5 cm
Type: Bülach
Date: 610-640
Alternative type: Siegmund Gür4.6 (8: 610-640)
Location: Archaeological restoration company Restaura

3 Knife, iron
Find number: 49-3-1
Iron knife; the fragment present of 7 cm may be of this knife recorded as find from this grave in the catalogue of Beckers and Beckers.
Recorded (blade) length: 16 cm
Location: missing / Archaeological restoration company Restaura

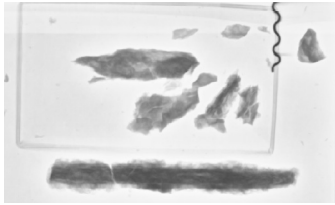
4 Indeterminate object, iron
Find number: 49-4-1
Find depth: 90 cm
Iron object, pear shaped.
Location: missing

5 Nail, iron
Find number: 49-5-1
Find depth: 90 cm
Iron nail, pin might be present, and some iron indeterminate fragments.
Location: Archaeological restoration company Restaura

6 Fire steel, iron
Find number: 49-6-1
Fragment of what seems to be a triangular iron fire steel. Stored in association with the remnants of the Bülach belt fittings but it is not certain whether they were found in association with each other. It was not recorded as a find from this grave in the catalogue of Beckers and Beckers.
Location: Archaeological restoration company Restaura



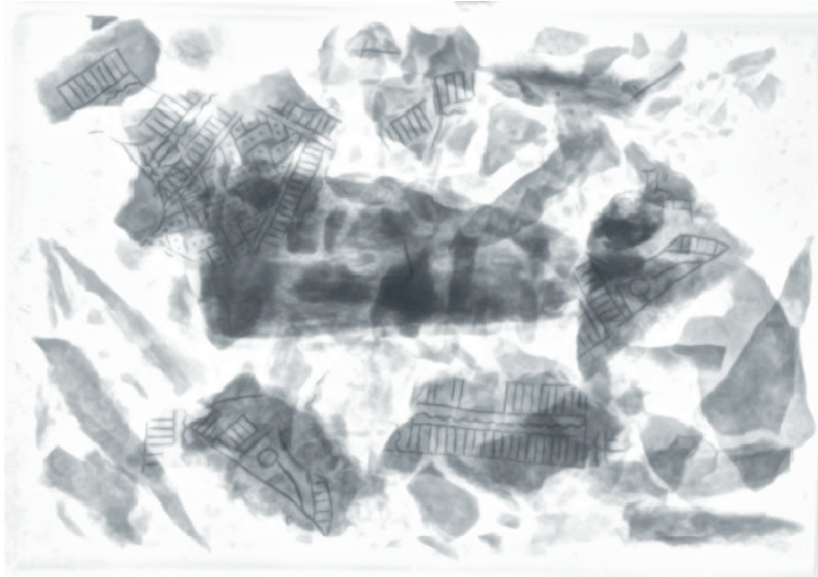
49-3-1



49-5-1



49-2-1, 6-1 (SCALE 1:1)



50 INHUMATION GRAVE

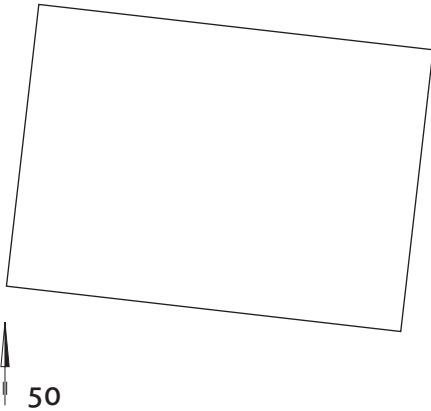
Grave structure	-
Grave pit length	210
Grave pit width	150
Grave pit depth	150
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably northwest-southeast, but we cannot be certain of this since no human remains were found. The pottery fragments were found scattered throughout the grave which was presumed to be a result of the removal of trees.

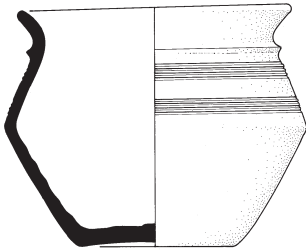
GRAVE DATE
S-GB I: 510/20-565 (585)
FAG 4-6: 510/20-610/20

FINDS

1 Pottery vessel
Find number: 50-1-1
Original find number: VIA 92
Grey biconical pot, found in fragmented condition but now restored and completed; approximately 50% of the original pot is present. The upper wall is decorated with two zones of four grooves.
Height: 12.5 cm
Type: Siegmund Kwt2.31
Rhineland phase: 5
Rhineland date: 555-570
Alternative type: FAG Kwt3A (4-5 (6): 510/20-580/90 (580/90-610/20))
Location: Archaeological Museum Stein



50



50-1-1



51 INHUMATION GRAVE

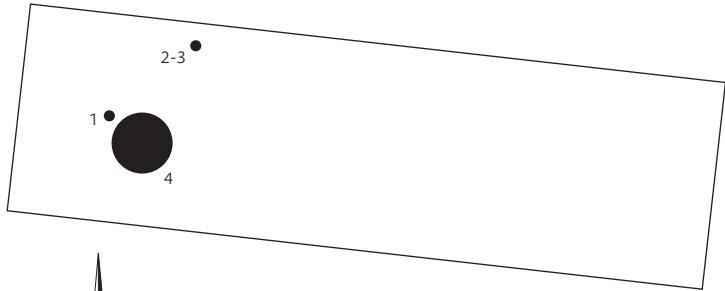
Grave structure	trench grave?
Grave pit length	370
Grave pit width	110
Grave pit depth	127
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably northwest-southeast, but we cannot be certain of this since no human remains were found. Some of the pottery fragments moved from their original location which might indicate that the grave was reopened.

GRAVE DATE
S-GB IIa: 565-610/20
FAG 1-7: 400-640/50

FINDS

1 Bead, glass
Find number: 51-1-1.1
Original find number: VIA 94
Find depth: 85 cm
Blue, opaque/transparent, long cylindrical.
Number: 1
Type: BT6 / S-form group 1.2
Kombinationsgruppe: A-C
Rhineland phases: 1-4
Rhineland date: 440-555
Location: Archaeological restoration company Restaura



51

Bead, glass
Find number: 51-1-1.2
Original find number: VIA 94
Find depth: 85 cm
Yellow, opaque, globular compressed.
Number: 12
Type: YO30 / S-Per 33.3
Kombinationsgruppe: D-H
Rhineland phases: 3-10
Rhineland date: 485-705
Location: Archaeological restoration company Restaura

Bead, glass
Find number: 51-1-1.3
Original find number: VIA 94
Find depth: 85 cm
Blue, opaque, barrel.
Number: 3
Type: BO19
Location: Archaeological restoration company Restaura

Bead, glass
Find number: 51-1-1.4
Original find number: VIA 94
Find depth: 85 cm
Orange, opaque, short cylindrical.
Number: 1
Type: OO4
Location: Archaeological restoration company Restaura



51-1-1

- 2

Ring, iron
Find number: 51-2-1.1
Find number: VIA 95
Simple iron ring, originally attached to an ensemble with other objects.
Recorded diameter: 4 cm
Diameter: 3.7 cm
Type: L/P/V 357
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: Archaeological restoration company Restaura
- Rod, iron
Find number: 51-2-1.2
Iron rod, one extremity bent, originally attached to an ensemble with other objects.
Recorded length: 10 cm
Location: Archaeological restoration company Restaura
- Rod, iron
Find number: 51-2-1.3
Iron rod with pointed extremity, originally attached to an ensemble with other objects.
Recorded length: 15 cm
Location: Archaeological restoration company Restaura

- 3

Knife?, iron
Find number: 51-3-1
Flat iron objects, probably of the blade of a knife, were recorded as find from this grave in the catalogue of Beckers and Beckers. They might be present among the iron fragments present in Restaura.
Recorded (blade) length: 14 cm
Location: Archaeological restoration company Restaura
- 4

Pottery vessel
Find number: 51-4-1
Original find number: VIA 93
Grey biconical pot, found in fragmented condition but now restored and completed; approximately 80% of the original pot is present. The entire upper wall is decorated with single lines of complex roulette stamp impressions consisting of crosses alternating with vertical stripes; the roulette stamp is applied as a spiral covering the upper wall five to six times.
Height: 11.4 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6 (7)
Rhineland date: 570-585 (610)
Alternative type FAG 5G (5-6: 565-610/20)
Location: Archaeological Museum Stein

52

INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	300
Grave pit width	160
Grave pit depth	145
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably northwest-southeast, but we cannot be certain of this since no human remains were found. The pottery fragments were found scattered throughout the grave.

GRAVE DATE
S-GB I: 510/20-565 (585)
FAG 4-6: 510/20-610/20

- FINDS

1

Pottery vessel
Find number: 52-1-1
Grey biconical pot with some gravel inclusions, found in fragmented condition but now restored and completed; approximately 30% of the original pot is present. The upper wall is decorated with two grooves beneath the neck and two grooves just above the carination.

Height: 13.0 cm
Type: Siegmund Kwt2.31
Rhineland phase: 5
Rhineland date: 555-570
Alternative type: FAG Kwt3A (4-5 (6): 510/20-580/90 (580/90-610/20))
Location: Archaeological Museum Stein

- 2

Wood, fragments
Find number: 52-2-1.1
Thin 'plates' of wood (fragments), found nearly at the bottom of the grave. Iron corrosion (of iron fragment 52-2-1.2) coloured the wood fragments red.
Location: Archaeological restoration company Restaura

Fragment, iron
Find number: 52-2-1.2
Indeterminate iron fragment with two small (copper alloy) rivets, found together with thin 'plates' of wood; might be a triangular plate of a plate buckle.
Location: Archaeological restoration company Restaura

- 3

Fragment, iron
Find number: 52-3-1
Iron rod; indeterminate. Not recorded as find from this grave in the catalogue of Beckers and Beckers.
Location: Archaeological restoration company Restaura

53

INHUMATION GRAVE

Grave structure	trench grave?
Orientation	NW-SE?

DESCRIPTION
Merovingian inhumation grave. The dimensions of this grave could not be recorded, it was not mentioned why. The indicated location, outline and orientation of this grave on the original cemetery plan are probably not accurate.

GRAVE DATE
S-GB IIa: 565-610/20
FAG 5-6: 565-610/20

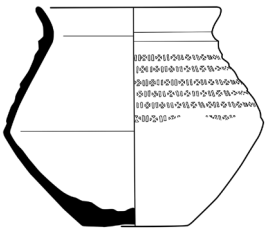
- FINDS

1

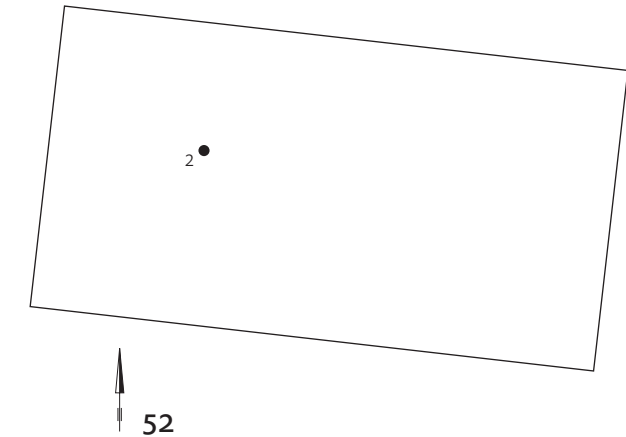
Pottery vessel
Find number: 53-1-1
Grey biconcial pot, found in fragmented condition but now restored and for a considerable part completed; approximately 40% of the original pot is present. The upper wall is decorated with three grooves underneath which two zones of two to three lines of simple roulette stamp impression of rectangles.
Height: 15.0 cm
Type: Siegmund Kwt3.12
Rhineland phases: 6 (7)
Rhineland date: 570-585 (610)
Alternative type: FAG type Kwt5A (5-6: 565-610/20).
Location: Archaeological Museum Stein



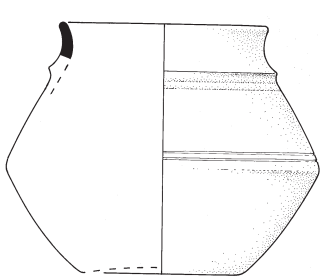
51-2-1, 3-1



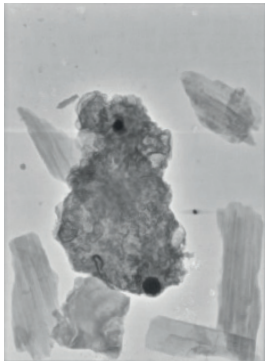
51-4-1



52



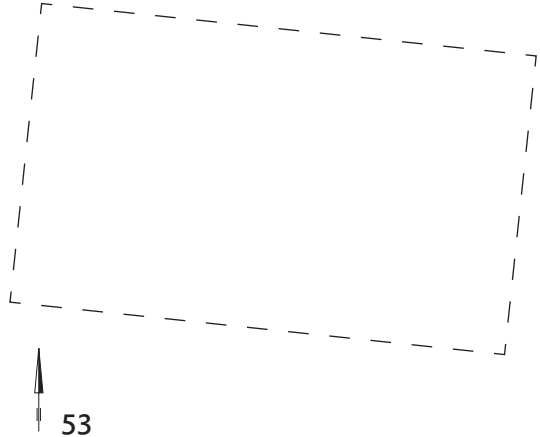
52-1-1



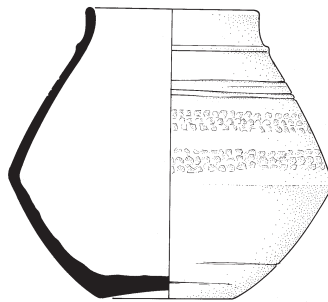
52-2-1.1, 1.2



52-3-1



53



53-1-1

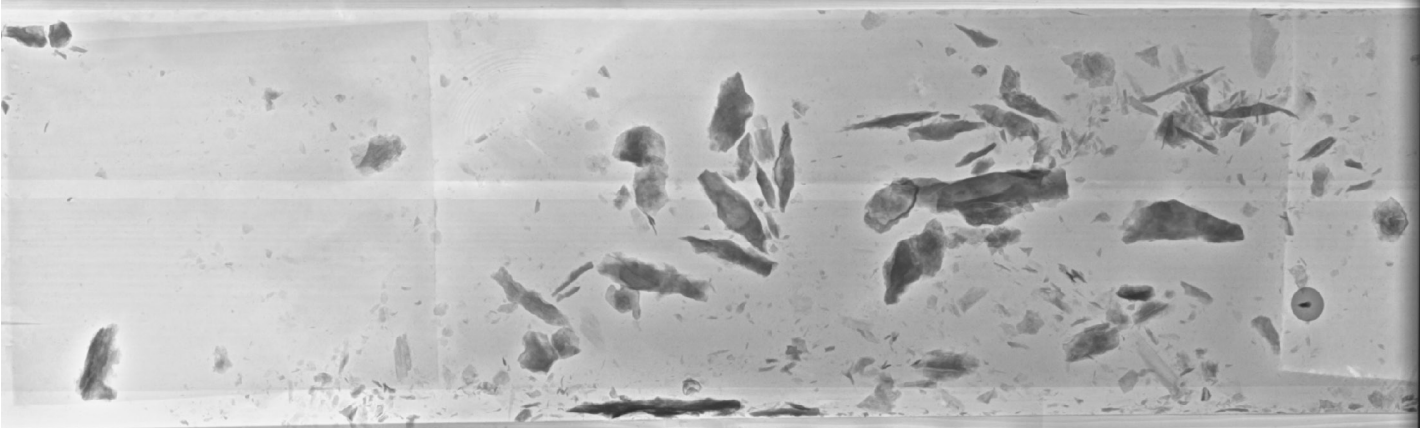
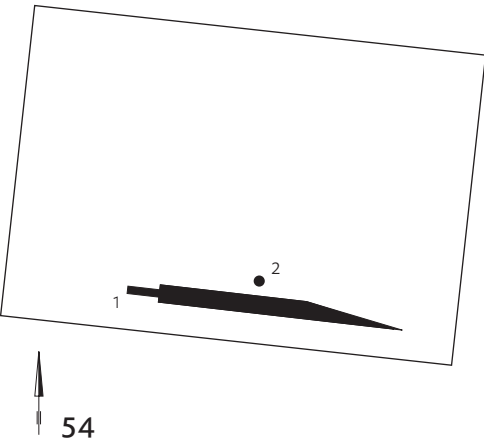


54
INHUMATION GRAVE

Grave pit length	240
Grave pit width	165
Grave pit depth	140
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably northwest-southeast, but we cannot be certain of this since no human remains were found. Ten flat stones were found in a row at a depth of 50 cm in the middle of the grave. The grave fill consisted nearly completely of sand.

GRAVE DATE
S-GB IIb: 565-640/50
FAG 5-8: 565-670/80



54-3-1

- FINDS**
- 1 Seax, iron
Find number: 54-1-1
Original find number: VIA 101
Find depth: 120
Iron seax with wood and leather remains, corroded condition.
Length: 43.0 cm
Length blade: 30.5
Type: FAG Sax 2.1
FAG phases: 6-7 (5-8)
FAG date: 580/90-640/50 (565-680)
Alternative type: Siegmund Sax2.1 (7-middle 9: 585-655)
Location: Archaeological Museum Stein
- 2 Knife, iron
Find number: 54-2-1
Original find number: VIA 102
Find depth: 120

- 3 Fragments, iron
Find number: 54-3-1
Original find number: VIA 98
Small iron fragments; presumably of an iron buckle (added to the list of finds on the basis of Restaura remnants: card indicates that they were remnants of a buckle, but this is not certain).
Location: Archaeological restoration company Restaura

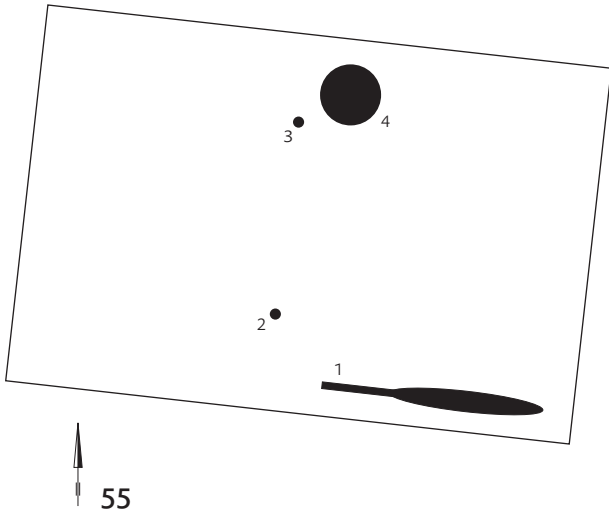
Iron knife, recorded as a specimen with wood and leather remains and with a length of 17.5 cm. The fragments present are together c. 12 cm.
Length: c. 12.0 cm
Recorded hilt length: 5.0 cm
Location: Archaeological restoration company Restaura

55
INHUMATION GRAVE

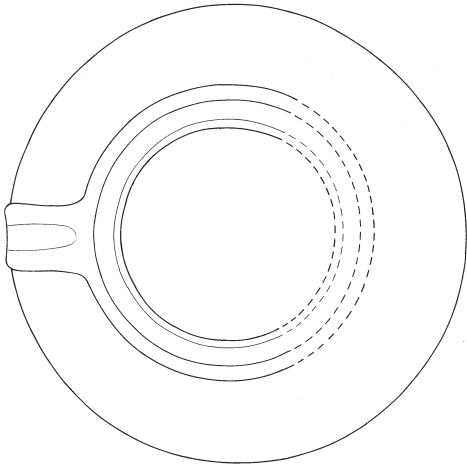
Grave structure	trench grave?
Grave pit length	300
Grave pit width	200
Grave pit depth	190
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably northwest-southeast, but we cannot be certain of this since no human remains were found. Pottery fragments were found scattered throughout the grave and only a lance head (of presumably a richer assemblage of weapons and other objects) found along the southern wall was preserved; it was suggested that the grave was reopened and partly emptied.

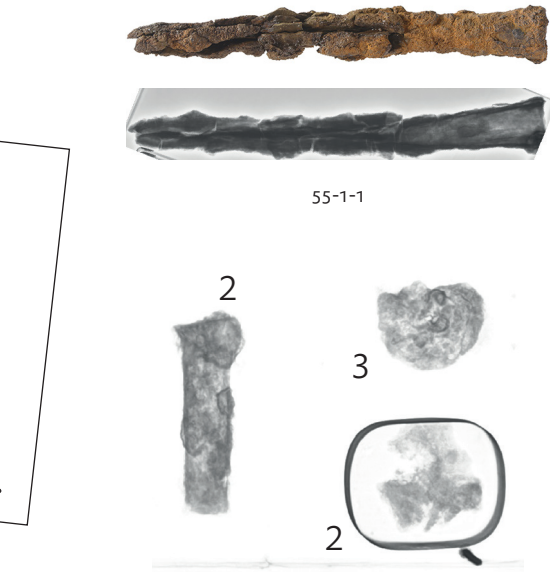
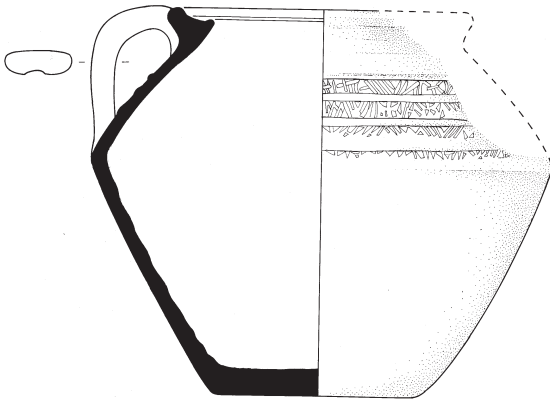
GRAVE DATE
S-GB IIb: 565-640/50
FAG 5-9: 565-710



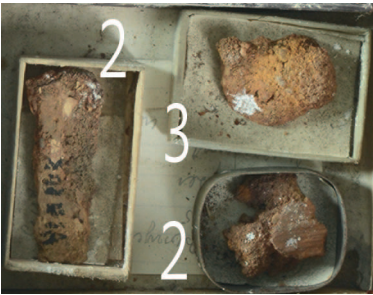
55



55-4-1



55-2-1, 3-1



- FINDS**
- 1 Lance head, iron
Find number: 55-1-1
Original find number: VIA 104
Find depth: 190
Iron lance head, in corroded and fragmented condition, with closed socket and narrow blade.
Length: 22.0 cm
Type: Siegmund Lan2.4
Rhineland phases: 8B-10
Rhineland date: 625-705
Type: Siegmund Lan2.5
Rhineland phases: 8B-9
Rhineland date: 625-670
Location: Archaeological restoration company Restaura
- 2 Fragments, iron
Find number: 55-2-1
Find depth: 160
Iron fragments, of which three seem to be rivets, found lying in line 55 cm from the long southern wall, and two are indeterminate of which one has wood attached to it. The rivets are not present but a number of indeterminate fragments are.
Location: missing/Archaeological restoration company Restaura

- 3 Fragment, iron
Find number: 55-3-1
Find depth: 160
Iron fragment which seems to be a rivet similar to 55-2-1 but found at a different location in the grave.
Diameter: 2.6 cm
Location: Archaeological restoration company Restaura
- 4 Pottery vessel
Find number: 55-4-1
Original find number: VIA 106
Black spouted pot found in fragmented condition but now restored; approximately 70% of the original pot is present. The inner rim has a pronounced indentation in which a lid could be placed. The upper wall is decorated with four lines of complex roulette stamp impressions: intercutting diagonal stripes forming V-shapes.
Height: 20.3 cm
Type: Siegmund Kwt3.12
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5F (5-7: 565-640/50)
Location: Archaeological Museum Stein



56A

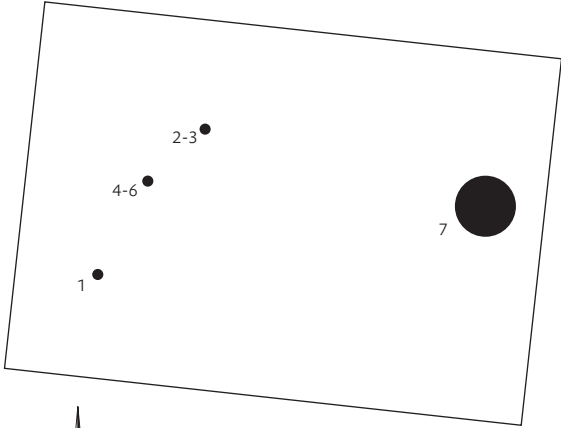
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	275
Grave pit width	195
Grave pit depth	160
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably northwest-southeast, but we cannot be certain of this since no human remains were found. The wall imprints of a wooden container became visible at a depth of 140 cm as grey-brown band shaped soil discolorations forming a rectangle of 190 x 65 cm. All the finds, apart from a biconical pot, were found above the first traces of the decayed wooden container: they are considered to be finds associated with a burial on top of the recorded wooden container grave.

GRAVE DATE
S-GB III: 640/50-670/80
FAG 7: 610/20-670/80

FINDS
1 Plate buckle, copper alloy
Find number: 56-1-1
Find number: VIA 110
Find depth: 90 cm
Copper alloy buckle, approximately half of the hollow plate is gone. The plate with the remnant of one loop at the back is attached to the oval buckle loop with D-section with a hinged construction. The tongue of the shield tongue is bent over the buckle loop. Mineralised textile or leather is preserved on the hinge.



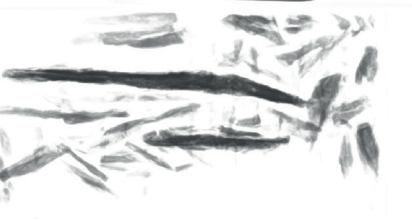
56A



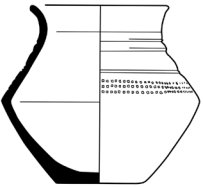
56A-1-1



56A-2-1, 3-1



56A-5-1



56A-7-1

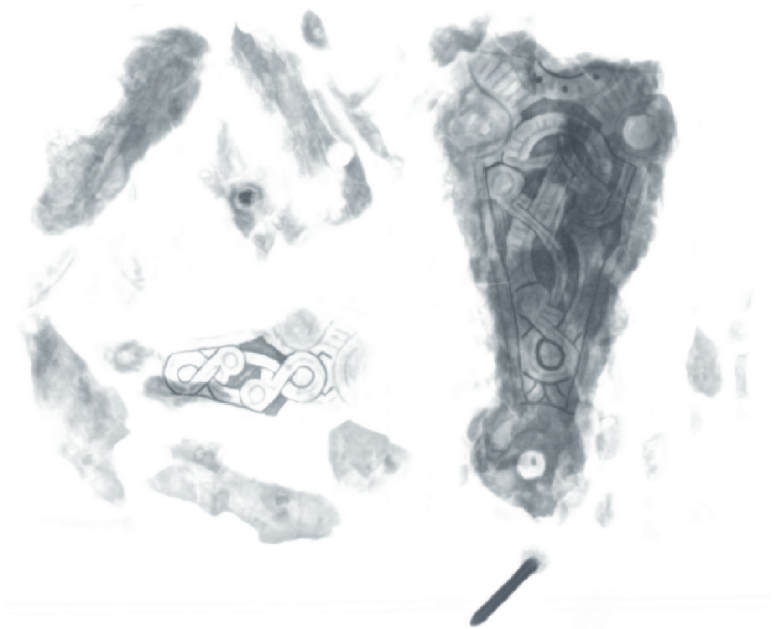


5 Belt fitting
Find number: 56-5-1
Original find number: VIA 107
Find depth: 90 cm
Loop of a buckle.
Location: Archaeological restoration company Restaura

6 Belt fitting, iron
Find number: 56-6-1.1
Find depth: 90 cm
Iron plate buckle with decoration. The X-ray photo shows that the decoration consist of silver plating intersected by a degenerated animal style pattern with additional copper alloy and/or silver threads.
Type: Siegmund Gür4.8
Rhineland phase: 9
Rhineland date: 640-670
Alternative type: FAG Gür4.8A (8: 640/50-670/80)
Location: Archaeological restoration company Restaura

Belt fitting, iron
Find number: 56-6-1.2
Small iron belt mount. The X-ray photo shows that the plate is similar to the plate of the plate buckle. X-ray photo shows that the decoration consist of silver plating intersected by a degenerated animal style pattern with additional copper alloy and/or silver threads. Fragments of a second, similar small mount may be are present.
Type: Siegmund Gür4.8
Rhineland phase: 9
Rhineland date: 640-670
Alternative type: FAG Gür4.8A (8: 640/50-670/80)
Location: Archaeological restoration company Restaura

7 Pottery vessel
Find number: 56-7-1
Original find number: VIA 111
Find depth: 90 cm
Grey biconical pot, complete (apart from a small rim fragment which is gone), but with a weathered surface. The upper wall is decorated with three grooves underneath which one zone of single lines of small square roulette stamp impressions was applied three to four times.
Height: 9.5 cm
Type: Siegmund Kwt3.12
Rhineland phases: 6 (7)
Rhineland date: 570-585 (610)
Alternative type: FAG Kwt5A (565-610/20)
Location: Archaeological Museum Stein



56A-6-1 (SCALE 1:1)

56B

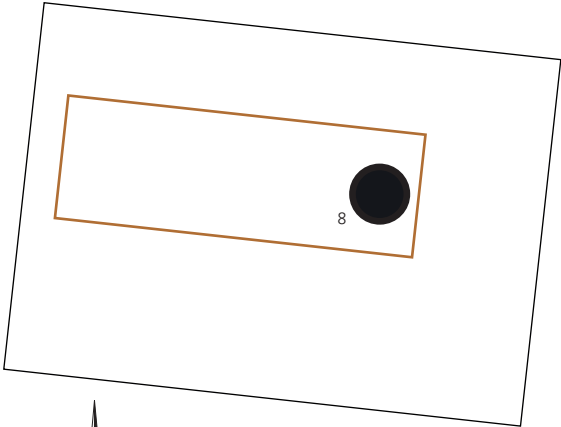
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	275
Grave pit width	195
Grave pit depth	160
Orientation	NW-SE

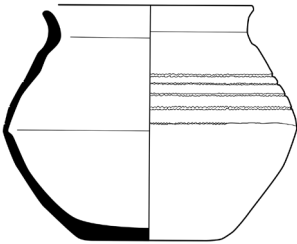
Merovingian inhumation grave. The grave’s orientation was probably northwest-southeast, but we cannot be certain of this since no human remains were found. The wall imprints of a wooden container became visible at a depth of 140 cm as grey-brown band shaped soil discolorations forming a rectangle of 190 x 65 cm. The traces left by the standing walls have a height of 20 cm and the short western wall had rounded corners.

GRAVE DATE
S-GB I: 510/20-565 (585)
FAG 4-6: 510/20-610/20

8 Pottery vessel
Find number: 56-8-1
Original find number: VIA 112
Find depth: 160
Brownish biconcial pot with obvious (pottery grid) inclusions, a weathered surface and black stains on the lower wall. The upper wall is decorated with five shallow grooves. The pot is complete.
Height: 15 cm.
Type: Siegmund Kwt2.32
Rhineland phases 4-5
Rhineland date: 530-570
Alternative type: FAG Kwt3A (4-5 (6): 510-580/90 (610/20))
Location: Archaeological Museum Stein



56B

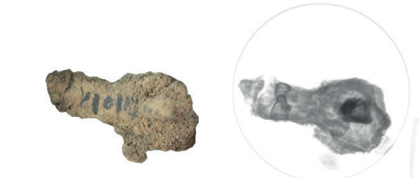
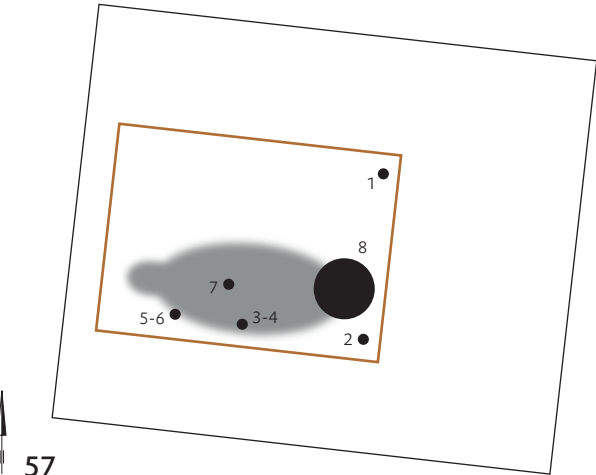


56B-8-1

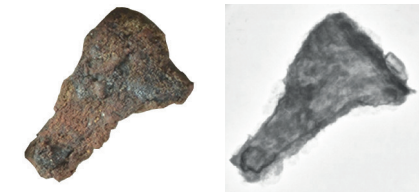
57
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	265
Grave pit width	220
Grave pit depth	185
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave’s northwest-southeast orientation is identified on the basis of the body silhouette. The red-brown band shaped soil discoloration, indicating the former location of wooden container walls, became visible at a depth of 145 cm. The container had a length of 150 cm and a width of 110. It was recorded to have been standing 90 cm from the eastern wall, 50 cm from the northern wall, and close to the western and southern walls of the burial pit. The silhouette of a decomposed body became visible as a dark brown greasy soil discoloration at a depth of 155 cm. The contours of the head were observed in the western segment of the container. The length of the body silhouette was 117 cm and its maximum width 60 cm.



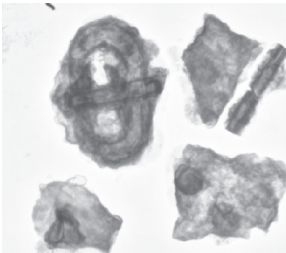
57-1-1.1



57-1-1.2



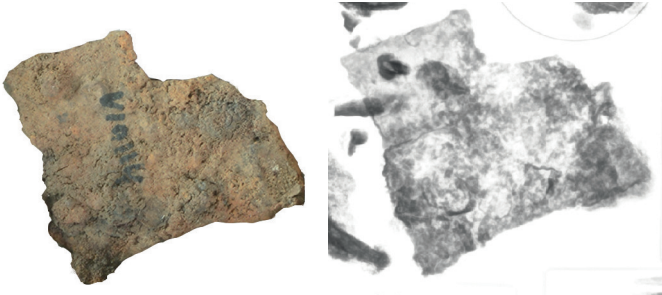
57-4-1



57-7-1



57-2-1



It was identified close to the long southern wall of the wooden container leaving only 15 cm between the wall and the widest part of the silhouette. In view of the length of the container and the body silhouette it is probably the grave of a child.

GRAVE DATE
S-GB IIa: 565-610/20
FAG 3-7: 460/80-640/50

FINDS
1 Mounts, iron
Find number: 57-1-1
Original find number: VIA 115
Find depth: 155 cm
Two iron mounts, one flat and bent, the other flat with wood remains, are recorded as finds in the catalogue of Beckers and Beckers. These ‘mounts’ might be present in corroded condition but one is now identified as the extremity of a shield grip. Location: missing / Archaeological restoration company Restaura

2 Belt fitting, iron
Find number: 57-2-1
Original find number: VIA 114
Find depth: 155 cm
Large flat iron mount with rivet heads; it might have been a back plate.
Length: 6.5
Width: 6.0 cm
Location: Archaeological restoration company Restaura

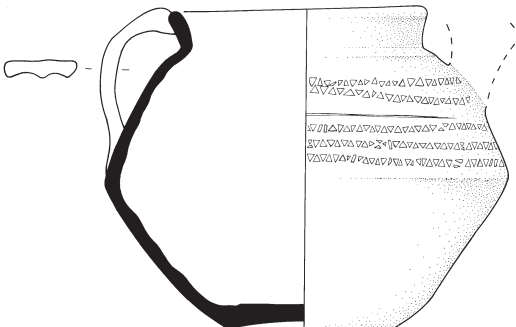
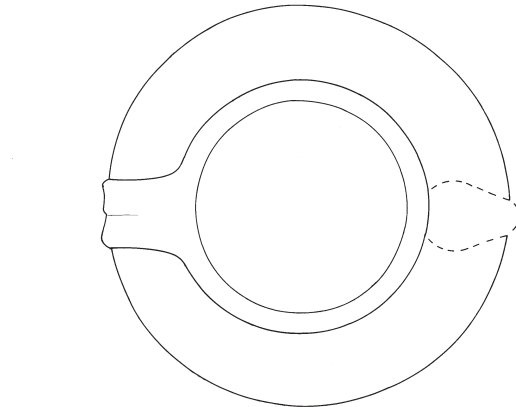
3 Ring, iron
Find number: 57-3-1
Find depth: 155 cm
Open iron ring, probably a bracelet.
Type: L/P/V 357
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: missing

4 Belt fitting, iron
Find number: 57-4-1
Find depth: 155 cm
Simple iron buckle, and some indeterminate iron fragments.
Length: c. 3.5 cm
Location: Archaeological restoration company Restaura

5 Bow brooch, iron
Find number: 57-5-1
Find depth: 155 cm
Fragment of an iron brooch with knobs (according to the description in the catalogue of Beckers and Beckers).
Location: missing

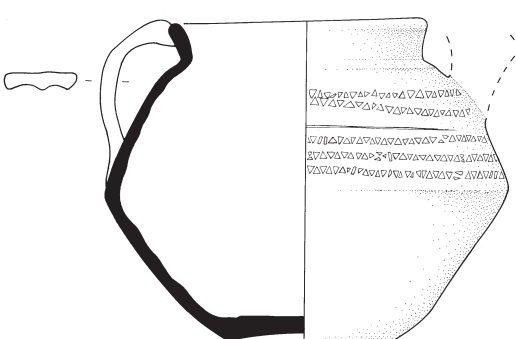
6 Tweezers
Find number: 57-6-1
Find depth: 155 cm
Fragment of a pair of tweezers.
Type: L/P/V 322
L/P/V phases: MA2-MA3
L/P/V date: 520/30-600/10
Location: missing

7 Spindle whorl/disc bead, glass
Find number: 57-7-1
Find depth: 155 cm
Black plano-convex glass spindle whorl or disc bead, decorated with a red straight band around the suspension hole and the middle of the bead, and with a white zigzag band covering the upper surface; the back side is without decoration.
Diameter: 3.4 cm
Type: L/P/V 367
L/P/V phases: PM-MA1 (MA2-MA3)
L/P/V date: 440/50-520/30 (520/30-600/10)
Location: Archaeological Museum Stein



57-8-1

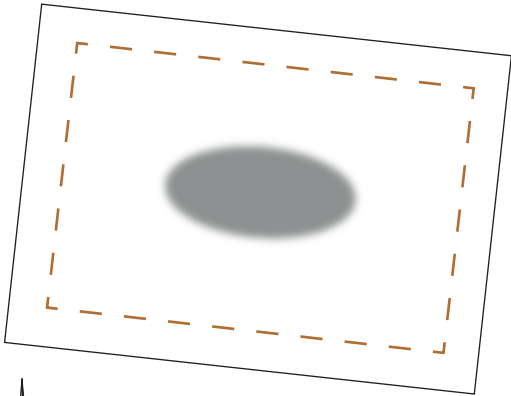
8 Pottery vessel
Find number: 57-8-1
Original find number: VIA 119?
Find depth: 155
Black spouted pot found in fragmented condition but now restored and completed; approximately 85% of the original pot is present. The upper wall is decorated with multiple lines of triangular roulette stamp impressions.
Height: 16.5-17.5
Type: Siegmund Kwt3.12
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5D (6: 580/90-610/20)
Location: Archaeological Museum Stein



58
INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	250
Grave pit width	180
Grave pit depth	185
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably northwest-southeast, but we cannot be certain of this since the body imprint did not leave a clear silhouette. A vague soil discoloration indicated the former location of a wooden container and a brown greasy spot the former presence of a now completely decomposed body; the soil discolorations were only visibly in a thin layer and dimensions of the wooden container and body imprint were not recorded. The many iron mounts, of which some had copper alloy rivets, found at the exact location of the wooden container walls, might indicate that the container was decorated. Pottery fragments were found scattered throughout the grave, which might indicate that it was reopened.



58



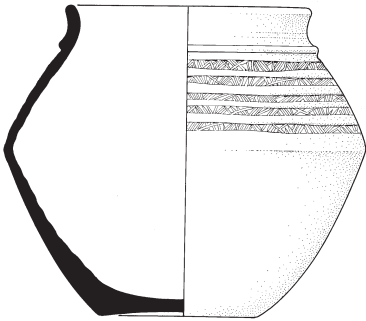
58-1-1

GRAVE DATE
S-GB IIa: 565-610/20
FAG 4-9: 510/20-710

FINDS

1 Rivets, iron
Find number: 58-1-1
Original find number: VIA 121
Four iron rivets with slightly domed solid heads and straight pins (five were mentioned as find in the catalogue of Beckers and Beckers)
Diameter: 2.9 cm
Location: Archaeological Museum Stein

2 Pottery vessel
Find number: 58-2-1
Grey biconcial pot, baked hard, found in fragmented condition but now restored and completed; approximately 75% of the pot is present. The upper wall is decorated with three relatively deep and broad grooves underneath the neck and five, less deep and broad, grooves on the upper wall. In between the grooves of the lower zone a pattern of crosses, lines and forks seem to be engraved, thus not applied with a stamp.
Height: 17.0 cm
Type: Siegmund Kwt3.12
Rhineland phase: 6 (7)
Rhineland date: 570-585 (610)
Location: Archaeological Museum Stein



58-2-1



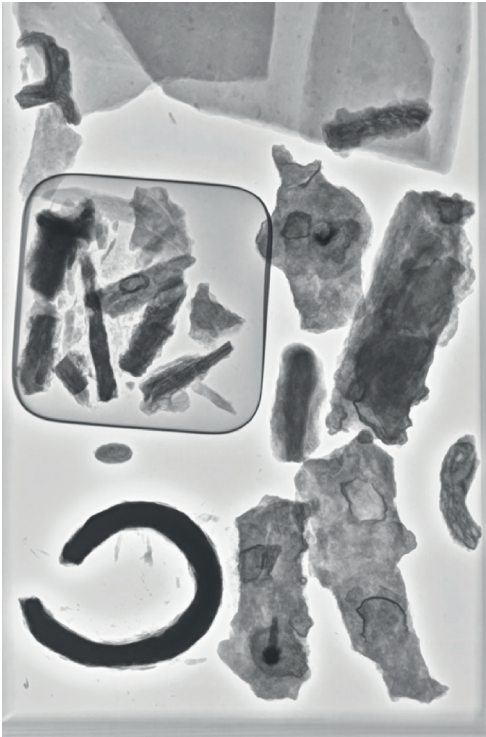
58-3-1



58-4-1



58-5-1, 6-1



6 Fragments, iron
Find number: 58-6-1
Original find number: VIA 122
Various iron fragments, some with rivets; grip of a shield.
Location: Archaeological restoration company Restaura

3 Pottery vessel
Find number: 58-3-1
Original find number: VIA 127
Fragments of the lower part of a grey biconcial pot with a smoked surface.
Location: Archaeological restoration company Restaura

4 Ring rod, iron
Original find number: VIA 124?
Find number: 58-4-1
Iron ring rod with an open loop, the rod is partly gone.
Length: 6.1 cm
Loop diameter: 1.8 cm
Type: L/P/V 353
L/P/V phases: MA3-MR3
L/P/V date: 520/30-700/10
Location: Archaeological Museum Stein

5 Simple ring
Find number: 58-5-1
Simple ring.
Diameter: 4.0-4.5 cm
Type: L/P/V 357
L/P/V phase: MA2-MR1
L/P/V date: 520/30-630/40
Location: Archaeological restoration company Restaura

59 INHUMATION GRAVE

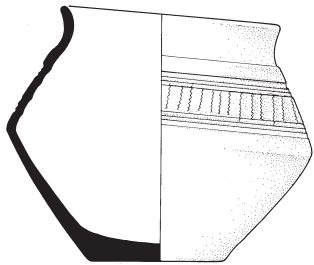
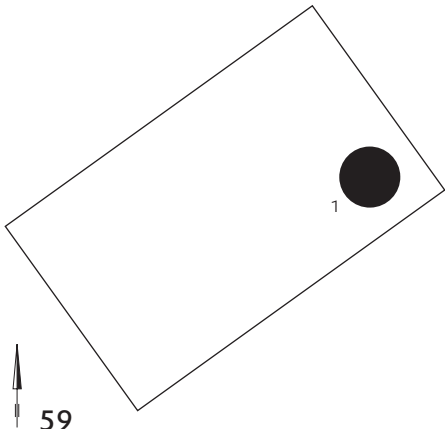
Grave structure	trench grave?
Grave pit length	200
Grave pit width	120
Grave pit depth	95
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably SW-NE, but we cannot be certain of this since no human remains were found.

GRAVE DATE
S-GB I: 510/20-565 (585)
FAG 4-5: 510/20-580/90

FINDS

1 Pottery vessel
Find number: 59-1-1
Grey biconical pot of fine to coarse paste with some large inclusions found in fragmented condition but now restored and completed; approximately 90% of the original pot is present. The upper wall is

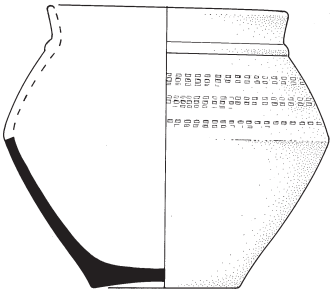
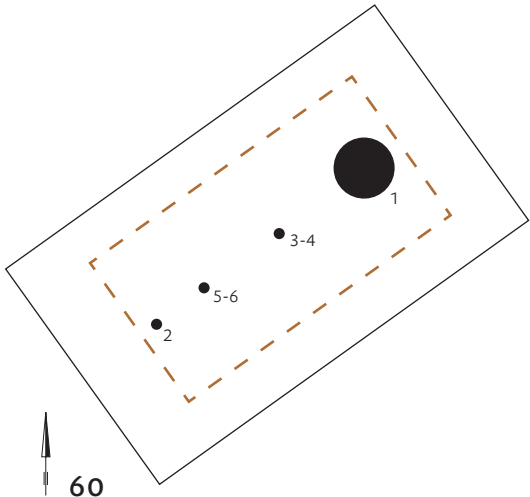


59-1-1

decorated with a zone of three grooves underneath the rim and a similar zone just above the carination and single stamp impressions of undulating vertical lines with a length of 1.5 cm in between them.
Height: 12.6-13.0 cm
Type: Siegmund Kwt2.11
Rhineland phases: 4-5
Rhineland date: 530-570
Type: Siegmund Kwt2.12
Rhineland phase: 4
Rhineland date: 530-555
Alternative type: FAG Kwt2A (4-5: 510/25-580/90)
Location: Archaeological Museum Stein

60 INHUMATION GRAVE

Grave structure	wooden container grave
Grave pit length	240
Grave pit width	140
Grave pit depth	150
Orientation	SW-NE



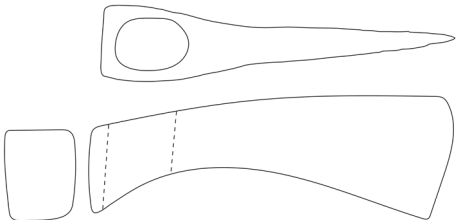
60-1-1

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably SW-NE, but we cannot be certain of this since no human remains were found. The fill of a (wooden) container, consisting of gravel and clay which was clearly different from its surroundings, became visible at a depth of 128 cm. The (wooden) container had a length of 170 cm and a width of 90 cm.

GRAVE DATE
S-GB IIa: 565-610/20
FAG 5-7: 565-640/50

FINDS

1 Pottery vessel
Find number: 60-1-1
Grey biconical pot found in fragmented condition but now restored and completed; approximately 50% of the original pot is present. The upper wall is decorated with zones consisting of three to four lines of rectangular roulette stamp impressions.
Height: 15.5 cm
Type: Siegmund Kwt3.22
Rhineland phases: 7-8A



60-2-1

- Rhineland date: 600-625
Alternative type: FAG 5B (5-7: 565-640/50)
Location: Archaeological Museum Stein

2Axe, iron
Find number: 60-2-1
Original find number: VIA 130
Iron axe
Length blade: 19.0 cm
Type: Siegmund FBA2.1
Rhineland phases: 6-7
Rhineland date: 570-610
Location: Archaeological Museum Stein

3Fire steel, iron
Find number: 60-3-1
Iron fire steel
Type: Siegmund Ger.5
Location: Archaeological restoration company Restaura

4Belt fitting, iron
Find number: 60-4-1
Small simple iron buckle.
Location: Archaeological restoration company Restaura

- 5Knob, copper alloy
Find number: 60-5-1
Copper alloy knob with remnants of the wooden shield.
Location: Archaeological restoration company Restaura
- 6Fragment, iron
Find number: 60-6-1
Iron fragment with a small round copper alloy fragment.
Location: Archaeological restoration company Restaura
- 7Fragments, iron and wood
Find number: 60-7-1
Various indeterminate iron and wood fragments.
Location: Archaeological restoration company Restaura
- 8Nail, iron
Find number: 60-8-1
Fragments of an iron nail.
Location: Archaeological restoration company Restaura
- 9Knife, iron
Find number: 60-9-1
Fragments of an iron knife.
Location: Archaeological restoration company Restaura

- 10Fragments, arrow head
Find number: 60-10-1
Fragments of the socket of an iron arrow head.
Location: Archaeological restoration company Restaura
- 11Fragments, arrow head
Find number: 60-11-1
Fragments of the socket of an iron arrow head.
Location: Archaeological restoration company Restaura
- 12Fragments, iron
Find number: 60-12-1
Fragments of what might be the socket of an iron lance head.
Location: Archaeological restoration company Restaura
- 13Fragments, pottery
Find number: 60-13-1
Original find number: VIA 131
Pottery fragments; smoked, decorated with multiple lines of rectangular roulette stamp impressions.
Type: Siegmund Kwt3.21/3.22/3.23
Rhineland phases: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5B/5C (5-8: 565-670/80)
Location: Archaeological restoration company Restaura

- 14Fragment, pottery
Find number: 60-14-1
Pottery fragment, white.
Location: Archaeological restoration company Restaura

61

INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	240
Grave pit width	150
Grave pit depth	170
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably SW-NE, but we cannot be certain of this since no human remains were found.

GRAVE DATE
S-GB IIb: 565-640/50
FAG 5-7: 565-640/50

- FINDS**

1Pottery vessel
Find number: 61-1-1
Black biconical pot found in fragmented condition now restored and completed; approximately 70% of the original pot is present. The upper wall is relatively long and decorated with three grooves underneath which two zones of three to four lines of small square roulette stamp impressions are applied.
Height: 13.5
Type: Siegmund Kwt3.22
Rhineland phases: 7-8A
Rhineland date: 600-625
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Location: Archaeological Museum Stein

2Pottery, fragments
Find number: 61-2-1
Three small Roman pottery fragments and a rim fragment of a red pot.
Location: missing

62

INHUMATION GRAVE

OrientationNW-SE?

DESCRIPTION
Merovingian inhumation grave. The grave's dimensions could not be recorded because it collapsed after heavy rainfall. The indicated location, outline and orientation of this grave on the original cemetery plan may be inaccurate.

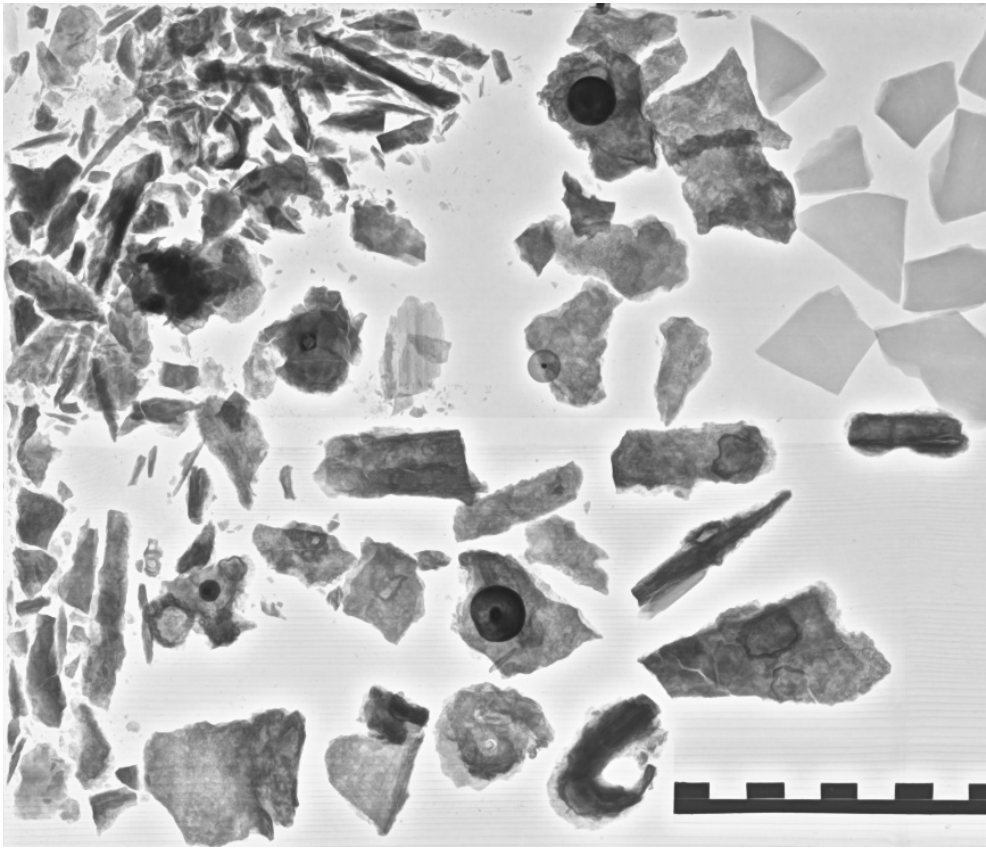
GRAVE DATE
S-GB IIb: 565-640/50
FAG 5-6: 565-640/50

- FINDS**

1Pottery vessel
Find number: 62-1-1
Original find number: VIA 133
Fragments of the lower part of a grey biconical pot. Traces of decoration just above the carination suggest that the entire surface was decorated with single or multiple lines of rectangular roulette stamp impressions. Approximately 30% of the original pot is present.
Diameter bottom: 6.6 cm



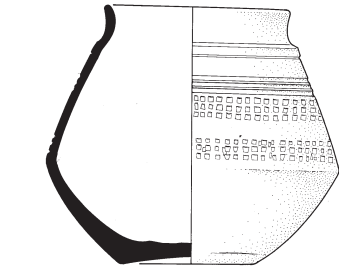
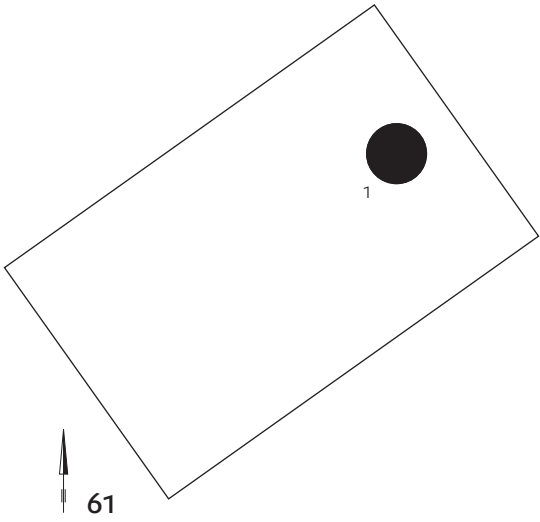
60-13-1, 14-1



60-3-1, 4-1, 5-1, 6-1, 7-1, 8-1, 9-1, 10-1, 11-1, 12-1



60-3-1, 4-1, 5-1, 6-1, 7-1, 8-1, 9-1, 10-1, 11-1, 12-1



61-1-1

Height carination: 8.4 cm
Type: Siegmund Kwt3.11/3.12/3.13
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Type: Siegmund Kwt3.21/3.22/3.23
Rhineland phases: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5B/5C (5-8: 565-670/80)
Location: Archaeological Museum Stein

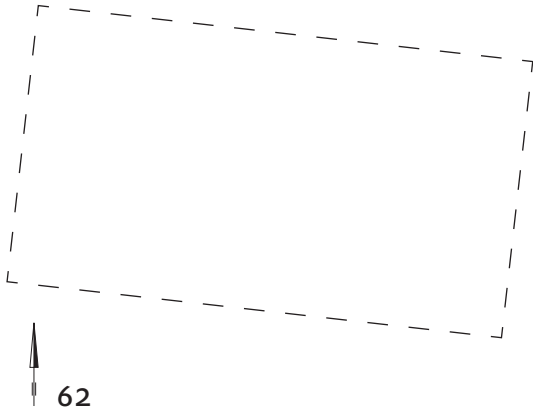
63
INHUMATION GRAVE

Orientation NW-SE?

DESCRIPTION
Merovingian inhumation grave. The grave’s dimensions could not be recorded because it collapsed after heavy rainfall. The indicated location, outline and orientation of this grave on the original cemetery plan may be inaccurate.

GRAVE DATE
S-GB I: 510/20-585
FAG 4-6: 510/20-610/20

FINDS
1 Pottery vessel
Find number: 63-1-1
Black biconical pot found in fragmented condition, now restored and completed; approximately 75% of the original pot is present. The upper wall is decorated with five prominent grooves covering nearly the entire surface.



62-1-1

Height: 10.3 cm
Type: Siegmund Kwt2.32
Rhineland phases 4-5
Rhineland date: 530-570
Alternative type: FAG Kwt3A (4-5 (6): 510/20-580/90 (580/90-610/20))
Location: Archaeological Museum Stein

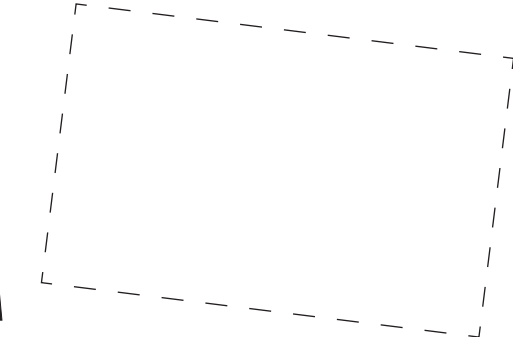
64
INHUMATION GRAVE

Grave structure trench grave?
Grave pit length 250
Grave pit width 150
Grave pit depth 180
Orientation SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found.

GRAVE DATE
S-GB III: 640/50-670/80
FAG 3-8: 460/80-670/80

FINDS
1 Belt fitting, iron
Find number: 64-1-1.1
Iron plate buckle with heart shaped plate and three copper alloy rivets (according to the description in the catalogue of Beckers and Beckers)
Recorded total length: 13.0 cm
Recorded width: 6.0 cm



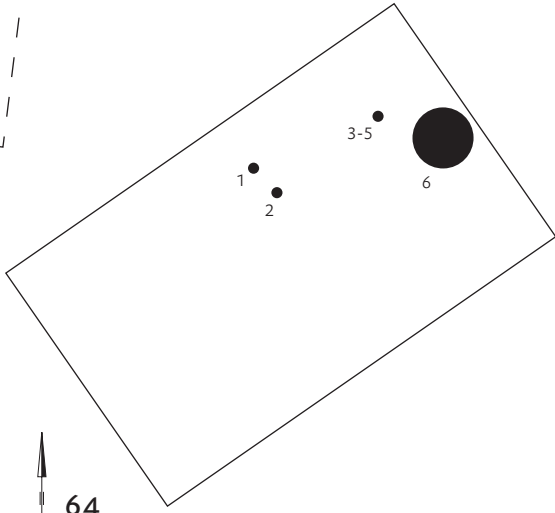
63-1-1

Type: Siegmund Gür4.2/4.3/4.5/4.6/4.7/4.8
Rhineland phases: end 7-9
Rhineland date: c.600-670
Location: missing.

Belt fittings, iron
Find number: 64-1-1.2
Iron heart shaped counter plate with five copper alloy rivets (according to the description in the catalogue of Beckers and Beckers).
Recorded length: 11.0 cm
Recorded base width: 6.0 cm.
Type: Siegmund Gür4.2/4.3/4.5/4.6/4.7/4.8
Rhineland phases: end 7 - 9
Rhineland date: c.600-670
Location: missing

Belt fittings, iron
Find number: 64-1-1.3
Iron rectangular back plate with five rivets (according to the description in the catalogue of Beckers and Beckers).
Recorded length: 6.0 cm
Recorded width: 5.0 cm.
Type: Siegmund Gür4.2/4.3/4.5/4.6/4.7/4.8
Rhineland phases: end 7 - 9
Rhineland date: c.600-670
Location: missing

Belt fittings, sheet copper alloy
Original find number: VIA 138
Find number: 64-1-1.4
Five thin copper alloy slotted plates with rectangular openings and rivets at each corner. Two engraved thin lines are applied along the edges.
1: 2.4 x 2.4 cm
2-5: 2.9 x 2.7 cm
Type: Siegmund Gür4.2/4.3/4.5/4.6/4.7/4.8

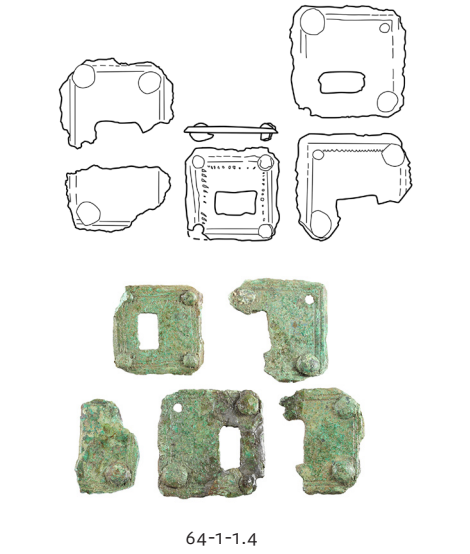


Rhineland phases: end 7 - 9
Rhineland date: c.600-670
Location: Archaeological Museum Stein

2 Ring, copper alloy
Find number: 64-2-1
Original find number: VIA 144
Thick (recorded section: 0.4 cm) copper alloy ring.
Diameter: 3.0 cm.
Location: Archaeological restoration company Restaura

3 Arrow head, iron
Find number: 64-3-1
Original find number: VIA 140
Pointed iron arrow head.
Length: 7.1 cm
Diameter shaft: 1.1 cm
Type: L/P/V 23
L/P/V phases: PM-MA3
L/P/V date: 440/50-600/10
Type: L/P/V 25
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein

4 Arrow head, iron
Find number: 64-4-1
Original find number: VIA 144
Iron arrow head with diamond shaped blade
Recorded length: 8.5 cm
Recorded blade width: 2.5 cm.
Location: missing



64-1-1.4

5 Arrow head, iron
Find number: 64-5-1
Original number: VIA 140
Iron arrow head with leaf shaped blade and closed shaft, restored.
Length: 8.2 cm
Blade width: 1.7 cm
Diameter shaft: 1.1 cm
Type: L/P/V 26
L/P/V phases: MA1-MR1
L/P/V date: 470/80-630/40
Location: Archaeological Museum Stein

6 Pottery vessel
Find number: 64-6-1
Black biconical pot, complete, without decoration. Some red stains on upper and lower wall and production grooves on the lower wall.
Height: 10.0 cm
Type: Siegmund Kwt2.42
Rhineland phases: 7
Rhineland date: 585-610
Alternative type FAG 4A (4-7: 510/25-640/50).
Location: Archaeological Museum Stein

7 Belt fitting, iron
Find number: 64-7-1
Iron plate buckle with a triangular shaped plate with inlays and half of the loop, present in corroded condition. Since it is not recorded as a find from grave 64 in the catalogue of Beckers and Beckers it might be wrongly assigned of this grave. It might be, in view of the matching dimensions, the missing

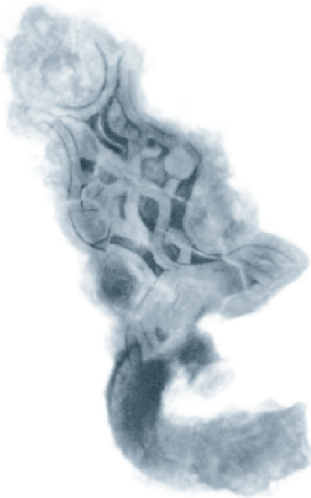


64-6-1

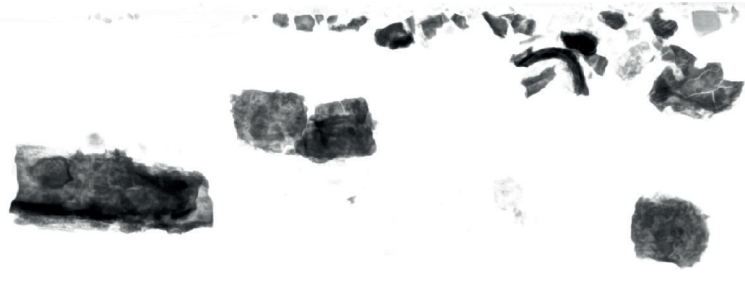
plate buckle recorded as find from grave 72. For now it is maintained, although with reservations, as a find from grave 64. On the basis of the X-ray the decoration can be identified as a (silver) plated middle field intersected with a degenerated animal style pattern probably with additional silver and/or copper alloy threads.
Plate length: 4.8 cm
Plate width: 2.5 cm
Type: Siegmund Gür4.8
Rhineland phase: 9
Rhineland date: 640-670
Alternative type: FAG Gür4.8A (8: 640/50-670/80)
Location: Archaeological restoration company Restaura

8 Fragments, iron
Find number: 64-8-1
Iron fragments iron with a copper alloy knob.
Location: Archaeological Restoration company Restaura

9 Fragments, wood
Find number: 64-9-1
Wood fragments of the shaft of one of the arrow heads; it is not known of which one.
Location: Archaeological Museum Stein



64-7-1 (SCALE 1:1)



64-8-1

65
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	270
Grave pit width	180
Grave pit depth	150
Orientation	SW-NE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably southwest-northeast, but we cannot be certain of this since no human remains were found.

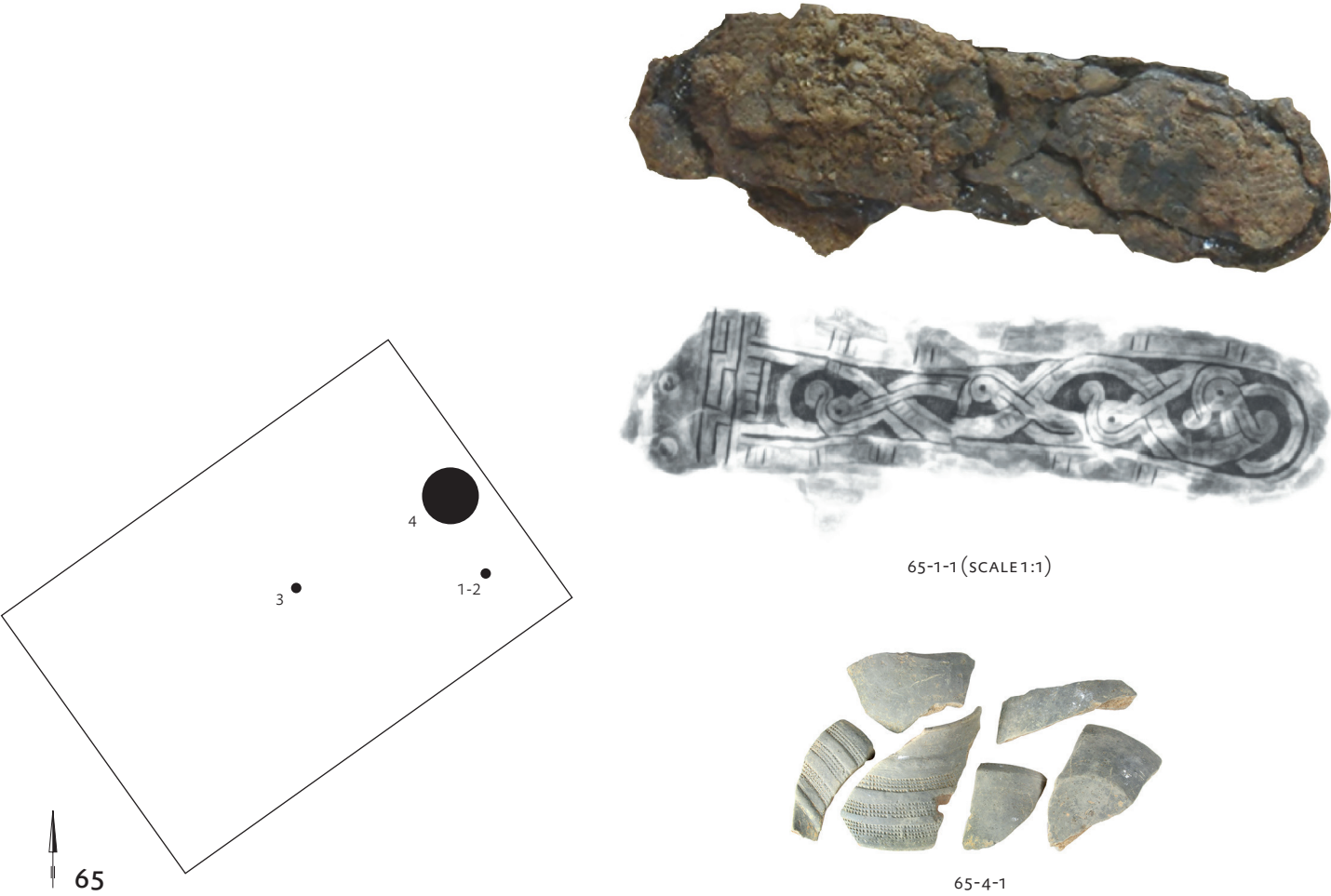
GRAVE DATE
S-GB III: 640/50-670/80
FAG 5-8: 565-670/80

FINDS
1 Strap end, iron
Find number: 65-1-1
Find depth: 110
An iron strap end with two iron rivets was recorded in the catalogue of Beckers and Beckers as find from grave 65. An iron strap end with a length of c. 10 cm

without find number is available in the collection. It is on the basis of its length assigned to grave 65. It is present in corroded condition and covered with mineralised textile remains. The X-ray photo shows that it was decorated with a silver plated middle field intersected by a regular animal style pattern with additional silver and maybe copper alloy threads.
Recorded length: 10.0 cm
Recorded width: 3.0 cm.
Actual length: 9.9 cm
Actual width: 2.6 cm
Type: Siegmund Gür4.7
Rhineland phase: 9
Rhineland date: 640-670
Alternative type: FAG S-Gür4.7 (8: 640/50-670/80)
Location: Restoration company Restaura

2 Fragments (belt fittings), iron
Find number: 65-2-1
Three iron fragments, of which two are triangular and one is an iron rivet. They might have been a plate buckle and counter plate with one detached rivet which can be associated with the strap end.
Location: missing

3 Ring, copper alloy
Find number: 65-3-1
Find depth: 150
Simple copper alloy closed ring.
Recorded section: 0.5 cm
Recorded diameter: 3 cm.
Location: missing
4 Pottery vessel
Find number: 65-4-1
Original find number: VIA 146
Six fragments of a grey biconical pot: one wall fragment with rim, one bottom fragment and four wall fragments. The upper wall was decorated with three zones of four lines of square roulette stamp impressions. Approximately 20% of the original pot is present.
Type: Siegmund Kwt3.21/3.22/3.23
Rhineland phases: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Alternative type: FAG Kwt5C (7-8: 610/20-670/80)
Location: Archaeological Museum Stein



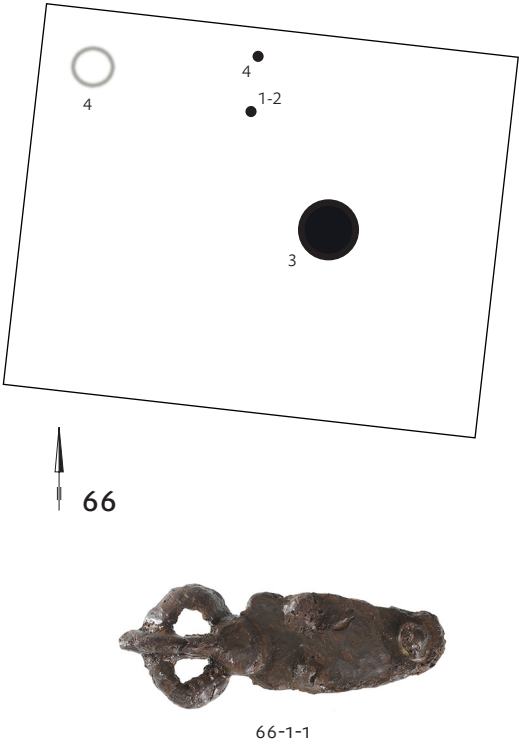
66
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	250
Grave pit width	200
Grave pit depth	120
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave’s northwest-southeast orientation is identified on the basis of the remains of a child’s skull found in the north-western corner of the grave.

GRAVE DATE
S-GB IIb: 565-640/50
FAG 5-7: 565-640/50

FINDS
1 Plate buckle, iron
Find number: 66-1-1
Original find number: VIA 146
Plate buckle, iron
Length plate: 5.0 cm
Length loop: 3.0 cm.
Type: Siegmund Gür4.5
Rhineland phase: 8
Rhineland date: 610-640
Location: Archaeological restoration company Restaura
2 Nail, iron
Find number: 66-2-1
Iron nail, found in the proximity of the plate buckle.
Location: missing



3 Pottery vessel
Find number: 66-3-1
Original find number: VIA 149?
Black biconical pot, complete. The upper wall is decorated with a single line of square roulette stamp impressions applied four times.
Height: 10.3
Type: Siegmund Kwt3.13
Rhineland phases: 6-7
Rhineland date: 570-610
Alternative type: FAG Kwt5A (5-6: 565-610/20)
Location: Archaeological Museum Stein
4 Human remains
Find number: 66-4-1
Bone fragments.
Location: missing
Human remains
Find number: 66-4-2
Part of the skull of a child.
Location: missing
5 Knife, iron
Find number: 66-5-1
Original find number: VIA 144/147
Only the hilt with some wood remains seems to be present.
Location: Archaeological restoration company Restaura
6 Bead?
Find number: 66-6-1
Small bead shaped white object with small elevated dots; it is not certain whether it is a bead and of which material it is made.
Location: Archaeological restoration company Restaura



67
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	54
Grave pit width	54
Grave pit depth	60
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave’s orientation was probably northwest-southeast, but we cannot be certain of this since no human remains were found. A biconical pot was the single find from this small grave; was it a grave with disarticulated bones, a very young child’s grave, or maybe a vessel grave with cremation?

GRAVE DATE
S-GB IIId: 610/20-670/80
FAG 7-8: 610/20-670/80

FINDS
1 Pottery vessel
Find number: 67-1-1
Black biconical pot found in fragmented condition now restored and completed; approximately 70% of the pot is present. The upper wall is decorated with two zones of three lines of square roulette stamp impressions.
Height: 9.7 cm
Type: Siegmund Kwt3.22
Rhineland phases: 7-8A
Rhineland date: 600-625
Alternative type: FAG Kwt5C (7-8: 610/20-670/80)
Location: Archaeological Museum Stein

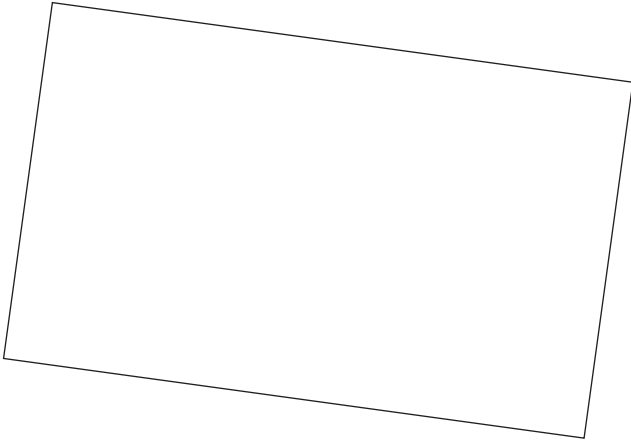
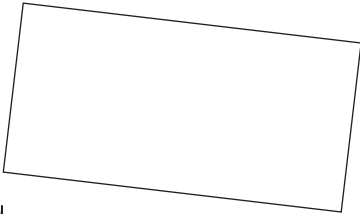


68
INHUMATION GRAVE

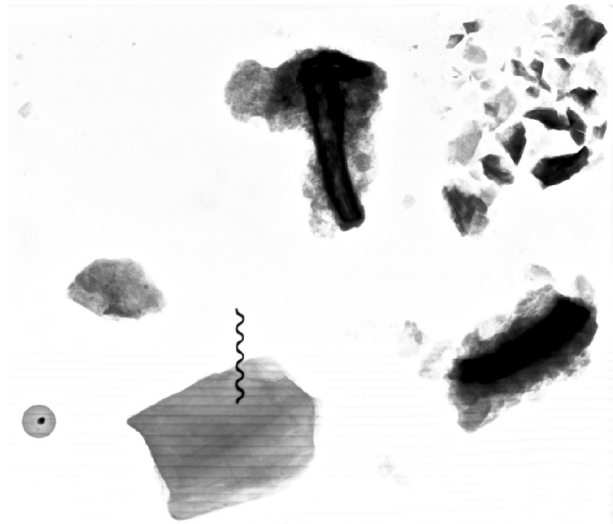
Grave structure	trench grave?
Grave pit length	180
Grave pit width	90
Grave pit depth	100
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably northwest-southeast, but we cannot be certain of this since human remains were not found.

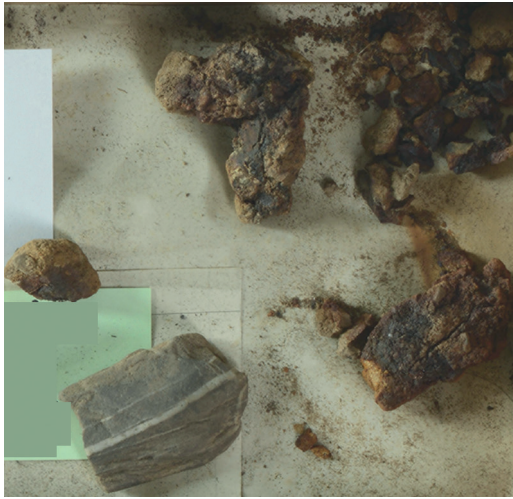
GRAVE DATE
Cannot be dated



69-1-1



69-2-1



- FINDS**
- Pottery vessel
Find number: 69-1-1
Original find number: VIA 155
Fragments of a grey biconical pot, not restored and completed. The upper wall was decorated with three zones of three or four lines of rectangular roulette stamp impressions. Approximately 50% of the original pot is present.
Type: Siegmund Kwt3.21/3.22/3.23
Rhineland phases: 7-8
Rhineland date: 585-640
Alternative type: FAG Kwt5B (5-7: 565-640/50)
Alternative type: FAG Kwt5C (7-8: 610/20-670/80)
Location: Archaeological restoration company Restaura
 - Fragments, iron
Find number: 69-2-1
Three amorphous indeterminate iron fragments recorded; present are an iron nail and indeterminate fragments.
Location: Archaeological restoration company Restaura

- Rivet, copper alloy
Find number: 69-3-1
Original find number: VIA 152
Copper alloy rivet
Location: Archaeological restoration company Restaura
- Pottery fragment
Find number: 69-4-1
Original find number: VIA 154
Terra sigillata fragment
Location: Archaeological restoration company Restaura
- Wood, fragments
Find number: 69-5-1
Wood fragments (not of the coffin).
Location: missing
- Pottery fragment
Find number: 69-6-1
Original find number: VIA 154
White pottery fragment
Location: Archaeological restoration company Restaura

69-3-1



69-4-1



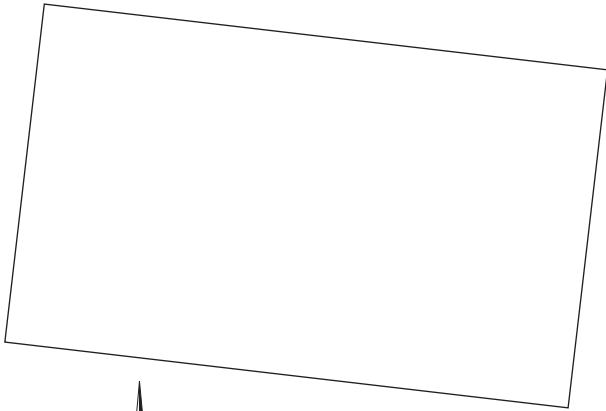
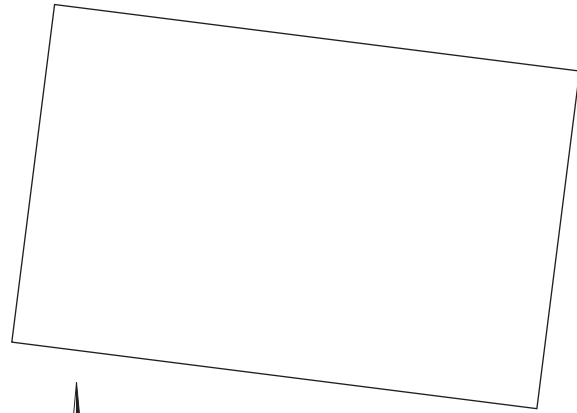
69-6-1

70
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	280
Grave pit width	180
Grave pit depth	190
Orientation	NW-SE

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably northwest-southeast, but we cannot be certain of this since human remains were not found. Remarkable was the large number of relatively large stones, which seemed to be distributed through the grave unevenly apart for some which were standing against the burial pit wall.

GRAVE DATE
Cannot be dated



71
INHUMATION GRAVE

Grave structure	trench grave?
Grave pit length	300
Grave pit width	180
Grave pit depth	140
Orientation	W-E

DESCRIPTION
Merovingian inhumation grave. The grave's orientation was probably northwest-southeast, but we cannot be certain of this since human remains were not found. Remarkable was the large number of relatively large stones, which seemed to be distributed through the grave unevenly apart for some which were standing against the burial pit wall.

GRAVE DATE
Cannot be dated

72
INHUMATION GRAVE

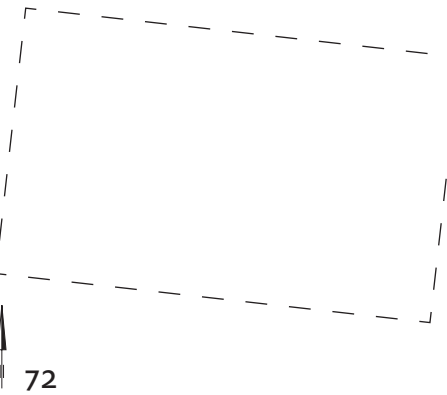
Grave structure	trench grave?
Orientation	NW-SE?

DESCRIPTION
Merovingian inhumation grave. The grave was for its greatest part destroyed because of its location in the slope to the south of the cemetery terrain. The indicated location, outline and orientation of this grave on the original cemetery plan are not accurate.

GRAVE DATE
S-GB IIc: 610/20-640/50
FAG 5-7: 565-640/50

FINDS
1 Plate buckle, iron
Find number: 72-1-1
Iron plate buckle with triangular plate (on the basis of the description in the catalogue of Beckers and Beckers).
Recorded length plate: 5 cm
Recorded plate base width: 3 cm
Recorded maximum buckle loop length: 4 cm
Type: Siegmund Gür4.5
Rhineland phase: 8
Rhineland date: 610-640
Location: missing

2 Seax, iron
Find number: 72-2-1
Original find number: VIA 161?
Iron seax, recorded with a rivet and wood remains preserved on the hilt. The specimen with original find number VIA 161 might match with this grave; the seax is present in corroded condition but a



rivet is not observed although wood remains are. The measured dimensions do not show that great discrepancies with the recorded dimensions.
Recorded length: 37.0 cm
Recorded hilt length: 13.0 cm
Length: 43.5 cm
Length blade: 29.7 cm
Blade width: 4.5 cm
Type: FAG Sax2.1
FAG phases: (5-8) 6-7
FAG date: (565-680) 580/90-640/50
Alternative type: Siegmund Sax2.1 (7-middle 9: 585-655)
Location: Archaeological Museum Stein

3 Pottery vessel
Find number: 72-3-1
Black biconical pot with an indented bottom. The upper wall is decorated with lines of irregular square roulette stamp impressions.
Recorded height: 13.0 cm
Location: missing

73
POSSIBLE GRAVE

Merovingian inhumation grave. Biconical pots were mentioned to have been found in the slope to the south of the cemetery terrain on the basis of which the former presence of an inhumation grave is assumed here. It was destroyed already some time before the excavation. Its exact location is not known and the indicated location on the cemetery plan is not accurate.



74
POSSIBLE GRAVE

Merovingian inhumation grave. Biconical pots were mentioned to have been found in the slope to the south of the cemetery terrain on the basis of which the former presence of an inhumation grave is assumed here. It was destroyed already some time before the excavation. Its exact location is not known and the indicated location on the cemetery plan is not accurate.

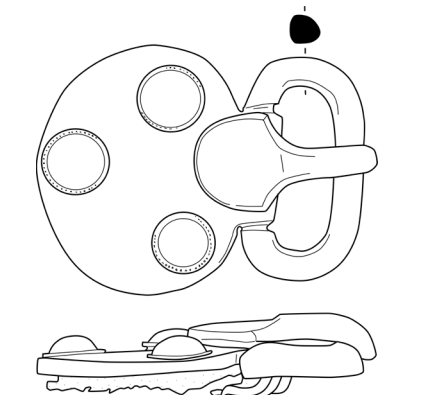
75
POSSIBLE GRAVE

Merovingian inhumation grave. Biconical pots were mentioned to have been found in the slope to the south of the cemetery terrain on the basis of which the former presence of an inhumation grave is assumed here. It was destroyed already some time before the excavation. Its exact location is not known and the indicated location on the cemetery plan is not accurate.

FINDS WITHOUT FIND NUMBER
OR (CORRECT) CONTEXT
INFORMATION

FIND NUMBERS MATCHING WITH GRAVE 8
A number of finds have find numbers which match with grave 8 but which were not recorded as finds from this grave in the catalogue of Beckers and Beckers. Since already a large number of finds are identified as finds from grave 8 on the basis of this catalogue, it is for now assumed that these additional finds were originally not part of this grave and that the find numbers were assigned to them by mistake.

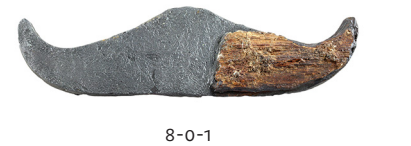
Belt fitting, iron
Find number: 8-0-0
Original find number: VIA18?
Plate buckle with a round plate and three copper alloy rivets with craved rim. Mineralised textile/ leather is preserved on the back side of the plate. It was stored in association with a back plate, also with a find number matching with grave 8. This back plate is for now matched with the iron plate buckle with triangular plate from this grave since this ensemble was recorded in the catalogue of Beckers and Beckers.
Length plate: 5.3 cm
Width plate: 6.6 cm
Loop max: 5.7 cm



8-0-1

Loop min: 4.3 cm
Type: Siegmund Gür4.1/4.2
Rhineland phase: 7
Rhineland date: 585-610
Location: Archaeological Museum Stein

Fire steel
Find number: 8-0-1
Original find number: VIA 20
Iron fire steel with curved extremities and wood remains at one side.
Length: 9.2 cm
Type: Siegmund Ger5
Location: Archaeological Museum Stein



8-0-1

Knife
Find number: 8-0-2
Original find number: VIA20
Iron knife with curved back and straight cutting edge.
Length blade: 11.0 cm
Location: Archaeological Museum Stein



8-0-2

Knife
Find number: 8-0-3
Original find number: VIA20
Iron knife with wood and leather remains on hilt and blade. The tip is pointing upward.
Length blade: 9.4
Location: Archaeological Museum Stein



8-0-3

Belt fitting, iron
Find number: 8-0-4
Original find number: VIA 20
Iron plate buckle, severely damaged. The plate is triangular with a protruding extremity and a vertical band shaped elevation on what is either the front or back side of the plate; this cannot be established. The remnants of the tongue base can be observed, but the buckle loop is gone.
Length: 5.9 cm
Width: 2.5 cm
Location: Archaeological Museum Stein

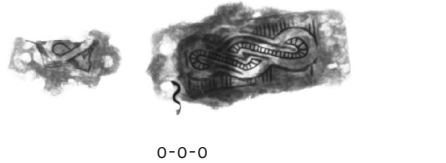


8-0-4

FINDS WHICH MAY BE FROM
GRAVE 37, 46 OR 52

Two iron belt fittings with inlays were kept in a box in restoration atelier Restaura. The notes in this box indicate that finds from graves 37, 46 and 52 were stored in it. The finds could be assigned to one of these graves, except for two belt fittings; it remains uncertain to which grave they actually belonged. At first it was thought that they belonged to grave 37, but they do not match with the iron strap end that was also kept in this box. They match best with the date range assigned to grave 46 (S-GB IIb: 565-640/50), and they do not match with the date range assigned to grave 52 (S-GB I: 510/20-565). It remains for now uncertain to which grave they actually belonged.

Belt fittings, iron
Find number: 0-0-0
Two iron fittings with inlays. The larger fitting has a length of 5.2 cm. It is decorated with a geometric pattern of presumably silver inlays. The decoration consists of a single braided band formed by a single silver thread and filled with a ladder band and a single silver thread or maybe some silver plating. The braided band is surrounded by a pattern of straight silver stripes. Two rivet holes can be observed in the short ends of the plate, and maybe these were also present in the long ends. The second plate is not complete; it remaining length is 1.7 cm. It is assumed to form a set with the larger plate since it has comparable (rivet) holes in its ends and it shows remnants of what seems to be a geometric pattern of inlays. It might have belonged to a more extended set of horse gear fittings (see chapter 4 for a detailed discussion), but they can be dated as belt fittings with geometric inlays.
Type: Siegmund Gür4.6
Rhineland phase: 8
Date: 610-640



0-0-0

FINDS WITHOUT FIND
NUMBER/CONTEXT
INFORMATION

Pottery vessel
Find number: 0-0-1
Original find number: VIA 159 (grave 76)
Biconical pot without decoration. It was found in fragmented condition but is now restored and completed; approximately 95% of the original pot is present. The find number indicates that it was found in grave 76, but this grave was never excavated; it remains unknown what the actual find circumstances of this pot were.
Height: 11.7 cm
Type: Siegmund Kwtz.42
Rhineland phases: 7
Rhineland date: 585-610
Alternative type: FAG Kwt4A (4-7: 510/25-640/50)
Location: Archaeological Museum Stein



0-0-1

Pottery vessel
Find number: 0-0-2
Original find number: VIA 160 (grave 76)
Small orange vessel with an elongated but globular body (beaker?). The vessel has an incurved upper part but is without neck and has a simple rim. It has a flat bottom. The find number indicates that it was found in grave 76, but this grave was never excavated; it remains unknown what the actual find circumstances of this pot were.
Height: 9.6 cm
Location: Archaeological Museum Stein



0-0-2

Pottery vessel
Find number: 0-0-3
Original find number: VIA 163 (grave 77)
Brown biconical pot without decoration and with a weathered smoked surface. The upper wall is much higher than the lower wall. It was found in fragmented condition but is now restored and completed; approximately 90% of the original pot is present. The find number indicates that it was found in grave 77, but this grave was never excavated; it remains unknown what the actual find circumstances of this pot were.
Height: 16.0 cm
Type: Siegmund Kwtz.43
Rhineland phases: 8-9
Rhineland date: 610-670
Alternative type: FAG S-Kwtz.43 (6-9: 580/90-710)
Location: Archaeological Museum Stein



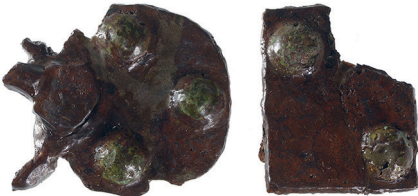
0-0-3

Sword, iron
Find number: 0-0-4
Original find number: VIA 130
Iron sword. The original find number cannot be matched with a grave in which a sword was recorded as find.
Length blade: 61 cm
Width blade: 4.6 cm
Length hilt: 11.3 cm
Location: Archaeological Museum Stein



0-0-4

Belt fittings, iron
Find number: 0-0-5
Original find number: VIA 126
Iron plate buckle with round plate and rectangular back plate. The original find number is difficult to match with a grave unambiguously, since in the possible matching graves belt fittings were not recorded as finds.
Type: Siegmund Gür4.1/4.2
Rhineland phase: 7
Rhineland date: 585-610
Location: Archaeological restoration company Restaura



0-0-5

Nails, iron
Find number: 0-0-6
Four iron nails, probably coffin nails.
Location: Archaeological restoration company Restaura



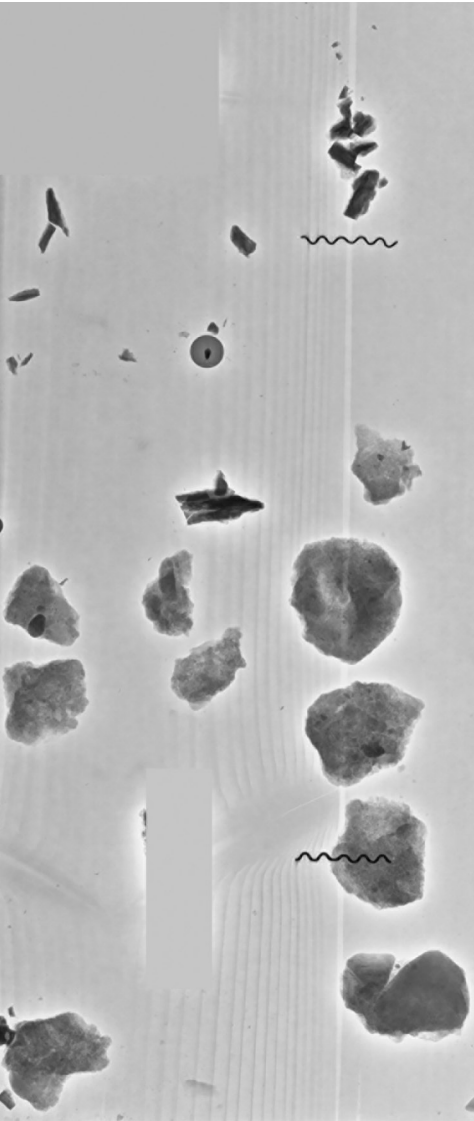
0-0-6

Bead, glass
Find number: 0-0-7.1
Blue, transparent, cylindrical twisted.
Number: 1
Type: BT29 / S-from group 47.4
Kombinationsgruppe: (F) H-I
Rhineland phases: (5-9) 8-10
Rhineland date: (555-670) 610-705
Location: Archaeological Museum Stein



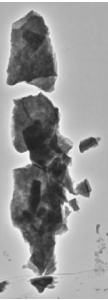
0-0-7

Bead, glass
Find number: 0-0-7.2
Red, opaque, cylindrical double bead. Decoration: white opaque undulating threads and yellow opaque edge bands.
Number: 1
Type: Koch-Schretzheim 58,1
Schretzheim phases: 3-4
Schretzheim date: 565-620/30
Location: Archaeological Museum Stein
Fragments, iron
Find number: 0-0-8
A number of iron fragments, indeterminate.
Location: Archaeological restoration company Restaura



0-0-8

Knife, iron
Find number: 0-0-9
Iron knife in corroded condition
Length blade: c. 11.0 cm
Location: Archaeological restoration company Restaura



0-0-9

Lance head, iron
Find number: 0-0-10
Original find number: VIA 165
Iron lance head with a closed socket and wood remains of the shaft. The tip of the blade is gone, but the length of the diamond shaped blade seems to be of approximately the same length as the socket. This find number does not match with one of the Stein graves. The lance head is not complete; the blade/socket index cannot be established and it can thus not be classified and dated unambiguously.
Length blade: 15.5 cm
Location: Archaeological restoration company Restaura

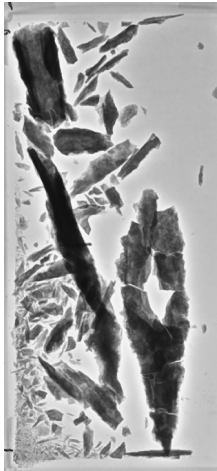


0-0-10

FINDS WITHOUT FIND NUMBER
AND CEMETERY REFERENCE

Find numbers could not be assigned to the finds below. They were stored with the finds from Obbicht-Oude Molen and Stein-Groote Bongerd and belonged thus to one of these cemeteries.

Lance head, iron
Find number: 0-0-0
Iron lance head in corroded and fragmented condition.
Location: Archaeological restoration company Restaura



0-0-0

Arrow, iron
Find number: 0-0-1
Iron arrow head in corroded condition
Location: Archaeological restoration company Restaura



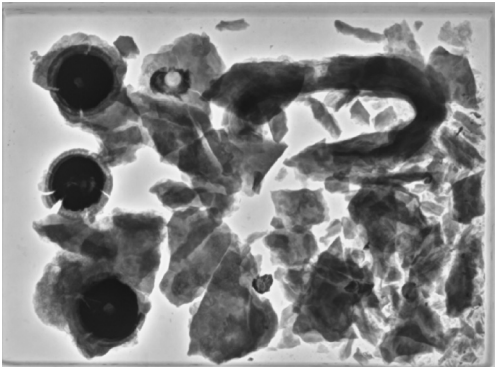
0-0-1

Arrow, iron
Find number: 0-0-2
Iron arrow head in corroded condition
Location: Archaeological restoration company Restaura



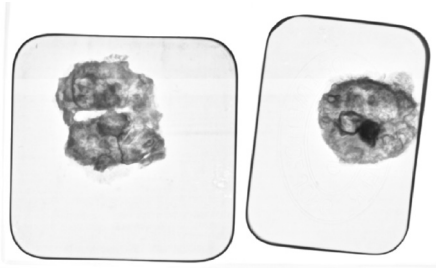
0-0-2

Rivets, iron
Find number: 0-0-3
Iron rivets in corroded condition
Location: Archaeological restoration company Restaura



0-0-3

Fragments, iron and copper alloy
Find number: 0-0-4
Corroded iron and copper alloy fragments; among which probably fragments of a buckle loop and copper alloy rivets.
Location: Archaeological restoration company Restaura



0-0-4

Knife, iron
Find number: 0-0-5
Iron knife in corroded and fragmented condition
Location: Archaeological restoration company Restaura



0-0-5

FINDS FROM OBBICHT?

Finds stored in the Museum De Domeinen in Sittard as finds from Obbicht but under find numbers that do not match with the original find numbers assigned to the finds from the Obbicht cemetery. They were neither recorded in the publication of Beckers and Beckers. It is not certain whether or not they originally belonged to the cemetery.



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Fig. 2.9
Reconstruction of the site plan Sittard-Kemperkoul (scale 1:250). 1. inhumation grave with number, 2. recent disturbance, 3. excavated area.



Fig. 2.23
Reconstruction of the site plan Obbicht-Oude Molen (scale 1:250). 1. schematic representation of inhumation grave with number, 2. body imprint, 3. disturbed grave: location, orientation and dimensions uncertain.

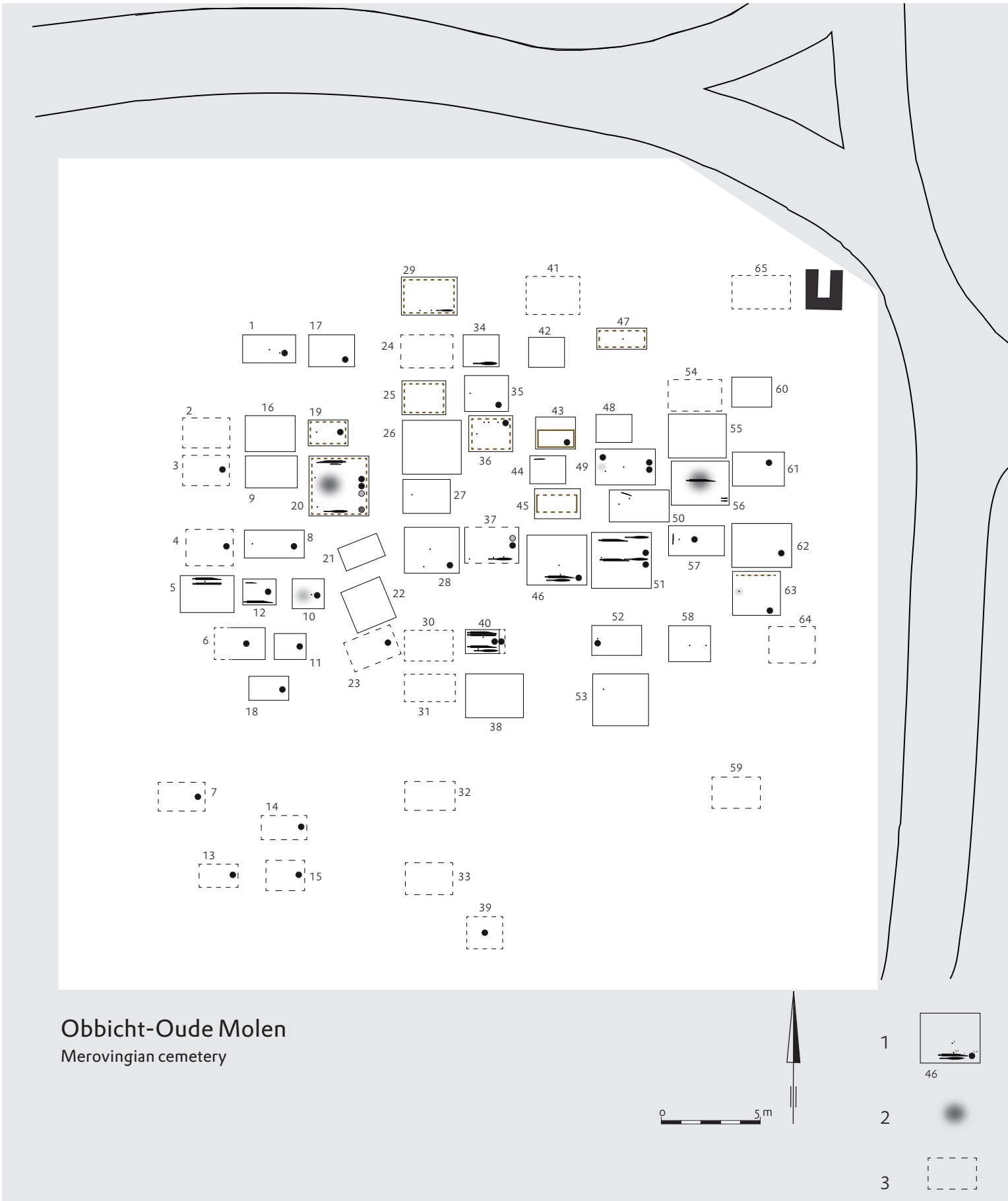


Fig. 2.32
Reconstruction of the site plan Stein-Groote Bongerd (scale 1:250). 1. inhumation
grave with number, 2. body imprint, 3. disturbed grave: location, orientation and
dimensions uncertain.



