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In touch with the dead : early medieval grave reopenings in the Low Countries

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In Touch with the Dead

Early Medieval Grave Reopenings in the Low Countries

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In Touch with the Dead

Early Medieval Grave Reopenings in the Low Countries

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To my dear grandmothers Tine and Cor whose names are my names.

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1. Introduction

In Merovingian cemeteries all over North-West Europe archaeologists find graves that have been reopened after burial. Although the evidence is not always conclusive, the interventions often seem to have been carried out while the cemetery was still in use, possibly even by contemporaries of the deceased. The participants dug pits into the graves, rummaged through, displaced and/or fragmented some of the contents, and took out a selection of objects and perhaps also bones. Many other objects and bones were left behind.

1.1 Historiography

Reopened graves are usually viewed as ‘disturbed’ and unsuitable for use in the study of early medieval society. Certainly, the original contents of these graves are not intact, so they cannot be used in most mainstream artefact-oriented research. Over the years, the post-depositional interventions themselves have nevertheless received scholarly attention in the form of a colloquium organized by Jahnkuhn in 1977 (Jahnkuhn et al. 1978; Pauli 1981; Lorenz 1982), a number of articles (Koch 1973, 1974; Roth 1977; Dannhorn 1994; Beilner & Grupe 1996; Steuer 1998; Stork 2001) and contributions in various cemetery publications (Stoll 1939; Fremersdorf 1955; Sagí 1964; Christlein 1966; Müller 1976; Schneider 1983; Grünwald 1988; Knaut 1993). Although different nuances of opinion can be found in the interpretations of various authors, there was a general consensus that the grave reopenings were carried out by primarily economically motivated criminals or ‘grave robbers’ (Redlich 1948; Roth 1978; Pauli 1981; Grünwald 1988; Steuer 1998; Stork 2001). Extensive summaries of these and other publications can be found in Klevnäs (2013), which are not repeated here.

In recent years, there has been a proliferation of studies about post-depositional interventions in early medieval graves (Aspöck 2005, 2011; Kümmel 2009; Van Haperen 2010; Klevnäs 2013; Zintl 2012; Noterman 2016, dissertation forthcoming). Apparently, the social sciences have come to a stage where disturbance and fragmentation are now interesting subjects for research. Since the publications appeared in quick succession, the literature does not yet show much debate between the various authors, but the interpretations do vary considerably. This chapter contains a discussion of these new publications, leading up to the research questions for the present study. Sections from this chapter were published in the proceedings of the Motifs Through the Ages conference series (Van Haperen 2016).

New studies

In 2009 the dissertation of Christoph Kümmel was published, which comprises a comparative study of the broad range of grave reopening types that have been described by archaeologists and ethnographers. His cases range from prehistory to the modern age, including a number of early medieval examples. Kümmel categorized a large variety of social contexts in which grave reopenings could take place, which he subsequently compared with actual cases of such practices found in historical written sources, ethnographic records in the Human Relations Area Files (HRAF), and reports of archaeological excavations. This categorization is displayed in table 1.1. The interventions are subdivided into progressively narrowing numbered categories (German: *Idealtypen*) according to the time that passed between burial and reopening, the ethnic origin and recorded or presumed motivations of the diggers and the juridical legitimacy of the intervention (Kümmel 2009). A comprehensive review of Kümmel’s book was written by Zintl (2010).

Historiography

Intra-ethnic intervention while cemetery is in use	Positive	Legitimate	Ia1	Ancestral cult; obtaining relics or magical objects; funerary rituals that include a reopening of the grave; reburial in another location
		Illegitimate	Ia2	Like Ia1, but unusual, negatively sanctioned or not socially accepted
	Negative	Legitimate	Ia3	Punishment or revenge; neutralizing dangerous dead (like revenants); desecrating the memory of the deceased
		Illegitimate	Ia4	Like Ia3, but unusual, negatively sanctioned or not socially accepted
	Economic (neutral)	Legitimate	Ia5	Obtaining grave goods or valuable relics for personal enrichment after completion of the funerary ritual/ as fragmentation that is part of the mortuary cycle/ when grave is reused
		Illegitimate	Ia6	Obtaining grave goods or valuable relics for personal enrichment as a crime of opportunity or in rare cases as systematic plundering
Extra-ethnic intervention while cemetery is in use	Positive	Legitimate	Ib1	Removal of relics or magic objects; worship of unknown dead (?)
		Illegitimate	Ib2	Like Ib1, but unusual, negatively sanctioned or not socially accepted
	Negative	Legitimate	Ib3	Revenge; vandalism; injuring an enemy's sense of piety; obtaining trophies; neutralizing dangerous dead (like revenants); desecrating the memory of the deceased
		Illegitimate	Ib4	Like Ib3, but unusual, negatively sanctioned or not socially accepted
	Economic (neutral)	Legitimate	Ib5	Obtaining grave goods or valuable relics for personal enrichment or curiosity, for instance during systematic plundering during war or when a cemetery has been given up
		Illegitimate	Ib6	Like Ib5, but unusual, negatively sanctioned or not socially accepted
Intra-ethnic intervention when cemetery is no longer in use	Positive	Legitimate	Ila1	Like Ia: reburial in another location (especially high status dead). The distance in time excludes funerary rituals. It is unclear to what extent the motives listed at Ia are relevant in this context
		Illegitimate	Ila2	Like Ia2, but sanctions may be lessened because of increased distance in time
	Negative	Legitimate	Ila3	Like Ia3, but it is unclear whether motives like punishment, revenge and fear of revenants are still relevant in this context
		Illegitimate	Ila4	Like Ia4, but sanctions may be lessened because of increased distance in time
	Economic (neutral)	Legitimate	Ila5	Like Ia5, but more easily accomplished because all restrictions are dissolved by the passing of time
		Illegitimate	Ila6	Like Ia6, but sanctions may be lessened because of increased distance in time
Extra-ethnic intervention when cemetery is no longer in use	Positive	Legitimate	Ilb1	Like Ib1: possible worship of unknown dead and relics in the context of 'invented traditions'
		Illegitimate	Ilb2	Like Ib2, but sanctions may be lessened because of increased distance in time
	Negative	Legitimate	Ilb3	Like Ib3, but it is unlikely that the motivations listed would still hold much sway a long time after the funeral
		Illegitimate	Ilb4	Like Ib4
	Economic (neutral)	Legitimate	Ilb5	Like Ib5, but most motivations listed would not hold much sway a long time after the funeral. However, the effect of curiosity could increase (archaeological excavations are an example)
		Illegitimate	Ilb6	Like Ib6, , but sanctions may be lessened because of increased distance in time

Table 1.1. English translation of Kümmel's table 3.13, showing all types of grave reopenings discussed in his study (after Kümmel 2009: 128).

Kümmel included a case study for each of the periods with which his book is concerned. His early medieval case consists of the reopened graves from the cemetery of Munzingen. In this cemetery a large number of graves were subjected to post-depositional interventions. He argues that the high percentage of reopened graves indicates that the removal of grave goods was perceived by the local population as a legitimate practice. Since some of the interventions were probably carried out when later burials were added to the graves, he concludes that they were likely carried out by members of the burial community. The fact that most intervention pits were placed in sections of the graves that usually contained grave goods, leads him to conclude that the motives of the perpetrators were economic, despite the fact that objects and fragments thereof were frequently left behind. He argues that if the removal of artefacts was indeed performed by the descendants of the deceased, this could be evidence of an eschatological scheme where the dead slowly fragmented and faded from memory, and only the material value of the objects in their graves remained of long term interest to the living (Kümmel 2009: 246-260).

In 2011 Edeltraud Aspöck published an article about the cemeteries of Brunn am Gebirge (Lower Austria) and Winnall II (southern England). The article is partially based on a previous German publication, which was one of the first to describe a detailed methodology for the study of interventions in Merovingian graves (Aspöck 2005). At Brunn am Gebirge graves and their contents appear to have been treated differently according to their state of decomposition. Because of this, Aspöck thinks people may have thought of the passage of the dead to another world or state of being as a process comprising various stages. A fully skeletonized corpse would have been a sign that the deceased had completed their passage. If so, the grave goods may have had a transient function as conspicuous display during the funeral, which made it acceptable to remove them at a later time, when the deceased's transformation had reached another stage

(Aspöck 2011: 312-313). At Winnall II, most graves were reopened shortly after burial, before the corpse had decomposed. Since there was little evidence for the removal of grave goods, Aspöck concludes that the primary aim of the interventions in this case was manipulating the dead bodies. This behavior could either indicate a fear of revenants or a type of mortuary practice that required reopening of graves and manipulation of the corpse. She argues that burial and post-burial interventions should be studied as an ensemble so archaeologists can gain a more complete understanding of past funeral practices (Aspöck 2011: 318-319).

In 2013 Alison Klevnäs published her PhD thesis, which focused on reopened graves from early Anglo-Saxon Kent. The book also includes an extensive overview of the continental literature on early medieval interventions in graves. A small number of reopenings that show evidence of bodily mutilation or rearrangement of skeletal parts are interpreted as a reaction to fear of revenants. The disorderly state of most reopened graves leads Klevnäs to suggest that the perpetrators in her research area had little regard for the grave construction or the remains of the deceased. However, because of evidence for preferential removal of specific object-types such as brooches and swords, Klevnäs argues that straightforward personal enrichment cannot have been the perpetrators' primary aim. Instead, the participants wished to 'deprive the dead of symbolically significant objects', thereby damaging the prestige of the deceased's family or reducing the supernatural power of the dead (Klevnäs 2013: 83). In this interpretation, grave reopenings are a type of inter-community violence, an expression of festering conflicts within the local society. Klevnäs (2013: 83-90) suggests that these disputes should be seen against the backdrop of the seventh-century consolidation of elite and royal power in the Anglo-Saxon area and the transition from a dispersed rural society to an early state. Stephanie Zintl has recently finished her PhD thesis on grave reopenings in early medieval German Bavaria (Zintl 2012). She questions

the traditional 'grave robbery' hypothesis, and argues instead that the grave reopenings were complementary to the funerary practices and were carried out by the burial community itself. There was no evidence for consistent removal of all valuable grave goods. The diggers rather seem to have targeted particular symbolically laden grave good types such as weapons and brooches, as they did in Kent. Zintl suggests that the reopenings may have meant to change the graves' layout and contents rather than just remove grave goods. This could have been a way to manipulate or constrain the graves' meanings and potency. According to this interpretation, post-depositional interventions were a tool with which people could control the real or symbolic power and social status of the dead and their descendants. Like Klevnäs, Zintl feels that such practices may have played a part in conflicts. However, since she believes graves were reopened by people from the burial community itself, she locates these among members or families within the burial communities rather than between larger rivalling factions. She suggests the subject of the disputes could have been of a socio-political nature, or have concerned ideas about proper mortuary practice. Grave reopenings may also have been a way for descendants of the deceased to control their own family's graves and the ways these represented the past (Zintl 2012).

While writing my Master's thesis about reopened Merovingian graves in 2009, I was unaware of this growing interest in the subject and naively thought that I was the only person working on it. I was very excited to discover the studies by Aspöck, Kümmel and Klevnäs, although by then I had finished my thesis and had prepared a shortened version for publication (van Haperen 2010). My thesis and the article that followed from it were very much a reaction to the traditional debate which, in my opinion, focused rather heavily on post-depositional interventions as disturbances or even desecrations of the burial context. I wished to show that a different interpretation was possible if the data were examined from another angle. To this end, I turned the evi-

dence on its head and emphasized the aspects that were difficult to explain within the economic-criminal grave robbery hypothesis, especially the many objects and fragments thereof which were left behind in reopened graves. The high numbers of interventions and the fact that they had often taken place while the cemeteries were still in use, suggested to me that the burial community was involved. I therefore argued that post-depositional interventions could have been perceived as a generally positive medium that facilitated the interaction between the living and their deceased ancestors. Several ethnographic and historical analogies such as the medieval cult of saints' relics provided examples (Huntington & Metcalf 1979; Bloch & Parry 1982; Brown 1982; Geary 1986; 1994; Bloch 1988; Gell 1998; Weiss-Krejci 2005; Smith 2012).

Underlying assumptions

The studies described above, including my own, illustrate one of the main problems of archaeological interpretation. Our interpretations rely heavily on assumptions about the motivations of past peoples and about the ways particular types of behavior were perceived in previous historical periods. Below I will discuss the main assumptions that feature in these interpretations. A short sentence describing the assumptions are placed in italics above each section.

If artefacts were removed from the grave, it is likely that the participants were economically motivated.

It should not *a priori* be assumed that objects were taken from graves because of their material or economic value. The diggers could indeed have been economically motivated, but they could equally well have intended to obtain objects with magical properties, gather relics of their forbears (van Haperen 2010: 22-27), destroy the power and prestige of the deceased (Klevnäs 2013: 83), or accomplish some other entirely unfathomed purpose. Mortuary practices and the interaction with graves were probably connected with culturally specific emotions (Tarlow 2000: 718-719),

norms, values and beliefs that may have contributed to the meaning of grave reopenings and the value, or rather ‘worth’, ascribed to the objects that were taken.

If the grave was left in a disorderly state after the intervention, this indicates that the participants intended to disrespectfully damage the grave and the remains of deceased.

First, we should take care not to impose our concept of orderliness on the early medieval context. In the eyes of an archaeologist, who is accustomed to meticulous excavation techniques and professional orderliness, the work of early medieval diggers is apt to look disorderly. However, contemporaries need not have perceived these activities in the same negative light (Kümmel 2009: 37; Zintl 2012: 353). It is also important to note that in funerary contexts ‘violence’ is not limited to violation, but can also be employed as a means of venerating the dead, making it difficult to distinguish the two in archaeological data (Weiss-Kreici 2001, 2005; Duncan 2005; Gardeła 2013: 107-108).

Grave goods and bones taken from graves were perceived as relics of the deceased.

This interpretation of former grave goods as relics assumes that early medieval people perceived their deceased ancestors as active entities who could manifest their presence and power through artefacts or bones taken from graves. This assumption relies heavily on an analogy with the contemporary cult of Christian saints’ relics. There is little evidence, written or otherwise, that confirms the existence of similar beliefs concerning the secular ancestors. Moreover, the cult of saints’ relics is a Christian phenomenon and it is uncertain whether similar beliefs and practices were prevalent among non-Christians. It may therefore be inappropriate to apply this interpretation to post-burial interventions from areas where people had not yet converted. This is further problematized by the fact that it is often unclear to what extent the various regions in the research area had been Christian-

ized in a particular period, and how conversion to Christianity manifested itself in the behavior of the professed adherents (Treffort 1996; Effros 2002).

The written sources

Somewhat separated from the archaeological debate, historians have been discussing various types of grave reopenings found in the written sources. This section will therefore briefly examine to what extent these sources and the historians’ work are relevant to the archaeological debate about post-depositional interventions in graves.

There are a number of early medieval narrative and legal sources concerning various types of grave reopenings. Archaeologists studying reopened graves often refer to legal texts that forbid the violation of graves and the despoliation of corpses, and threaten the perpetrators with severe penalties. There are also a small number of historical accounts of illicit interference with graves that have traditionally been used as sources for the study of the supposed grave robbers’ motives and methods (Krüger 1978; Nehlsen 1978; Lafferty 2014). Possibly the most cited of these sources is Gregory of Tours’ account of Guntramn Boso’s attempt to have his retainers rob the richly furnished grave of a female relative in a *basilica* in Metz (*Libri Historiarum* X 8, 21 (Thorpe 1974)). Monks witnessed the event and reported it to king Childebert II. Boso’s servants, fearing punishment, returned the grave goods to the altar of the church, took shelter there and confessed that they had committed the theft on their master’s orders. Childebert subsequently charged Boso with grave robbery. Boso fled, but was nevertheless apprehended and executed two years later. Many authors have taken this anecdote at face value (Krüger 1978: 173-174; Effros 2002: 56; Lafferty 2014: 268), but in my opinion it is problematic and invites a number of questions. Why would a wealthy and influential man like Guntramn Boso rob a grave? It seems unlikely that he needed its contents so much that he was prepared to risk his life for them. We should also ask why he would choose a

relative's grave for his pursuits. The dead woman had probably been part of his immediate social circle. Many people in his acquaintance had witnessed the funeral and knew what artefacts had been put into her grave, which presumably made it difficult for him to use or sell them. He would have had to conceal the items, or have them melted and reformed. This tale may therefore be a partial fiction on Gregory's part. It is also possible that Childebert or another political enemy persuaded Boso's servants to implicate their master in the offence. Effros (*38th International Congress on Medieval Studies*, 2003) has pointed out that Childebert and the church also had a vested interest because they profited from the returned grave goods.

Despite what is often assumed, it is not self-evident that the practices described in these sources are the same as the archaeologically attested grave reopenings from rural cemeteries (Van Haperen 2010: 18). The discrepancies are most obvious in the case of the narrative sources, which deal only with interventions in individual graves of the Merovingian religious and secular elite that were located in churches; no mention is made of the numerous reopenings of the graves of ordinary people in rural cemeteries.

The references to grave disturbance in early medieval law do not contain information on the context in which such forbidden activities were expected to take place. It is difficult to determine whether they pertain to the grave reopenings observed by archaeologists. Frankish law suggests that only specific types of grave reopenings were forbidden. The *Lex Salica* orders the robbers to pay a compensation fee for the time that the grave goods were in their possession (*Pactus Legis Salicae* XVI, 10 (Fisher Drew 1991: 80)). It does not specify the compensation's recipients, but such fees usually went to the crime victim's relatives, as in a similar passage in Visigothic law, which stipulates that goods stolen from a grave should be returned to the deceased's family (*Lex Visigothorum* II.2, I. See Nehlsen 1978: 126-129; Effros 2002: 49-52; Zintl 2012: 365). These passages suggest that the law ap-

plies only to grave reopenings that were carried out without the consent of the deceased's family. Considering the fact that it would probably have been quite difficult for the perpetrators to conduct such interventions in secret (Van Haperen 2010: 13), it seems likely that the deceased's relatives were often involved, in which case the proceedings would have been considered legal. Alternatively, the apparent contradiction between the laws and the archaeological data may also reflect a conflict between the laws' authors and parts of the rural population. Lafferty (2014: 257-271) has recently argued that the increased number of laws against grave robbery in the early medieval period was inspired by the rise in post-depositional interventions in graves, both for plain material gain and for the gathering of saints' relics. For the archaeological part of his paper he unfortunately relies almost exclusively on the work of Roth (1978) and does not benefit from any of the newer archaeological studies on reopened graves by Aspöck, Kümmel, Klevnäs, or myself. Nevertheless, there could very well have been a link between the actual grave reopening activity observed by archaeologists and the efforts of the early medieval lawmakers. By bringing grave reopenings into the criminal sphere, the authorities may have attempted to control these practices. They may also have wanted to protect their rights over certain cemeteries, which may over time have increased in importance as an element in strategies for defining social positions (Theuvs Vrijthof publication, forthcoming). If so, the laws should be considered ideological documents that reflect the lawmakers' attempts to increase their power over their territory and over the people living there. It is uncertain to what extent they succeeded in influencing the behavior of the population. In any case, the frequency with which graves were disturbed during most of this period suggests that, if such activities were forbidden, the laws' prohibitions and threats of punishment were largely ineffectual. Illegal violation is not the only type of post-depositional intervention in graves that is found in the early medieval written sources.

The majority of references to such practices actually occur in accounts of the collecting and moving of saints' relics (usually referred to as 'elevation' and 'translation'). Krüger (1978: 178-184) was the first author to link these distinct types of historical post-depositional interventions to archaeological reopened graves. He argued that the moving of saints' relics should be considered an exceptional category of grave reopenings, one that should not be confused with 'normal' cases of robbery, although they were probably similar in practice. Perhaps the translation of saints' relics should not be considered exceptional, since accounts of these practices occur in the narrative sources far more frequently than stories about actual grave robbery. Saints' relics were usually moved by authorized means of transfer such as gift or purchase, but they could also be taken by theft. Such transfers were motivated not by the relics' material value, but by a desire to benefit from their divine potency (Geary 1986: 174-189). When we compare the treatment of saints' graves with archaeologically attested grave reopenings, some noteworthy similarities come to our attention, which will be discussed in the final chapter of this thesis.

It is also very tempting to involve accounts from the Old Norse sagas into the discussion about early medieval graves. The lively and capturing image of grave reopenings presented there is unique for the medieval period. However, their use is problematic for obvious reasons. Among other things, they were written down centuries after the period they are thought to deal with. Although many modern times heavily informed by ethnographic analogies. Since methodology is not value-free, such an attitude also influences me to view and select data in a way that promotes social and symbolic types of interpretations, rather than rational economic ones. In the present study, I will attempt to give all interpretations an equal hearing and minimize preconceived bias or personal preference. To this end I have opted for a scenario-based approach. An inventory will be made of all the interpretations that have been suggested on the basis of existing

scholars are optimistic about the extent to which they can be used to reconstruct real early medieval sentiments and worldviews (Hedeager 2011; Pollington 2011; Gardela 2013, 2016), their relevance and validity for regions outside Scandinavia is limited at best. Similarly, early medieval accounts of grave reopenings from Anglo-Saxon England (Blair 2009; Klevnäs 2016a) may provide interesting analogies for the present study, but are probably not appropriate for direct interpretation of finds from the Low Countries. These sources will all be discussed in more detail in the final chapter.

1.2 Approach and research questions

The historiography shows that the interpretations of early medieval reopened graves vary considerably. The growing scholarly attention to the subject in recent years has not led to consensus, but rather to a significant increase in the variation of opinions. As demonstrated above, the choice for a particular interpretation usually seems to be based on assumptions that are not grounded in the archaeological data. Therefore, the individual researchers' preference for a specific hypothesis is probably largely determined by cultural and educational background and personal character. My personal background includes anti-authoritarian upbringing and education in cultural anthropology. It is easy to see how this would predispose me to a somewhat wayward interpreta-

archaeological and historical knowledge about reopened graves and early medieval society. Examples from other societies that have been studied ethnographically will also be taken into consideration. This inventory will serve as a frame of reference for formulating research questions and choosing which data are to be gathered. This choice of methodology was partly inspired by Leskovar's plea (2005) for the incorporation of multiple narratives in our texts so they will more honestly reflect the ambiguous nature of archaeological interpreta-

tion. It should therefore be emphasized that this thesis will not be a positivist exercise in formulating hypotheses which should subsequently be corroborated or falsified. It is an attempt to explore the merits and weaknesses of all possible interpretations with regard to their potential to account for the variation in the dataset.

It is important to keep in mind that grave reopenings took place in many different regions and during multiple phases of the Merovingian period. As Carr (1995: 107) points out in his thought-provoking, though not unproblematic cross-cultural study of funerary behavior, the ways in which social processes, philosophical-religious beliefs, environmental circumstances and the intent of individuals influence and manifest themselves in mortuary practices are complex and multivariate. Kümmel's (2009: 214) analysis of the cross-cultural HRAF dataset does indeed show that in most societies where grave reopenings are practiced, multiple motivations and varying degrees of legitimacy are documented for the interventions. In early medieval society, where people were apparently very much accustomed to reopening graves, interventions could have been carried out for a multitude of different reasons, which varied across time, space and social context. Graves may even have been reopened for more than one reason. As a result, reconstructing the circumstances in which reopenings may have taken place is far from straightforward. The research requires a methodology that can accommodate all these possibilities.

The interpretative scenarios of the various authors discussed in the historiography center while the cemetery was still in use and were carried out by the burial community themselves (2009: 211-212). A situation where the participants did not have personal relations with the dead or the burial community could come about if the graves were reopened by people from another community or cultural/ethnic group. Such a 'community' could for instance have been a local coresident group or a descent or kin group. This category partially overlaps with Kümmel's (2009: 123) distinc-

around a number of research questions which will be discussed below. This section contains an inventory of all the hypothetical answers to these questions that can be extracted from the literature or conceived of on the basis of existing knowledge about reopened graves and early medieval society, the historical sources and the ethnographic record. This inventory forms a base for formulating data-oriented research questions and shaping a methodology for gathering data from the cemeteries in the research area. The inventory will not take the form of a table like Kümmel's, which is targeted to an introductory cross-cultural catalogue of grave reopenings. This type of categorization is not sufficiently sensitive to the context specific circumstances expected in the present study. Rather I will employ a scenario based approach, as discussed above.

What were the social roles of and relations between the persons participating in grave reopenings (including the diggers, the deceased and possible onlookers)?

Discussions about the identity of the people participating in grave reopenings usually center on the question whether or not they belonged to the community that buried its dead in the cemetery. This is an important question, since it would have made considerable difference to the social context and meaning of reopenings if the participants knew the deceased and his or her family. In the HRAF societies studied by Kümmel, the majority of the post-depositional interventions took place

tion between intra- and extra-ethnic interventions, except that within an ethnic or cultural group, people can still be strangers to one another and interfere with the others' graves. The perpetrators could for instance be professional grave robbers, warriors raiding the cemetery during a time of armed conflict (Müller 1976: 125; Kümmel 2009: 128), or aristocrats who emptied the cemetery of their relocated dependents (Steuer 2001: 285-286).

If the reopening took place a long time after

burial, the participants would usually not have known the deceased personally. This corresponds to Kümmel's distinction between interventions that are chronologically close (*zeitnah*) or far (*zeitfern*) from the funeral. As Kümmel rightly points out, in the case of very high status deceased, the memory of the dead person can last significantly longer than for less famous people (2009: 122-124). If the participants did know the burial community and/or the dead person, this relation could be of a positive or negative nature. Positive relations include relatives or descendants of the deceased (Van Haperen 2010: 24-27), ritual specialists such as Christian priests or non-Christian religious practitioners and dedicated servants or slaves (Huntington/Metcalf 1979: 83). Negative relations could pertain to enemies of the deceased, their family or the burial community (Klevnäs 2013: 83), or to people who feared the supernatural power of the dead person (Grünwald 1988: 42-43; Klevnäs 2016a: 194-200). To answer this research question about the identity of the participants, it will be important to know how much time passed between the burial and reopening and to look for indications that the diggers were familiar with the grave's layout. In addition, the references to various types of post-depositional interventions in early medieval written sources can be of assistance.

What were the participants' motives for having grave reopenings?

Economic gain by obtaining the grave contents

The most common hypothesis in the traditional literature is that graves were reopened for economic gain. These interpretations usually focus on the material value of the artefacts in the grave, primarily those made of silver, gold or gemstone and to a lesser extent bronze, iron and glass (Werner 1953; Roth 1978; Grünwald 1988; Steuer 1998). The fate of the bones found to be missing from reopened graves has received very little attention in the debate. However, Kümmel (2009: 199, 204, 206) points out that the physical remains of

the deceased could also have been of economic interest, as they could be sold as saints' relics or magical or medicinal substances.

In Kümmel's classification, economic gain as a motivation for grave reopenings is found in the categories 5 and 6 (Ia5, Ia6, Ib5, Ib6, IIa5, IIa6, IIb5, IIb6), which are represented in 15 of the 60 societies from the HRAF Probability Sample (Kümmel 2009: 209-225). When ethnographic or historical sources report the removal of objects without explicit mention of the motivation for these activities, Kümmel has a tendency to assign these cases to economic/neutral categories, even though other motivations could have been equally relevant. The reuse and secondary use of graves is also included as an economic motive, so careful reading is required to find the cases where there is actual economic gain from the removal of objects. Many of the historically documented grave reopenings discussed by Kümmel were apparently also motivated by economic gain. The prime example of this type of practice is found in Egypt, where written sources from the period of the New Kingdom recount the existence of professional grave robbers, who earned a living by illegally opening graves to convert the contents into merchandise (Kümmel 2009, 190-194).

The fact that reopened Merovingian graves often contain a considerable amount of objects has been a particular matter of concern among the adherents of the economic hypothesis. If the diggers went through the trouble of exposing the graves' contents, why did they not take everything? It is often assumed that grave reopenings were illegal and therefore the diggers had to work fast and in the secrecy of night, so limited visibility caused objects to be left behind unnoticed (Fremersdorf 1955: 29; Roth 1977: 289). It has also been argued that certain types of objects were taboo and therefore could not be taken from the grave (Koch 1974; Roth 1978: 67-71).

However, the removal of objects for economic reasons need not have been an illegal practice. Aspöck (2005: 264; 2011: 312-313) has argued for the cemetery of Brunn am Gebirge that the grave goods may have had a transient

function as conspicuous display during the funeral, so it was acceptable to remove them at a later time. Kars (2011: 42-44, 65-66, 82) has suggested that the deposition of objects as grave goods may have been a means of dealing with inalienable family property when the person who had kept the object, the 'temporary caretaker', died before an opportunity arose to pass it on to an heir. If this interpretation is correct, it may have been possible for the family to retrieve some of the grave's contents at a later time, for instance when an appropriate heir had come of age to assume responsibility for keeping the objects. Kümmel mentions that among the Chippewa, it is generally accepted to open the grave to add new objects and remove old ones (2009: 327). The Tobriand Islanders remove the deceased's jewelry when bodies are exhumed for reburial (Kümmel 2009: 219).

When considering economic gain as a motive for post-depositional interventions, it is important to take into account the state of the potentially valuable materials that were taken from the grave. Depending on the soil conditions, glass beads, gemstones and gold may emerge in pristine condition. Materials prone to corrosion, such as iron, bronze and silver would certainly be affected by the conditions in the grave, especially if they were exposed to the liquids released by the decomposing corpse (Gillard et al. 1994; Klevnäs 2013: 46). In order to derive economic benefit from these materials, the participants would have needed to employ the expertise and equipment of a smith (Grünwald 1988: 40).

Use of objects and bones from graves for magical, medical and symbolic purposes

The removal of objects (grave goods or human remains) from graves need not have been motivated by economic gain. The objects may have been coveted because of their perceived magical or medicinal potency in addition to, or instead of their material value. Kümmel places this type of motivation in his subtypes 1 and 2 (IIa1, IIa2, IIb1, IIb2, IIa1, IIa2, IIb1, IIb2), which also includes ancestor cult and relic worship (Kümmel 2009: 128). I prefer to

separate the two, since in ancestor and relic cult, the artefacts and bones are worshipped because they provide a connection to an invisible powerful entity, and are part of a religious world-view. On the other hand, objects employed for magical or medical purposes are used because they themselves are believed to hold a certain potency that is not necessarily related to an external entity. Undeniably though, the dividing line between magic or medicine and religious practice is fuzzy at best. Saint's relics for instance, were frequently used for the treatment of ailments in ways that cannot always be distinguished from non-religious medicinal practices (Flint 1991: 5-6; Kieckhefer 1994). Flint (1991: 215-216, 228-231) discusses several mentions of magic using human bone in the written sources. Several early medieval law codes contain strictures against necromancy, including the use of human bone for magical ends. Visigothic law distinguishes between grave robbery for personal enrichment and grave reopenings performed with magical ends (*Lex Visigothorum* II.2, I.). Magical acts are also frequently described as taking place on or near a grave. Thompson (2004: 94-96) discusses references to corpse-divination in the Anglo-Saxon law codes and charms relating to pregnancy and birth that involve graves. In one charm the grave is stepped over, in another charm soil is taken from a child's burial.

Preventing negative influence from the dead on the living

Some scholars have argued that grave reopenings were aimed at neutralizing the alleged negative influence of the dead. An example of this type of interpretation can be found in Grünwald's (1988: 42-43) discussion of reopened graves in the cemetery of Unterthürheim. He argues that while the materialistic motivations of grave disturbance are evident from the fact that the participants removed valuable artefacts from the grave, these practices also had an ideological component. Certain items buried with the dead, such as fibulae and decorated belts, may have functioned as amulets. When buried with a dead person,

they could create a *lebende Leichnam* (living corpse), which was a potential threat to the living. Disturbing and removing part of the deceased's remains and grave goods would then be a way of undoing these powers and rendering the dead agent harmless (also see Knaut 1993: 37; Aspöck 2005: 262; Klevnäs 2013: 77-80, 2016: 194-200).

This type of motivation for reopening graves corresponds to Kümmel's (2009: 128) 'negative' subtypes 3 and 4 (Ia3, Ia4, IIa3, IIa4 and to a lesser extent Ib3, Ib4, IIb3, IIb4). Kümmel discusses the historiography of this interpretation in detail and states that the concepts of *Totenfurcht* (fear of the dead) and the *lebende Leichnam* or *Wiedergänger* (one who walks again) first appeared in the German archaeological discourse during the first half of the twentieth century. These notions developed from the theory that before the introduction of the Christian concept of the soul, people in proto-historic Europe believed that the dead continued to exist in corporeal form and had the same needs and legal rights as living corporeal subjects. In various scholarly disciplines, the term '*lebende Leichnam*' came to be used for diverse types of corporeal manifestations of the dead. In archaeology, it signified a dead person physically subsisting in the grave, inhabiting it as a home. Researchers deduced that the elaborate furnishings found in some graves would have accommodated the physical needs of the 'living' dead person. Scholars reasoned that the combined belief in living corpses and the fear of the dead would have led people to try and protect themselves from the dead persons' negative influence. Many archaeologists still habitually refer to the fear of living corpses to account for various deviant mortuary practices, despite general consensus in the theoretical discourse that there is no basis for assuming a universal fear of the living dead among pre-Christian societies (Kümmel 2009: 45-50). Separate from the German debate, somewhat similar ideas about revenant deceased also developed among Anglo-Saxon scholars (Klevnäs 2016a). These ideas are relatively well grounded in historical scholarship as some evidence for such fears can

for instance be found in written sources from medieval England and in the Old Norse sagas (Beck 1978; Gardefa 2013: 100-107; Klevnäs 2013: 80-81). As mentioned above, the extent to which these sources can be used for research into the early medieval period outside England and Scandinavia is questionable, but even in the least favorable view, they can nevertheless serve as historical analogies. Archaeological evidence for measures against revenants in reopened graves could for instance take the form of intentional displacement of the skull or other bones, fixation of the corpse or skeleton in the grave with stones, ropes or nails, and excessive damage to the grave's contents (Klevnäs 2013: 77-79, 2016: 194-197).

There are also various mentions of interventions aimed to neutralize dangerous dead persons in the ethnographic record. The Taiwanese Hokkien habitually change the location of buried ancestors to change their influence on the living (Kümmel 2009: 337). In the Philippines, graves are sometimes opened to adjust the furnishings of a deceased ancestor if it is believed they are causing illness among the living because they are uncomfortable in the grave (verbal communication by Titia Schippers who did ethnographic fieldwork in this region).

Graves desecrated by hostile groups to take revenge or injure the socio-political standing of the burial community

Klevnäs (2013: 83) proposed that the grave reopenings in her research area were performed by enemies of the deceased's family, who aimed to deprive the dead of symbolically significant objects. Depending on the perceived function of the grave, this destructive method of reopenings could have served to damage the prestige generated by the grave furnishings and destroy the dead ancestor's supernatural ability to protect living descendants. These activities would have aimed at injuring the social standing and political power of the deceased's family. Revenge on the burial community may have been an additional motivation. Such destructive post-depositional interventions could perhaps have

occurred during feuds between families or in times of war. Grave reopenings conducted by war bands have for instance been suggested by Müller (1976: 125) and Pauli (1981: 475). Hostile intentions on the part of the diggers could have manifested themselves in a markedly disrespectful treatment of the grave and its contents. However, as discussed above, it is difficult to estimate whether particular behaviors would always have been considered disrespectful by early medieval burial communities (Weiss-Kreici 2001, 2005; Duncan 2005; Gardela 2013: 107-108). In Kümmel's classification, this type of motivation falls in the 'negative' subcategories 3 and 4 (Ia3, Ia4, IIa3, IIa4 and in less likely cases Ib3, Ib4, IIb3, IIb4), that also include the precautions against revenants discussed above. Such motivations are relatively rare in his cross-cultural dataset (Kümmel 2009: 128, 212-213).

Marking discontinuity of the deceased's relations

Theuws has suggested that grave reopenings could have been a means of marking the discontinuity of decent lines or affinal relations (Theuws forthcoming). If the marriage ties between two families were terminated, the graves of the persons who had previously embodied these relations would have been disturbed or emptied. The same could have happened to the graves of ancestors who's lines of decent were no longer productive or who had founded settlements that ceased to prosper. When studying a cemetery, it could therefore be worthwhile to see whether reopened graves are found in small grave groups with a short life span, or in larger groups with a longer period of use. It seems no similar motivations or activities were recorded in Kümmel's cross-cultural dataset.

Collecting relics of the dead

As I suggested previously (Van Haperen 2010: 22-27), grave reopenings could have been a means of obtaining relics of ancestors, similar to the way people would gather saints' relics from the tombs of holy persons. The remains taken from reopened graves may have been

treated as relics in the traditional sense of the word, being enshrined in special vessels that people kept in the house or in small portable containers that could be worn on the body. Effros (2002: 158-160) has suggested various types of objects found in Merovingian graves may possibly have served as relic containers. Caring for the relics of ancestors in this way could have been a means of ensuring their good will, obliging them to reciprocate by ensuring the prosperity of their descendants. The remains taken from the grave would have allowed the ancestors to be physically present among their living descendants, and participate in the activities that took place there. In Kümmel's cross-cultural dataset ancestor veneration and the removal of relics are among the most common motives for grave reopenings. They are classified as subtype 1 (legitimate) or 2 (illegitimate). The removal of relics often occurs in combination with the performance of second funeral and reburial of the remains (Kümmel 2009: 214-217).

Alternatively, if graves were reopened a long time after burial, the interventions could have been a means of appropriating ancestors and asserting descent from the deceased. Such practices could have been part of strategies to claim land or substantiate political power (Van Haperen 2010: 24-26). The remains could also have been incorporated into utensils and other newly made objects, which subsequently carried the ancestor's presence, as is for instance suggested by Gansum (2004), who thinks that human bone from Iron Age Scandinavian graves could have been converted to coal and used to temper iron for sword-making. This interpretation is somewhat problematic for the Merovingian area, since there is only limited evidence for ancestor beliefs in North-West Europe.

Conducting a second funeral

In numerous societies, grave reopenings are an essential, even mandatory, part of the mortuary practices. In these cases, the burial community often celebrates an entire second funeral, which may be even more elaborate and costly than the festivities that accompanied the

initial burial. The first anthropologist to discuss these practices in detail was Herz, who argued that the treatment of the deceased's body reflected beliefs about the soul. He showed that people who perform grave reopenings and second funerals usually perceive the transformation or passage of the dead as a slow and gradual process or spiritual journey (Herz 1960). This theory was later taken up and elaborated on by other scholars (Huntington & Metcalf 1979; Bloch & Parry 1982; Bloch 1988). Between the moment of burial and the reopening of the grave the dead person is believed to be in a transitory state, no longer alive but also not yet 'properly' dead. After the corpse has decomposed and only dry bones remain, the remains need to be retrieved from the grave and taken through a final ceremony before the deceased can become a beneficial ancestor and enter the realm of the dead. By manipulating the remains of the dead, the living can influence the state of the ancestor's spiritual being.

Grave reopenings motivated by a desire to aid the soul or non-corporeal presence of the deceased in its transformation are categorized in Kümmel's subtypes Ia1 and Ia2. Prolonged mortuary practices of this type were the most frequently found motivation for post-depositional interventions in his cross-cultural dataset (Kümmel 2009: 216). However, the question remains whether this type of motivation was also prevalent in the Early Middle Ages, and if it was, how it manifested itself. Evidence for true reburials of human remains are rare, but it is possible that the standard grave reopenings found in many cemeteries also had connotations of consecutive funerary rites. If early medieval people did indeed see death as a transformative process, this transformation could have been observed in and confirmed by the physical changes of the materials in the grave, including the deceased's body, the wooden coffin, textile clothes and shrouds and grave goods partially or entirely made of organic materials (Van Haperen 2010: 20-21).

Grave reopenings often serve important social functions, independent of whether the people

performing them have beliefs about the soul that demand redeposition of the remains of the dead. Contrary to the funeral that usually has to be performed within a few days after death, post-depositional interventions can be planned long in advance, allowing people who live far away to be invited and attend the event. Ethnographically documented second funerals are often celebrated far more elaborately and are attended by a larger audience than the ceremonies performed immediately after death (Huntington & Metcalf 1979). Also, the time that passes between the burial and the reopening could have allowed the dead person's family to save up resources, make the necessary exchanges and prepare a more elaborate feast than what could be afforded during the first funeral. Miles (1965) has documented this type of procedure among the Ngadyu-Dayak of Borneo.

Grave reopenings may have served to bring together the members of the deceased's kin and descent groups, including those who lived in distant places. Authors writing on the archaeology of personhood have shown that such gatherings were often demonstrations of fractal personhood, where all levels or dimensions of a society's concept of the person are visible simultaneously (Fowler 2004: 48-51, 68). The body of the deceased, revealed in the reopened grave could have been perceived to represent the whole kin group. If the reopening involved the redistribution of some of the materials from the grave among the participants, this could in fact have been viewed as a distribution of the power of the joined kin group to each individual member or subgroup/nuclear family (Van Haperen 2013).

Moving the deceased's remains to a location near their living relations

From the Carolingian and Ottonian period onwards, there are documented cases of graves of elite persons that were reopened in order to move the deceased to another burial location. These incidents occur for instance if a person dies far away from home. The body is buried in a temporary grave and retrieved when it has skeletonized and therefore easier to transport.

In some cases, relocation of the body, or part of it, was also a means of settling disputes over the correct place of burial (Weiss-Krejci 2005).

Grave reopenings aiming to move buried human remains to another location (German: *Umbettung*) were also found in the HRAF dataset. They fall into Kümmel's subtypes Ia1, Ia2, IIa1 and IIa2. The exact motivations for the relocation of the deceased in the dataset vary. The Khasi repatriate dead community members who died and were buried away from home. The Iroquois (German: *Irokesen*) and Azande will dig up the remains of their dead relatives when they move to a new settlement. The Aschanti regularly move the bones of their kings to keep them safe from grave robbers (Kümmel 2009: 214-217, 327-335). In the Philippines, people will sometimes attempt to solve landownership disputes by taking the remains of dead forbears from their graves and reburying them at the boundaries of the contested area (Personal communication from Titia Schippers). All motives for relocating a burial that are listed above could be relevant for the early medieval period. In addition, it has been suggested that Merovingian cemeteries were used in complementary ways, which meant that a single family or burial community could choose to distribute its dead over various types of cemeteries that may have been shared by multiple communities or families. The choice to bury a person in a particular cemetery was inspired by a combination of custom and social strategy (Theuvs 1999: 345-346; Panhuysen 2005: 282-283). This complementarity of cemeteries need not have been limited to burials of newly deceased persons, but could also have involved human remains taken from reopened graves (Theuvs 1999: 347; Van Haperen 2010: 25-26).

Retroactive Christianization

Grave reopenings could have been a means of 'retroactive Christianization'. The concept of retroactive Christianization was first developed by Geary to account for eighth-century churches that were built on top of the richly furnished graves of fifth-century (and there-

fore probably pagan) dead, who were thereby made into Christians (Geary 1994: 36-39). In the case of grave reopenings, retroactive Christianization could perhaps be achieved by the deposition of Christian symbols such as gold-foil crosses or coins with a cross motif in the grave (Van Haperen 2010: 26). Alternatively the remains of the dead could be taken from the grave and transferred to a church or churchyard (Theuvs 1999: 346-347). Theuvs labels this phenomenon 'posthumous Christianization', but since Geary previously described similar practices under the heading 'retroactive Christianization', I have chosen to retain his designation.

Adding materials to the grave

Graves may have been reopened in order to place additional items into them. The most obvious example is the burial of an entire second corpse in an existing grave. However, artefacts and disarticulated human or animal bones could also have been added to the graves' fill during reopenings. In a grave from the Merovingian cemetery of Pleidelsheim, Koch (1991: 215) noted a coin that may have been deposited when the grave was reopened, since it post-dated the remainder of the grave furniture by a century. In the cemeteries of Deersheim and Eching-Viecht, animal remains and stone piles had been included in the fill of some reopening pits (Schneider 1983: 126-127; Dannhorn 1994: 299). Such items may have been placed in the grave for the benefit of the deceased. Alternatively, residence in the grave may have endowed the objects with symbolism or supernatural potency. Adding materials to graves as a reason for grave reopenings is not explicitly mentioned in Kümmel's classification even though there is at least one example of such practices in the HRAF dataset. Among the Chippewa, it is generally accepted to open the grave to add new objects and remove old ones (Kümmel 2009: 327). Depending on whether such activities had a 'positive' or 'negative' motivation, such actions would fit in Kümmel's types 1 and 2 or 3 and 4.

Reopening the grave to prepare it for a new occupant

Graves could be reopened to deposit another corpse in them.¹ Kümmel classifies such motivations in his 'economic/neutral' subtypes Ia5 and IIa5 (Kümmel 2009: 128). If a grave was reopened for a second burial, the remains of the original occupant could be left intact, moved aside, or removed from the grave altogether. Graves could also be partially reopened when they are cut by another newly dug grave. The course of action taken in these cases would depend on the intentions of the participants. If they wanted the new dead person to be associated with the older corpse, as for instance in a family tomb, they would probably leave the original deposit intact or move it aside, to make room for the new body. If their main aim was to provide the new corpse with a prestigious burial location or grave container (such as a sarcophagus), they were probably more likely to remove the remains of the previous burial entirely.

What was the socio-cultural context of the interventions?

The study of the socio-cultural context of interventions is closely related to the enquiry into the motives of the participants that was discussed above. For instance, if the diggers primarily removed metal artefacts, this would indicate an entirely different context than if they mostly intended to manipulate the grave construction or the remains of the deceased. The identity of the participants is of equal

importance, since interventions committed by the deceased's kin would have had a different context than those performed by outsiders.

This research question is therefore the most speculative of all, since it builds on previous speculations about the identity of the perpetrators and their motives.

In the older literature, the discussion on the socio-cultural context of grave reopenings usually centered on the question whether the interventions were legally or socially sanctioned (Redlich 1948; Nehlsen 1978). This question cannot be answered by a simple yes or no, since within a society there can be different opinions on what is unlawful behavior. As was also mentioned in the section on historical sources, the elite may find certain practices unacceptable and criminal, notwithstanding the fact that (or even because) they are common practice among other classes. In addition, a practice may be acceptable when performed by particular people in a specified social context, while it is perceived as reprehensible when it occurs in another context with other participants. It may be more appropriate to investigate the total social frame or context in which post-depositional interventions took place. Traditionally, it is often assumed that the reopenings were carried out in the dead of night, by a small number of partners in crime, working as fast as they could, constantly afraid of getting caught. However, the reopening of a grave could also have been a joyous occasion, even more elaborate than the funeral and attended by all but the most distant relatives of the deceased, celebrating the birth of a new ancestor.

On a more general level, we might ask what were the circumstances that led to the rise in grave reopenings in the early medieval period. Steuer (2001: 285-286) suggests that seventh-century aristocratic landlords may have been responsible for the possible increase in grave disturbances in this period. They expanded their control over rural areas and forced the people who lived there to move to new settlements. From their new locations, they could no longer protect the old cemeteries, which subsequently lay open to exploitation by the

¹ This practice is very common in modern Dutch cemeteries. Once the family stops paying rent for the grave, the remains of the deceased are removed to a communal deposit. In heavily populated areas like the city of Amsterdam, inhumation graves are only temporary memorials that usually exist for no more than the minimum renting period of ten years after the funeral (information given by the director of the Oosterbegraafplaats and personal communications from people whose deceased loved ones were buried in this cemetery).

landlords and their dependents. It has also been claimed that grave disturbance was committed by families who could not afford continually to bury their dead with valuable grave goods, and therefore began 'recycling' artefacts from older graves (Steuer 1998: 520). Some authors proposed that economic strain was brought on by a general shortage of precious metals resulting from the collapse of the Roman trade networks and the increasing tendency of the early medieval Church and aristocracy to control the distribution of these materials. The decreased availability of precious metals would have brought on the rise of grave reopenings often observed in cemeteries from this period (Werner 1953: 7; Pauli 1981: 473-474). However, the existence of such a shortage has not been proven (Roth 1978: 67; Steuer 1998: 520). Klevnäs (2013: 83-90) links the rise of grave reopenings in Anglo-Saxon England to early state formation and the resulting conflicts between socio-political factions, which she argues manifested themselves in violence on the graves of enemy groups.

Several authors have argued for a progressive devaluation of the symbolic or religious significance of the grave good custom in the seventh century. This development eventually resulted in a change of perception that made it unnecessary for these artefacts to remain in the grave indefinitely. A number of reasons for this supposed devaluation have been put forward. Redlich (1948: 77) maintained that it was caused by seventh-century changes in inheritance law, which no longer required the deceased's property to be buried in the grave. There is little evidence, however, that such a law existed. Moreover, this hypothesis makes the unjustified assumption that all grave goods were former possessions of the deceased (Effros 2003: 76-79).

Roth and Koch have argued that the devaluation resulted from the expansion of Christianity, because the 'pagan' custom of grave good deposition lost its function when people accepted Christian concepts of the afterlife in which the dead did not require material things (Roth 1977: 290; Koch 1996: 737). Effros

protests that the grave good custom was not unequivocally related to pagan beliefs about the afterlife and was also practiced by Christians, as is attested by, for instance, richly furnished burials in churches (Effros 2002: 47, 61; 2003: 86-88; see also Steuer 1998: 519). Instead she relates the decreasing importance of the grave good custom to a changing focus in the commemoration of the dead from temporary conspicuous consumption to more permanent display in the form of funerary monuments and masses performed for the dead. The change of focus away from grave goods would have made it more acceptable to remove objects from old burials, thus bringing on an increase in grave reopenings (Effros 2002: 57; 2006: 219).

It seems likely that the rise in post-burial interventions was indeed related to large scale changes in religion (Paxton 1990; Treffort 1996), mortuary behavior (Effros 2002; 2003) and the social order (Theuvs 1999), although the processes involved may have been much more complex than what has been proposed in the literature up to this point. As already stated, since very little is said about reopened graves in the written sources that are our main point of access for studying these developments, it is difficult to formulate and study hypotheses surrounding this theme.

A related issue that has also received little attention in the literature is the ways in which objects (including bones) taken from graves were used after the intervention. Sometimes they may have been redeposited in other graves, in other cases they could have had uses similar to those before burial or have been reworked into new objects. In all these cases, the fact that the objects had been buried in a grave may have had consequences for the contexts in which they could be used. Either because they were perceived as relics associated with the deceased (as argued in Van Haperen 2010: 22-24) or because they could not be displayed in public because that would expose the people who used them as 'grave robbers' (Grünwald 1988: 40). Apart from these 'practical' uses, the objects could also have become center pieces of ritual activities and/or

magic practices.² Lastly, they could also simply have been discarded or destroyed. Interestingly, this option is often brought forward when talking about skeletal remains missing from graves, but almost never suggested when there is evidence for removal of artefacts.

To gain insight into the socio-cultural context of post-burial interventions, we will have to track their chronological development, chart local and regional variations of prevalence within the research area and compare it with other areas. The distribution in time and space can then be correlated to our knowledge of the socio-cultural developments. Comparisons between the cemeteries can yield insights into the intra-regional and local variation in grave reopening practices, which most likely correlates closely to local and regional socio-cultural processes. The percentages of graves with interventions can for instance be an indication of whether the interventions were an ordinary or rather exceptional practice. If a large number of graves were reopened while the cemetery was still in use, this could indicate that post-depositional interventions were socially acceptable. However, this does not imply that a smaller percentage of reopened graves cannot be taken as evidence that the interventions were a violation of law or custom. They may simply result from rare or exceptional circumstances.

Practical research questions

Based on the discussion above I formulated these practical research questions to guide me through the next chapters, from the methodology to the gathering of data and finally the interpretation of the results.

1. *How much time passed between burial and post-burial interventions (relative date)?*
2. *When did the interventions take place (absolute date)?*
3. *Are there indications that the diggers were familiar with the grave's layout?*
4. *How was the grave treated after the intervention (examine intervention pit's fill)?*
5. *Did the diggers target specific sections of the grave?*
6. *Did the diggers target specific types of graves (grave construction, gender etc.)?*
7. *Did the diggers target specific object types and skeletal remains? Is there evidence for a taboo on the removal of certain objects?*
8. *Is there evidence for purposeful fragmentation of grave goods, grave constructions or bones?*
9. *Is there evidence for the reuse of objects taken from reopened graves, such as deposition in other graves, settlement finds, references in written sources (necromancy, saints relics etc.)?*
10. *What is the relation between reopened graves and other consecutive mortuary practices, such as intercuts and periodical mortuary feasting?*
11. *Which complete objects remained in reopened graves?*
12. *What is the inter- and intraregional variation in reopening practices?*

² See Brück (1999) for some thoughts about the theoretical distinction between ritual and practical activities.

2. Methodology

The methodology outlined in this chapter aims at answering the practical research questions formulated in the previous section. The paragraphs below discuss the practical conditions that aid or obstruct the research into reopened graves. The subjects treated include identifying and dating post-depositional interventions, documenting the variability of reopened and intact graves, and assessing the treatment of graves during and after interventions. The strategies examined here serve as a base for the development of the database used in this study, which is discussed at the end of the chapter.

2.1 Identification and prevalence of grave reopenings

The section below deals with various methods for identifying reopened graves and studying the techniques and practices involved in reopenings. For this purpose we will focus on the characteristics of intervention pits, the effect of reopenings on skeletal remains and grave goods, and the potential tools used by the diggers.

Intervention cuts

The traces of intervention cuts (also often called reopening or ‘robber’ pits) are among the most obvious and diagnostic features of reopened graves (Sagí 1964: 360-395; Roth 1978: 65-67; Neugebauer 1991: 113-123, Kümmel 2009: 137-139; Klevnäs 2013: 131-134). Unfortunately, traces of intervention cuts are often not well documented during excavations, and even if they are, they are almost never reproduced in cemetery publications. When a grave was reopened, it could be backfilled with mixed with organic material from the surface. If the intervention pit was left open, it was gradually filled with natural sediment and organic materials from the surrounding area. Both these types of backfilling

can result in a fill that has a different color than the soil around it and is thus recognizable to archaeologists. Reopening pits in early medieval burials usually appear as approximately circular or elongated oval discolorations in the grave’s fill. Care should be taken however, since such features can also be brought about by other mechanisms. After a cemetery was abandoned, pits could have been dug there for reasons unrelated to the graves. For instance, if trees were planted on the site at some point, excavators may observe round circular cuts in the graves that are not unlike reopening pits. Similarly, animal burrows can be mistaken for anthropogenic interventions. Discolorations in the upper part of the grave’s fill can also come about when the wooden container decomposes and fills up with soil that slumps down from above. This slumping can create an indentation in the surface that fills up with darker organic material and sediment. If such discolorations and pits were carefully documented, it should in most cases be possible to distinguish real reopening cuts from other types of features based on their shape, depth and placement in relation to the grave. In addition to color differences between the grave fill and intervention pit, reopenings may also leave traces by cutting part of the grave construction. They may show as protrusions interrupting the outline of the grave pit, or as missing sections in the traces of the wooden container, where the wood remains were broken through or dug away, depending on the container’s state of decomposition.

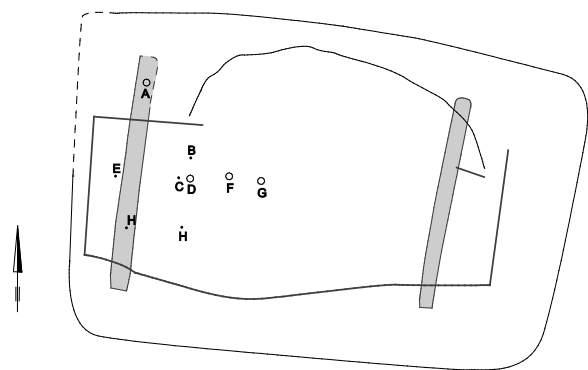


Figure 2.1 Grave 43 from the cemetery of Bergeijk showing interruptions of the coffin outline where it was cut by a reopening pit.

If the excavators did document traces of the reopening cut, additional care should be taken, as such traces do not always accurately reflect the extent of the intervention (Müller 1976: 122; Klevnäs 2013: 46, 53-56). If there was still an open space in the grave because the wooden container had not yet decomposed, the diggers may only have needed to make small hole from which they could access the entire interior of the container (Roth 1978: 65-66; Grünwald 1988: 34; Neugebauer 1991: 115; Aspöck 2011: 303; Klevnäs 2013: 45). In other cases, especially if the wooden container had collapsed or if there was no container to begin with, the diggers may have rummaged the grave's fill, rather than digging a straight edged hole, making it difficult for the excavators to discern the true extent of the cut.

It is often impossible during excavations to recognize any intervention cuts at all, despite careful observation. In some cemeteries, even the grave pits themselves are difficult to see. When the soil is very dark, has been bleached by natural formation processes or has a loose or rough texture with lots of rocks, tracing reopening cuts can be difficult. This is especially the case if the pits were not very clear cut and were backfilled using the original soil that was taken out when the pits were dug. In the Low Countries we are fortunate to usually have relatively well legible soil, but nevertheless it is often not possible to find traces of intervention cuts. In such cases, we have to rely on other indicators that the grave was reopened such as chaotic distributions of skeletal remains and grave goods. It is important to keep in mind that a jumbled grave contents could also be caused by burrowing animals. It can even come about if disarticulated remains which originated elsewhere, for instance from a reopened grave, are brought to a new location and are redeposited (Duday et al. 1990: 43-44).

Skeletal remains

In cases where no traces of a reopening cut were found or documented, displacement or absence of skeletal remains are the prime indi-

cators for post-depositional interventions. However, interpreting the state and layout of the skeleton is not a straightforward affair, particularly for researchers like myself who have had only limited osteological training. The condition and layout of human bone is influenced by a diverse set of factors, of which post-depositional interventions are only one. If bones are missing from the grave, it is difficult to be certain whether skeletal remains were removed, since the preservation of bone material is dependent on numerous taphonomic processes. The condition of bone in the grave may vary considerably between and even within sites. Important factors here are the texture, composition, acidity, moisture and drainage of the soil; variations in grave construction; and of course the nature of the skeletal material itself. Bones will usually decay faster in acidic soils than in soils with a neutral pH. The treatment of the corpse before burial (cremation, embalming, textile wrappings, etc.) and the type of grave construction (sarcophagus, wooden coffin, trench grave, etc.) all affect decomposition and bone preservation (Gordon, Buikstra 1981; Hedges 2002). The fragile bones of children are more likely to disintegrate than the bigger bones of adults. Likewise due to differential preservation, the smaller bones like thoracic vertebrae often degenerate before the more sturdy arm and leg bones (Klevnäs 2013: 131-132). In some cemeteries in the research area, especially those on sandy soils like Bergeijk and Posterholt, almost no skeletal material has been preserved, except for tooth enamel and occasional 'skeletal silhouettes', which are soil discolorations observed around the former location of a skeleton.

Even when the bones are largely intact, it can still be difficult to determine whether they were subjected to post-depositional interventions. An intervention need not necessarily result in bone displacement, especially if the deceased's remains lie in the open space of a wooden or stone container and are barely touched. The degree of displacement may also vary considerably depending on the corpse's stage of decomposition. If an intervention

takes place while the soft tissues in the dead person's body are still largely intact, the remains can be moved without causing disarticulation (Duday et al. 1990: 43; Neugebauer 1991: 115-121; Aspöck 2005: 242; Kümmel 2009: 151-152; Klevnäs 2013: 44-45). As a result, it may be difficult to tell the difference between atypically positioned intact burials, delayed burials where the body had already started to decompose and cases where the deceased's remains were moved during a post-depositional intervention (Aspöck 2011: 315). Persistent joints, such as those in the knees, pelvis and lumbar vertebrae maintain their integrity for months or even years after death, allowing these parts of the corpse to be moved intact when a post-depositional intervention takes place during this period. In such cases it is important to note whether the entire skeleton is articulated, or whether the tendons of unstable joints such as those in the fingers and cervical vertebrae have decomposed, causing these joints to be separated and left in place when the body was moved (Duday et al. 1990: 31). Clothing such as shoes can delay decomposition and even hold together bones after their connecting soft tissues are gone (Klevnäs 2013: 132).

To complicate matters further, if the deceased's bones do appear to have been moved and disarticulated, this need not have occurred during a post-depositional intervention. Disarticulation and displacement of bones can occur under various circumstances, many of which are not caused by anthropogenic action. One of the most prominent natural causes for bone displacement in the grave is so called 'bone tumble', where the bones fall into cavities, mostly in the thoracic and lumbar regions, that open up as the body decomposes. Similarly, bones can also be displaced when organic materials in the grave decompose and collapse. This is especially the case with furnishings like a bed or bier that elevate the deceased's body above the bottom of the grave pit. If the deceased's head is resting on a pillow made of organic material, the skull may roll away from the body when the pillow decomposes. Relatively light elements like the

sacrum, sternum, cranium and vertebrae can even move by floating if groundwater rises in the open space of a coffin (Duday et al. 1990: 32-33, 36; Duday & Guillon 2006: 127-129, 139; Klevnäs 2013: 132; Noterman 2016: 157). Influences from outside, such as ploughing, pits and trenches dug during wars, animal burrowing and tree root activity may also cause bones to move out of place (Klevnäs 2013: 133; Noterman 2016: 159).

Grave goods

In cemeteries where few preserved skeletal remains and visible intervention cuts are found, reopened graves can only be identified on the basis of a chaotic distribution of the grave goods, which unfortunately is a rather unreliable indicator. The notion of an atypical and disorderly distribution of grave goods implies that in an intact grave these objects are usually laid out in a standardized, orderly and patterned way that is easy to recognize. The spatial arrangement of grave goods in Merovingian graves does indeed show a certain amount of patterning (Legoux 2005: 166-167; Theuvs & Van Haperen 2012: 175). In the research area, pottery was frequently deposited near the foot end. Swords and seaxes were positioned left of the deceased's body with the appropriate beld wrapped around it. Belts could also be worn around the waist. Beads are usually found in the thoracic region, worn as necklaces or sewn onto clothing. Brooches were deposited as dress accessories on the deceased's clothing. However, notable exceptions occur: pottery can also be found in other parts of the grave; swords and seaxes are sometimes laid down without a belt or with the belt wrapped around them; and beads can be attached to bracelets, girdle pendants and other objects. Similarly, although grave goods were usually laid down on the floor of the wooden container or grave pit, they could also be deposited on top of the container. This means that objects found in a grave's fill need not signify that a post-depositional intervention took place (Klevnäs 2013: 133).

Nevertheless, by taking into account the overall layout of the finds in a grave, it is often

possible to discern a marked displacement of artefacts and fragments of artefacts. This displacement need not have resulted from a post-depositional intervention, since artefacts can be moved by various processes, which are similar to those discussed above in relation to the movement of skeletal remains. They include falling into the cavities opened in the decomposing body, displacement by collapse of the grave construction, and disturbance by ploughing, animal burrowing or tree root growth (Duday et al. 1990: 32, 36; Klevnäs 2013: 132-133). An alternative way of identifying reopened graves on the basis of artefacts, is to look for evidence that objects were taken from the grave. One of the most well-known forms of such evidence is the bluish green staining on bones that were in contact with copper alloy artefacts (Werner 1953: 7; Sprenger 1999: 43; Neugebauer 1991: 115; Knaut 1993: 30; Kümmel 2009: 143-145, Klevnäs 2013: 134). If the bone material in a grave shows this type of stains while the corresponding object is not found, it is likely that the object was removed from the grave at a later time. However, if there are still copper alloy objects remaining in the grave it is often difficult to know whether they caused the staining or whether it was caused by another object that is now missing. Under certain circumstances small objects may also have dissolved naturally and left no other traces than the green staining (Zintl 2012: 79). Often, graves also contain fragments or components of objects, indicating that the missing fragments may have been taken from the grave during a reopening. Since partial fragmented objects could also have been deposited in the grave during the funeral, such fragments are not hard evidence for a post-depositional intervention (Grünwald 1988: 34; Kümmel 2009: 143; Van Haperen 2010: 18, 2012: 51-53; Zintl 2012: 78). The subject of missing objects shall be discussed further below, in the section about determining what was taken from the grave.

Reopening tools

Another category of finds that may be indicative of grave reopenings are the so-called robber tools. A number of cemetery excavators claim to have found such tools, or traces thereof. The tools fall into two general categories: stick-like probes that were presumably used to locate the grave and explore its contents, and hooks that the diggers used to retrieve objects that were difficult to reach or to avoid touching unsanitary materials (Grünwald 1988: 34; Thiedmann & Schleifring 1992; Knaut 1993: 31; Dannhorn 1994: 301; Leinthal 1995: 131; Dannheimer 1998: 26-29; Stork 2001: 429; Bofinger & Przemyslaw 2008; Kümmel 2009: 135-137; Klevnäs 2013: 12-13). These objects and traces are somewhat problematic since it is often unclear whether they were truly used in grave reopenings or whether they served a different purpose. In my opinion, such objects cannot be used as independent evidence for post-depositional interventions, but should only be used in combination with the other indicators discussed above. It is important to keep in mind the aspect of practicality and ask how the possible tools would have been used, whether they would have been effective and how they could have left the traces attributed to them. A useful starting point for such an investigation is the use of such tools by pre-modern antiquarians and modern grave robbers or amateur archaeologists. Klevnäs cites the antiquarians and early archaeologists Fausset and Brent (Fausset & Smith 1856: 88; Klevnäs 2013: 435-436, 461), who used a metal probe to search for archaeological features, which they could identify because the fill had a looser texture than the surrounding soil. Fausset's probe is described in detail: 'Total length, four feet; from the top to the spur, two feet two inches; from the spur to the point, including the spur, one foot ten inches, spur three inches and a quarter long.' This device apparently consisted of a pointed metal rod, 120 cm long, with a 'spur' mounted halfway so it could be inserted in the ground using foot pressure. Zintl (2012: 66) recounts similar practices among German archaeologists.

I have personally done some research on Dutch internet forums for amateur archaeologists and metal detector hobbyists, and found that some of them use probes that are somewhat similar to the object described by Fausset. The type of probes that were popular in one such forum consisted of a bar made from sturdy metal, such as stainless steel or concrete reinforcement steel (Dutch: *betonijzer*), between one and 60 and 150 cm long. The width of the bar was not often mentioned, but one poster stated that his probe had a diameter of 1 cm. Upon being asked, the same forum member thought that it should also be possible to use a wooden probe with a metal point, providing that the wood was strong and would not absorb water. The probes were not equipped with a spur like Fausset's, but had a T-bar handle at the top and were inserted by arm pressure. As another novelty, the prong was often equipped with a small bulbous protrusion which widened the insertion hole, so the remainder of the bar met with less resistance from the soil and could be moved up or down more easily. According to the forum members the point itself should not be too sharp since one would risk damaging interesting finds. The probes are used both to find spots of loosened soil which are an indicator of previous digging activity and to look for artefacts that do not register on the metal detector (Oorlogsvondsten.nl, the topic on probes (Dutch: *prikstokken*) was consulted on 21-03-2012).

This information on modern probes can be used to set some criteria for identifying similar implements in the early medieval material. It seems safe to state that a functional probe should have a length between 50 and 150 cm; have a handle or spur to push it in; be made of a sturdy material (usually metal, although strong wood with a metal point might also work); and is not exceptionally thin, but not too thick either, since that would make it more difficult to push down. Not all known early medieval 'probes' satisfy these criteria, so it should be questioned whether they could have been used as such. Another question relates to how such sturdy probes were pro-

duced. If they were made of metal, the quality of the workmanship and the amount of iron used would have been comparable to that of a lance, arrow or sword. If so, such probes may have been rather costly tools which the diggers could not have made themselves except if they were trained as smiths. Wooden probes with a metal point would have been less costly and easier to make, but may also have been less effective.

In some cemeteries, the excavators observed long slender cavities in the soil around graves, which are interpreted as impressions left by such probing tools. In the cemeteries of Eussenheim and Remseck-Pattonville, deep narrow shafts were found surrounding several graves. The excavators made plaster casts of them, which showed that they had probably been made by long straight staves (max. 1.5 cm in diameter) that had been inserted into the ground (Leinthal 1995: 131-2; Koch 1996: 737; Bofinger & Przemyslaw 2008: 53). We have to ask whether these traces are the result of early medieval grave reopening activities and if so, how they were preserved for more than a thousand years, and not obliterated by draining water and faunal activity. This would only be possible in exceptionally stiff and stable soil types, where it would have been very difficult to insert a probe at all. It seems likely that if these traces are related to the reopening of the graves, these events probably date to a more recent moment in time rather than the Early Middle Ages. Zintl (2012: 66-77) points out that even if such holes are early medieval, they need not have been related to post-depositional interventions and could instead have served a function during the burial, for instance to loosen up the soil before digging the grave or to facilitate drainage of decomposition fluids from the grave's bottom. In any case, we would not expect to see probing holes in the fill of a reopened grave, since such traces would normally have been obliterated by the reopening. Also, to locate graves for potential reopening, the diggers would not have needed to hammer down their probes deep into the graves' bottoms.

Another frequently mentioned type of grave reopening tools are the hooks that may have been used to search through the grave's contents. The potential use of such instruments is sometimes attested by hook-like artefacts found in the graves or by peculiar displacement patterns of objects and bones which suggest a hook was used to pull them towards the opening of the reopening pit (Grünewald 1988: 34; Dannhorn 1994: 301; Dannheimer 1998: 26-29). The use of a hook required an open space inside a grave's wooden container in which the tool could be inserted and the objects moved around. Such tools could have been made of wood or metal. Once again some skepticism about finds of such artifacts in Merovingian graves is advisable. As Zintl (2012: 71-72) points out the hook-like metal objects shown in some of the literature seem rather small and fragile for the task and may instead have been part of the graves' original furnishings rather than tools left behind by grave reopeners. They could for instance have been remains of folding chair hinges of which the organic components had decomposed. As with the probing tools, such items should not be used as independent evidence for grave reopenings.

Identifying reopened graves

To conclude this section, I will give a short summary of the criteria used in the database to classify graves as reopened or intact. Graves of which the status could not be accurately evaluated are put in the indeterminate category. A small disclaimer is in order here. Great care was taken to assign each grave to the proper category. However as in all archaeological research, ambiguous cases remain, where the grave's status may not have been assessed correctly.

Intact: the traces of the grave construction, the layout of the skeletal remains, and the distribution of the grave goods show no indications that the grave was reopened. Possible observed disturbances are due to natural taphonomic processes or human interference that was not

directed specifically towards the grave (ploughing, tree planting etc.).

Reopened: The excavators noted traces of a reopening pit or a disturbance of the grave construction; there is evidence for dislocation or removal of skeletal elements; and/or if human bone remains are absent, the grave showed a marked atypical, chaotic distribution of artefacts. It is unlikely that the disturbance was caused by natural taphonomic processes or by types of human interference not intentionally directed at the grave.

Indeterminate: It is not possible to determine whether or not the grave was subjected to an intentional post-depositional intervention, or whether any observed disturbances were due to a reopening or were caused by natural taphonomic processes or human interference that was not directed specifically at the grave. This category includes many seemingly 'empty' burials and graves disturbed by animal burrows, ploughing, construction work or tree planting.

2.2. Studying grave reopening practices

This section outlines ways to reconstruct the practices of grave reopening participants. Not all early medieval graves were reopened and the number of intact graves varies considerably between cemeteries. This means that choices were made whether particular graves would be reopened or not. If these choices were not random, it should be possible to discern local and regional patterned differences between reopened and intact graves in chronology, the deceased's gender and age, grave constructions, grave good types, soil type etc. The database allows us to analyze correlations between these variables and discover potential patterns present in the material.

Sex and gender

In this study, sex is defined as the biological sex of the deceased determined by osteological

examination of the skeleton. Gender is defined as the social counterpart of sex, an identity that often seems to have been represented in the funerary ritual by means of the grave goods placed with the deceased. There is a strong correspondence between biological sex and the gender identities expressed in the grave goods. Female skeletons are most often found buried with objects like brooches and strings of beads, which are almost never buried with males. Similarly, male skeletons are frequently accompanied by weaponry, which is only rarely found in the graves of women. Nevertheless, there are notable exceptions. In addition, these patterns may appear stronger than they actually are because osteological analyses are often done with foreknowledge of the grave goods found with the skeleton, which may influence the researcher to score bones buried with weapons as male and those with jewelry as female (Effros 2000; 2006: 212-214). This is problematic, but often cannot be remedied due to the state of research and bad preservation of skeletal remains in certain sections of the research area. Data on biological sex are unavailable for most burials in this study. In such cases, we are forced to rely solely on the deceased's gender identity as it is expressed in the grave goods. We have to assume that graves with weapons usually held the remains of persons gendered as men (regardless of their biological sex) or at least meant to express aspects of male identity. Graves with jewellery are assumed to have contained persons gendered as women, or express aspects of female identity. Graves in which only 'neutral' non-gender specific objects were found, could have contained persons gendered as male, female or one or more additional genders, such as children who had not reached the age where they identified as men or women. In addition to gender and age, many other identities were probably expressed in the burial ritual, which are more difficult for us to reconstruct. It is also important to keep in mind that the identities expressed in the funeral ceremony and grave good assemblage, gender-related or otherwise, need not

have been a direct reflection of the identities held by the deceased during life.

Grave good types

In addition to the differences between the grave good assemblages found in the graves of men and women, there is considerable regional and local variation in both the character and quantity of objects deposited in graves. The broad scope of this study does not allow me to go into the minute details of the typology of early medieval grave goods. The analysis will therefore be based on simple artefact types, such as sword, lance, ceramic pot, glass vessel, bead string, brooch etc. An attempt is made to ascertain which objects were usually taken from or left behind in reopened graves, based on a statistical comparison between reopened and intact burials. Fragmentation of various object types in reopened and intact graves is also assessed.

Grave construction

The construction types of early medieval graves are very diverse (Smal forthcoming). The size of the graves varies between those that can just fit a small child, to graves that are more than four meters long and three meters wide, but nevertheless contain only one body. Most of the deceased in the research area were buried in graves furnished with single or multiple containers of wood or occasionally stone, while others lay in trench graves. Irrespective of the type of container used, the dead may have been wrapped in a textile shroud. The above-ground appearance of the graves may also have varied. For most graves, no traces of surface adornment or marking were preserved. However, this does not necessarily mean that these graves were really not marked in any way. It will be tested whether there are variations in reopening frequency or technique between these types of graves.

The timing of interventions

The chronology of grave reopenings is often difficult to establish. Both the time that passed between the funeral and reopening and the

absolute date at which the reopening took place are relevant for reconstructing the context in which reopenings took place. The time passed between the funeral and reopening yields information about the relation between the diggers and the deceased. The absolute date allows us to place the intervention in a wider socio-historical perspective and compare it to other interventions from the same period. The methods used to date early medieval graves are not unproblematic. Radiocarbon dates and other types of scientific dating methods are still under-used and graves are most often dated on the basis of seriated grave good typologies. Authors such as Siegmund (1998: 204-205) have suggested seriations of grave goods dividing the Merovingian period in tight chronological phases of which some are as short as 25 or even 15 years. Kars (2011: 13-93) has convincingly shown that such short phases are at odds with theoretical views on early medieval inalienable property and artifact circulation. It seems unlikely that early medieval people were indeed so sensitive to fashion that most objects were taken out of circulation within only 15 to 25 years or that the objects deposited in graves were all produced specifically for the funeral and were not used and exchanged in other contexts. Even in modern Western societies valued objects are often kept for much longer periods of time. This study will therefore work with overlapping phases of approximately 50 years, leaving more room for prolonged early medieval exchange and keeping of objects.

Only in rare cases does the evidence allow absolute dating of post-depositional interventions (Kümmel 2009: 148-150; Zintl 2012: 86-87). Reopened graves occasionally contain objects that most likely originated from the diggers, because they date to a later period than the other items found in the grave. Such items can serve as *termini ad* or *post quem* for the intervention (Koch 1991: 215). However, these cases are rare and since it is difficult to assign accurate dates to Merovingian grave goods, such intrusive objects are not easily recognized if the intervention took place during the Merovingian period. In some cases,

reopening pits are cut by other contexts, like other graves or post-holes. If the date of such features is known, they can be used as *termini ad* or *ante quem*, depending on whether the grave appears to have been reopened before or during the construction of the cutting context (Kümmel 2009: 147; Zintl 2012: 88; Klevnäs 2013: 47).

In most cases, post-depositional interventions can only be dated by combining information from multiple indicators. Dating usually relies primarily on estimations of the time that passed between the funeral and reopening. When combined with the dates of the graves, these can provide an absolute time range in which the graves were reopened. One frequently cited indication of the time that passed between the funeral and intervention is the degree of accuracy and precision with which the diggers placed the reopening pit over the grave. Since early medieval cemeteries usually seem to lack permanent grave markers, it is often assumed that the diggers either knew the grave's layout because they had attended the funeral, or could deduce its location from perishable grave markers that did not leave archaeological traces (For instance Stoll 1939: 8; Schneider 1983: 125; Grünwald 1988: 36; Stork 2001: 430; Van Haperen 2010: 10). Klevnäs (2013: 46, 53-56) has criticized this approach for a number of reasons. In cemeteries where the medieval surface level has eroded or has been dug away or disturbed by ploughing, it is no longer possible to make correct estimates of the original extent of the reopening pit. The upper levels which could have contained evidence of search trenches are lost while the lower levels of the cut are always centered on the grave, possibly creating an exaggerated appearance of accuracy. If graves do truly appear to have been opened with foreknowledge, this is still only a vague indication of the timeframe involved. Given the relatively uniform arrangement of early medieval graves, even vague remains of perishable grave markers such as wooden or earthen structures would be sufficient for experienced diggers to reconstruct the grave's layout. Alternatively, the diggers may

have been able to locate the graves' positions using probing tools such as those described above. Therefore, the precision of reopening cuts cannot be used as reliable evidence of the timeframe in which grave reopenings took place. In this context it is also worthwhile to take into account the written sources, specifically the *Lex Salica* title 55, which discussed various types of grave markers, including mounds, honorary columns or posts and wooden huts for the dead, depending on which version of the text is read (Fischer Drew 1991: 118; Schmidt-Wiegand 1994: 257). If these structures were superficial, they need not have left archaeological traces.

More trustworthy estimations of the time that passed between burial and reopening can be based on the state of preservation of the corpse or skeleton and the grave construction (Neugebauer 1991: 115-121; Aspöck 2005: 251, 2011: 303; Kummel 2009: 150-154; Zintl 2012: 88-89; Klevnäs 2013: 43-46). Aspöck has proposed a classification of grave reopenings into four timeframes that can be distinguished based on the state of the wooden container and skeletal remains. The chronological classification shown below that is used in this study's database is based on her work (Aspöck 2005: 242, 251-2, 2011: 302-304). The timeframes listed are estimates, since the rate of decomposition varied depending on local conditions such as moisture level, drainage, texture and pH of the soil and the type of grave construction (Kummel 2009: 152, table 3.36; Zintl 2012: 89; Klevnäs 2013: 44-46).

Timeframe A (within one year after burial): the corpse is still largely intact

When a corpse has only been buried for a short time it is often still largely intact, despite oncoming decomposition. At this stage it can be taken from the grave or moved around inside it without disarticulating. Under normal environmental circumstances where there was no preservation treatment of the corpse and the soil was not exceptionally moist, this stage can last up to one year.

It is only rarely possible to recognize this timeframe in the archaeological material, since an intact articulated skeleton in a reopened

grave could either signify that the corpse was intact during the reopening or that the diggers did not touch or move the bones when they opened a grave containing skeletonized bones. Aspöck (2011: 303, 318-319) has argued that the unusual positions of the 'deviant burials' found in the Anglo-Saxon cemetery of Win-nall II may actually result from manipulation of the corpses during post-depositional interventions. In such cases, it is difficult to be certain that the bodies had not already been laid down like this during the funeral or slipped inside the coffin when they were transported to and lowered down into the grave. This was termed 'coffin slide' by Klevnäs (2013: 132).

Timeframe B (usually within 0-10 years, but may take longer in wet conditions): the corpse is skeletonizing, but still partially articulated

During or shortly after the first year in the grave, the corpse's tendons of unstable joints such as the fingers, toes and cervical vertebrae will start to decompose, while the more persistent joints such as those of the pelvis, lumbar vertebrae and knees will remain intact for months or years after burial (Duday et al. 1990: 31). Even after most of the soft tissues are gone, part of the skeleton may still be held together by sinews, tendons as well as the deceased's clothing. The process of complete skeletonization will usually take up to ten years, but may take longer in exceptionally wet conditions.

According to Aspöck, graves can be assigned to this timeframe that show signs of having been dug open, but show little or no disturbance of the skeleton. Such observations could indicate that the skeleton was still held together by its own tendons or by the clothes it was dressed in. Care is required however, since the diggers could have examined the grave without disturbing the decomposed corpse, especially if they were working in the open space of an intact wooden container (Kummel 2009: 142; Klevnäs 2013: 44-45). In addition, a completely intact body could also be evidence of timeframe A. The displacement of articulated ligaments that were separated from other parts of the body is a more reliable indicator of

reopenings that took place when the body was partially skeletonized (as observed by Neuffer-Müller & Ament 1973: 19; Grünwald 1988: 35; Schneider 1983: 125; Klevnäs 2013: 44-45).

Timeframe C (0-35 years): wooden container is still intact

Depending on their construction and material, most wooden grave containers decompose between 10 and 35 years after burial. Only graves with a wooden container can be assigned to this time frame. There are two methods for determining whether the container was intact at the time when the grave was reopened. In rare cases, the excavators may have documented traces of whole wooden boards that were broken off and moved during the intervention. This would not have been possible after the container had decomposed. However, care is required, since boards could also have been moved when the wooden construction in the grave collapsed as part of the natural decomposition process. Aspöck (2005: 251) herself determines whether the container was intact by looking for evidence of an open space inside the grave at the time of reopening. If the coffin had decomposed and filled with earth by the time the grave was reopened, any disturbed objects would most likely be mixed with the intervention pit's fill. If the displaced grave goods and bones are all found on the grave's floor, it can be assumed there was still and open space inside the container when the grave was reopened. However, it should be noted that this argument does not hold true in reverse. If the objects are found mixed with the fill, this could mean that the open space in the container had filled with earth, but it is equally possible that the objects from an open space were mixed with the fill when it was dug out and deposited near the grave, after which the mixture was used to backfill the intervention pit. The diggers could also have purposely buried objects higher in the fill. In the cemeteries of Deersheim and Eching-Viecht for instance, the fill of some reopening pits had been covered by animal remains and stone

piles (Schneider 1983: 126-127; Dannhorn 1994: 299).

Timeframe D (>35 years): body has skeletonized, the organic grave containers have decomposed and the grave has filled up with earth

It is very difficult to narrow down the timeframe of interventions that occur after the body has skeletonized and the wooden containers have decomposed. Such graves could have been reopened 40 years after burial, but 200 or 1000 years is equally possible. If the body is skeletonized, the individual bones can be moved freely across the grave. A decomposed container can be recognized if the intervention pit cuts through the container outline or the objects and bones are mixed with the pit's fill, indicating that the container had filled up with soil so there was no open space in which the objects could be moved and deposited on the grave's bottom.

In her study of reopened graves from the Kent region, Klevnäs distinguishes a fifth timeframe, when the bone itself had actually started to decay and fragment. According to the author, graves that are reopened during this timeframe can be recognized from the fragmented state of the bones and the distribution of fragments of the same bone over various parts of the grave (Klevnäs 2013: 44). However, since it is possible that the diggers purposely fragmented the bones, even when they had not yet decayed to a fragile state, I prefer not to use bone fragmentation as a criterion for dating post-depositional interventions.

Some authors suggest that the 'disarticulation' of multicomponent artefacts, such as leather belts with metal fittings, can also be used to estimate the time that passed between funeral and reopening, similar to the decomposition of wooden grave containers (Knaut 1993: 32; Zintl 2012: 90; Klevnäs 2013: 46-47). If for example the plates of a belt were scattered throughout the grave, it is likely that the leather had decomposed. If on the other hand such multicomponent artifacts were moved as

a whole, this is an indication that the grave was probably reopened while the organic components were still intact. Like skeletal fragmentation however, this indicator is somewhat problematic since intact artefacts could have been fragmented intentionally, both as part of the funeral ceremony and during reopenings.

Unfortunately, there are many graves that cannot be assigned to any of the time frames above. If burials are not well preserved or well documented, little evidence is available concerning the condition of the corpse and the organic grave containers at the time of the intervention, limiting our ability to estimate when the grave was reopened. It is therefore often not be possible to date interventions in these graves, other than by comparison with dated reopenings of similar appearance. A general indication of when graves were being reopened in a cemetery can also be obtained through the presence of single disarticulated bones in intact graves. Since these bones probably originated from reopened graves, it is likely that other graves in the cemetery or region were being or had been reopened when the new graves were constructed.

2.3 Treatment of the grave during interventions

Grave reopening types

Preliminary analyses of the data showed three main types of contemporary or near-contemporary post-depositional interventions in early medieval graves: *reopenings*, *intercuts* and *additional burials*. We distinguish between *straightforward reopenings* (traditionally called ‘grave robbery’), where a pit was dug into the grave with no other apparent purpose than to gain access to its contents. A more rare subtype is *superficial reopenings*, where the intervention pit accesses only the grave’s upper fill and does not go down to the grave’s bottom where the skeleton and most of the grave goods are. These shallow reopening pits can be confused with the natural slumping of a grave’s fill that occurs when the coffin collaps-

es, nonetheless there seem to be a few cases of genuine superficial reopening. Such superficial reopenings were also found by Zintl in her research area (2012: 337-338).

Another common intervention type is *intercuts* between graves. I distinguish two subtypes. The first is *invasive intercuts* which cut into the section of the affected grave where grave goods and bones lay. The second is *non-invasive intercuts* which cut only the upper layers or peripheral areas of the affected grave and do not access the coffin and the area where the deceased’s bones lay.

The third intervention type is the deposition of *additional burials* in an existing grave. Archaeologists often call these ‘secondary burials’. This term is avoided here to prevent confusion with cultural anthropologists, who use it to designate the reburial of remains that were previously buried elsewhere (for instance Huntington & Metcalf 1978). Unfortunately, it is not always possible to determine whether additional burials took place and whether multiple individuals were deposited in the grave simultaneously in one event or consecutively over a longer period of time. The later addition of new burials can once again be divided into two subtypes: cases where the original burial is pushed aside or removed from the grave and cases where the original burial is left intact. In the dataset there are additional burials in the form of the inhumation of a complete body, the deposition of cremation remains, or the reburial of disarticulated remains that had previously been buried elsewhere.

As we shall see in the data analysis chapter, multiple interventions of various types can be found in a single grave and the relations between them are often complex and difficult to grasp. In a way, a freshly constructed grave is like a stage for future post-depositional interventions and other activities that can continue to tell the story of the deceased and the burial community.

Intentions of the participants

The ways graves were treated when they were reopened are often taken as indications of the

participants' thoughts and intentions. The less than optimal state of preservation and documentation of the evidence does not always facilitate interpretations of this kind. However, even when the material is well preserved and documented, the correct interpretation can still be a point of contention between scholars.

One question that is often asked, is whether the diggers were familiar with the grave's layout. As discussed above, the apparent precision with which most reopening pits seem to be dug may often be an illusion caused by disturbance of the upper soil levels (Klevnäs 2013: 46, 53-56). We should instead look for evidence such as search trenches, that would indicate that the diggers did not know the graves' exact position, and had to look for it (Grünwald 1988: 35; Fischer 1993: 61; Damminger 2002: 7; Kümmel 2009: 138; Klevnäs 2013: 38, 51).

Due to these concerns, it will also be difficult to determine whether the diggers targeted specific sections of the grave. Combining evidence from the traces of intervention cuts and the distribution of skeletal remains and grave goods should allow us to make some headway in this area, but it is important to keep in mind that absence of evidence is not evidence of absence. If part of a grave looks undisturbed, it could nonetheless have been reopened, especially if there was still an open space inside the coffin (Codreanu-Windauer 1997: 29-30; Klevnäs 2013: 46, 53-56). Conversely, disturbances of the skeleton and grave goods are not necessarily related to an intervention, but could have been caused by burrowing animals, ploughing and other taphonomic processes.

When gathering evidence concerning the participants' intentions, it is also worthwhile to check for evidence of the purposeful removal or fragmentation of particular skeletal elements and artefact types. Since human skeletons have a high degree of uniformity, it is relatively easy to determine whether or not bones are partially or entirely missing from the grave. Some difficulties may nonetheless arise due to natural differential preservation of the

material, the state of the documentation and the lack of osteological expertise in many publications. Since grave good assemblages are far less uniform than human skeletons, it is somewhat more complicated to determine what objects were removed from reopened graves. In some cases, parts of fragmented objects are found in reopened graves, suggesting that the remainder of the fragments was taken by the diggers. However, it cannot be excluded that partial fragmented objects were occasionally deposited in the grave during the funeral. According to Ament (1976: 309-310) the breaking of pottery was part of late Merovingian funerary rites. Another method to determine which grave goods were taken, is the comparison of object assemblages from reopened and intact graves (Aspöck 2005: 256-258; Kümmel 2009: 256-259; Zintl 2012: ; Klevnäs 2013: 65-74). This is not straightforward since differences between the assemblages found in reopened and intact graves could be due either to selective removal of certain object types from reopened graves, or selective reopening of graves with particular grave good assemblages. Such comparisons between reopened and intact graves will be discussed in more detail in the section on statistical analysis below.

Treatment of the grave and its contents after the intervention

The question of what happened after a grave was reopened has not often been addressed extensively. A query into this subject should take into account whether graves were usually reopened only once or multiple times, whether the intervention pit was backfilled, what types of objects were left behind in the grave, whether the diggers added any items to the fill and what other activities may have taken place on the cemetery apart from funerals and reopenings.

Early medieval reopened graves could be backfilled after they had been reopened (Stoll 1939: 9; Aspöck 2005: 255, 262; Zintl 2012: 159, 200; Klevnäs 2013: 57-59). The most reliable evidence for backfilling can be found in cross section drawings or photographs of

the intervention pit's fill. If a pit has a homogenous fill, it was probably backfilled. If on the other hand, the fill shows thin layers of sedimentation, the pit probably filled up naturally. Unfortunately such sections are rarely documented in excavations. Objects and bone material found in the fill may also serve as evidence for backfilling of the reopening pit. Neugebauer (1991: 115) has suggested that objects and bones could have rolled into open intervention pits. Consequently, the presence of objects in the fill should not be taken as definitive evidence that the grave was backfilled. However, objects that suffered prolonged exposure to the wind and rain while they lay on the surface in or around a pit, should show significantly more signs of erosion than objects that were buried in a purposely backfilled pit. Where available, information on the state of objects found in the fill may help us to determine whether intervention pits were intentionally backfilled. Another important question is how the items taken from the grave were used after the intervention. To answer this we should look at evidence for reuse of grave goods in other contexts such as deposition of objects or bones in neighboring graves. Examples of this, though not unproblematic, can be found in Werner (1953: 7), Christlein (1966: 17-18), Grünwald (1988: 35), Knaut (1993: 36) and Codreanu-Windauer (1997: 33.). Finds of bone material or typical grave goods in settlements or cult sites may also be of use. In addition, references in the historical sources about the use of materials from graves, for instance as relics or objects with magical potency (Flint 1991: 215-216, 228-231) should be examined. It is important to ask what was the condition of materials that had lain in the grave for a number of years. This will help us understand in what ways the objects could have been used: whole, refurbished, or as a source of raw materials that could be recycled (Grünwald 1988: 40; Codreanu-Windauer 1997: 33; Van Haperen 2010: 22-24). A final issue that should be addressed is the relation between grave reopenings and other consecutive mortuary practices, such as peri-

odical mortuary feasting, intercuts by later graves, additional burials in older graves, the complete emptying and reuse of graves and finally, the abandonment of cemeteries. The database is equipped with fields that record evidence of such activities, allowing us to find possible correlations.

2.4 Research strategy

The research area

The research area of this study covers of the Low Countries, with a focus on the southern Netherlands. This area was chosen mainly for practical reasons, as it has relatively many well documented cemetery excavations of which the data are convenient to access for a researcher working in the Netherlands. I also feel a commitment to this material which for the most part is only available in Dutch. Until recently, the Low Countries were a somewhat neglected region when it came to the study of early medieval cemeteries. This neglect is now slowly being compensated, but active input from new researchers is required. As a Dutch researcher who has access to this material, I want to do my part in filling this gap in the European dataset. Other researchers contributing to the study of reopened graves have focused primarily on England, Germany, Austria, Eastern Europe and Scandinavia. The Netherlands and Belgium are now a blank area on the map, between two regions where grave reopenings have been studied. This study is a first step towards filling in this blank, making the data available to the English reading international audience, who otherwise would not have access to them.

As with all research areas there are advantages and disadvantages to working with material from the Low Countries. A big downside is the poor preservation of skeletal material in the sandy soil types prevalent in many parts of the region. This severely limits the possibilities to answer research questions related to the treatment of the dead bodies and bones. On the other hand, traces of grave constructions and intervention cuts are often of exceptional-

ly high quality and some past excavators have been very good at documenting them with a high level of detail. This allows a thorough study of the diggers' practices and the effect of reopening pits on the graves' constructions.

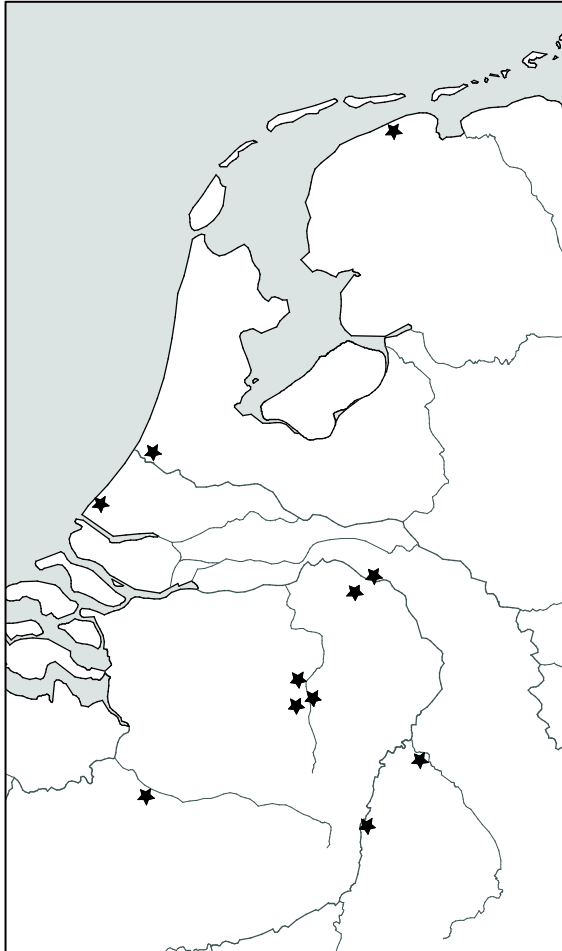


Figure 2.2 Map showing the locations of the cemeteries discussed in this study. Drawing by Frans Theuws.

The region has many more cemetery sites than were included in this study, but due to time constraints only a small number could be included. A selection was made on the basis of the quality and accessibility of the documentation. Only a relatively small number of the sites have actually been excavated and documented with the level of precision required for this project. Of those, not all are easily accessible, as many have not been analyzed and published. Where possible I worked on the basis of publications to save time, but it was often necessary to examine the original field documentation because the publications

lacked the necessary level of detail. The final result was a database containing information from eleven cemeteries excavated across the modern Netherlands and Belgian Flanders: Bergeijk, Dommelen, Meerveldhoven, Borgharen, Posterholt in the southern Netherlands; Solleveld and Oegstgeest in the western coastal Netherlands; Lent and Wijchen in the central Netherlands; Oosterbeintum in the northern Netherlands and Broechem in Belgian Flanders. In the early medieval period most of the sites were situated within the borders of the Frankish Merovingian kingdom, but the most northerly lay in the domain of the Frisian kings. Together these cemeteries yielded over 1350 graves of which at least 200 had been visibly reopened.

The variable quality of the dataset

The quality of the data from the cemeteries included in this study varies considerably. Most early medieval cemeteries in the research area were excavated over 30 to 50 years ago, when the methodology of funerary archaeology was only just starting to develop and the funding and time available for excavations was usually limited. Nevertheless, the quality of the documentation occasionally exceeds expectations to the extent that such older excavations yield more detailed information than more recent campaigns that were carried out with less care, funding or time.

The quality of the data is also influenced considerably by the local preservation conditions on particular cemetery sites, which may be more or less favorable to the preservation of bone and other organic materials and the visibility of grave construction features and traces of intervention cuts. For instance, in the sandy soils in the southern Netherlands grave construction features and reopening cuts are often exquisitely preserved as discolorations, while bone material has disintegrated, leaving little more than occasional pieces of tooth enamel and stains called 'skeletal silhouettes'. Conversely, in dark clay soils of the coastal and riverine areas, bone preservation is quite good, but traces of the grave constructions and in-

intervention pits are often difficult to distinguish.

It is clear from the above that not all sites are equally well suited for studies into particular research questions such as the treatment of the deceased's remains or the choice of different method for opening the grave. This study requires a methodology that is sensitive to these differences and offers a transparent view on the reliability of the data and the ensuing analysis. To this end the database is equipped with fields that record the quality of the available data, both on the level of the cemetery in general and on the level of the individual grave, such as the state of the skeletal material and the visibility of grave construction features. The analyses will be set up as pyramid. For relatively straightforward research questions such as the prevalence and dating of reopened graves the analysis will incorporate all or nearly all cemeteries and graves (the pyramid's base), creating a comprehensive and reliable framework for our interpretations. The analyses that require detailed high quality data will include only the top of the pyramid, the most dependable and well documented cemeteries. The conclusions drawn on the basis of this smaller dataset will not be as wide-ranging, but they will be accurate because of the high quality of the data used.

Database design, a strategy for describing reopened graves

For this project, a dedicated Access database was developed that focusses on describing and analyzing cemeteries with reopened graves. This database is available to the public and can be downloaded from the online DANS Easy archive. The basic structure of this database was inspired by the cemetery databases used in the Servatius and Anastasis projects conducted at the universities of Amsterdam and Leiden and the database used by Stephanie Zintl (2012: 116-120) for her dissertation about reopened graves in German Bavaria. For every cemetery in the study, the data from both the reopened and intact graves were put into the database. The reopened graves were described in more detail, since they are the prime re-

search subject. The intact graves and graves with an indeterminate reopening status were added solely for the purpose of comparison. Given the variable quality of the cemeteries' documentation, it was not possible to record all desired information for every grave in every cemetery, but an extensive and detailed dataset was collected nonetheless.

The database has separate forms for entering data about cemeteries and grave contexts. The Cemetery Form (frmStart > Manage cemeteries) is used to collect general information about the cemeteries used in this study. The researcher can enter the cemetery's name, an indication of the quality of the excavation and the state of publication, whether or not unexcavated graves are still *in situ*, literature references of relevant publications, the period in which the cemetery was excavated, the region in which it was found and the local soil type. These characteristics will be used to estimate and compare the reliability and representativeness of data from different cemeteries. The Cemetery Practices Field can be used to make note of mortuary practices that are not restricted to a single grave, such as feasting or the construction of buildings.

The Context Form (frmStart > select cemetery > Contexts) is used to collect detailed information about individual grave contexts. This form also has limited options to input other types of contexts like ditches, pits and stray finds that are often found on cemetery sites and may intercut graves. In this study, a context is defined as a delimited and coherent group of archaeological features resulting from past human actions. In the case of a grave the archaeological context may for instance consist of the grave pit and coffin, their respective fills, the deceased's skeleton and the grave goods. It could be debated whether a reopening pit should be considered as a separate context, but for this study it was convenient to record it as part of the grave context.

The Context Form is subdivided into tabs that focus on general information about the grave; the grave's construction with the grave pit and containers; characteristics of possible intervention pits; conclusions about the dating of post-

The screenshot shows a software window titled 'frmContextInfo' with a 'Context info' tab selected. The form contains several input fields and dropdown menus for recording archaeological data. The 'Cemetery' field is 'Broechem', 'Context number' is '8', and 'Reopened' is 'Unknown/poss'. Below these are tabs for 'Context info', 'Grave construction', 'Intervention pit', 'Reopening', 'Grave goods', 'Skeletal remains', and 'Reconstructed grave goods'. The 'Intervention pit' tab is active, displaying fields for 'Traces of intervention pit' (Yes), 'Traces reflect extent of intervention' (Unknown/poss), 'Evidence for search trench' (No), 'Displacement of whole planks' (No), 'Intervention pit cuts container' (No), 'Intervention pit cut' (No), 'Intervention pit back filled' (Unknown/poss), 'Fire in intervention pit' (No), 'Deposition of objects' (No), and 'Depth of intervention pit' (Down to skeleton). Below these are fields for 'Extent of the intervention' with sub-tabs for 'Grave pit head end', 'Head/Neck', 'Thorax/Pelvis', 'Legs/Feet', 'Grave pit foot end', and 'Grave pit sides', all set to 'Unknown/poss'. A 'Remarks' section at the bottom contains the text: 'The grave shows traces of a possible reopening pit. Reopening pit outline is contained inside the coffin.' and a checkbox for 'Exceptionally well documented intervention' which is unchecked. The status bar at the bottom indicates 'Record: 7 of 511'.

Figure 2.3 Screenshot of the database used in this study.

depositional interventions; grave goods and other objects found in the grave's fill and any human skeletal remains that were preserved in the grave. The form behind the final tab records indications for objects that may have been taken from the reopened graves, such as fragments that were left behind.

When opening the Context Form, users first land on the Context Info Tab where they can enter general information about the nature of the context (inhumation or cremation, human or animal remains), its date, intercuts with other graves and whether it was reopened. For this last aspect, both the researcher's own opinion and that of the excavator or publication are recorded so differences of opinion are easily identified. The presumed gender association of the grave goods (male, female or neutral) is identified so it can be compared and used in addition to the deceased's osteological sex, if available. The Profile Section Drawing Field can be used to make notes on the information that is available in the rare case that a vertical section of the grave was documented. There is also a box at the bottom of the page

that can be ticked to mark exceptionally interesting and well documented reopened graves. The Grave Constructions Tab allows the user to record the characteristics of the grave pit and the types of containers placed inside it, such as a tree trunk coffin, wooden chamber or stone sarcophagus. The maximum depth, width and length of the grave pit and containers can also be recorded. If the burial had more than one container, the measurements of the largest are taken. This tab also has options for recording externally visible structures of the grave, such as poles, mounds or funerary buildings. The so called Revenant Measures Field is meant for rare additions to the grave such as stones or nails placed on the deceased's body, which are often interpreted as protective devices to prevent the dead from walking (Klevnäs 2016a: 194-197).

Under the Intervention Pit Tab the user can collect information about possible reopening cuts. The form distinguishes between different types of intervention pit traces, ranging from clear color differences in the soil that demarcate the location of the reopening cut, to vague disturbances such as the chaotic distri-

bution of the grave goods and skeletal remains. The form starts with a list of questions to determine what the intervention pit was like. Was it visible as traceable color differences in the soil; are there indications for disturbance outside the documented discoloration of the reopening pit; was there evidence for a search trench? The next set of questions helps determine when the intervention took place. Is there evidence for the displacement of whole coffin planks; did the intervention pit cut the container; was the pit backfilled after the intervention? Lastly there are a few fields that let the researcher enter information about a few typical 'ritualized' aspects that reopenings may have. Examples of these could be the use of fire in the intervention pit or the deposition of objects. The relative depth of the reopening pit is also recorded, to distinguish interventions that involve only the grave's top fill from those that go down to or even cut through the grave's bottom. In the lower half of the Intervention Pit Tab, the researcher has to decide which parts of the grave seem to have been affected by the intervention. For this purpose, the grave is divided into six sections: the head end (beyond the deceased's head), the head/neck area, the thorax and pelvis region, the legs and feet, the foot end (beyond the feet) and the sides of the grave (the parallel to the deceased's body). If no skeleton was preserved, its presumable former location should be estimated.

The Reopening Tab is meant for conclusions about the relative and absolute date of post-depositional interventions. These conclusions are based on data gathered under other tabs in the Context Form. The options under Relative Intervention Date are chosen to fit the methodology of Aspöck that was discussed above, which distinguishes four approximate archaeological timeframes for when intervention could take place (Aspöck 2005: 242, 251-252, 2011: 302-304). Time-frame A (< 1 year), when the corpse is still intact; Time-frame B (< 10 years), the corpse is skeletonizing, but still partially intact; Time-frame C (10-35 years), the corpse is skeletonized but wooden containers is still intact; and Time-frame D (>

35 years), when wooden containers have collapsed and decomposed. When the relative timing of the intervention is determined, it can be combined with the date of the grave (if available), to calculate and fill out the absolute date range in which the grave was reopened. Occasionally the absolute date can also be deduced from other factors, such as intercuts by later graves and objects that may have been left behind during the intervention.

Under the Grave Goods Tab, data is collected about the artefacts found in the grave. The format is simple and only a limited number of characteristics is taken into consideration, since a detailed study of the objects themselves is not the aim here and would be too time consuming. The finds are numbered according to the system used in the excavation documentation or publication. General object type (beaker, shield-boss, bead, sword etc.) and material (glass, iron, pottery etc.) are recorded. The Number of Objects Field allows the user to quickly enter multiple objects that have the same characteristics. The degree of completeness of fragmented objects is expressed as a percentage of the original whole. For instance, if a broken pot is missing one quarter of its fragments, it is 75% complete. The Vertical Location of an object indicates at what relative height in the grave's fill it was found (on the bottom, in the center or at the top). If the grave contained the remains of multiple individuals an object's association with a particular skeleton can be noted. If the grave was reopened, the researcher can indicate whether or not the object lay within or outside the range of the intervention. Boxes can be ticked to register whether the object shows any indications of intentional damage (judged on subjective criteria); carries potential Christian symbols such as crosses, Chi-Rho symbols or biblical scenes; has elaborate decorations like silver inlay or gems; or is an 'antique', meaning that it is significantly older than the remainder of the grave's inventory. The researcher can also make a note if other fragments of the object in question were found distributed over adjacent graves in the cemetery. Lastly, there is a box to tick if the find is

of post-early medieval date, which may help to distinguish interventions that took place after the cemetery was abandoned.

The Skeletal Remains Tab allows the researcher to collect data on multiple individuals by creating a fresh record for each one. The individuals are numbered and these numbers are automatically fed into the Associated Skeletal Remains Field in the Grave Goods Tab, so grave goods can be assigned to a particular skeleton if the grave contained more than one. Osteological sex and age can be recorded for every individual. The sex can later be compared to the gender association of the grave goods which is recorded in the Context Info Tab. The Preservation Field is used to record the state of the skeleton (well preserved, poorly preserved, only a body silhouette). The Displacement of Articulated Elements Field gives an indication of whether the corpse had fully skeletonized when body parts were moved by an intervention. If the disturbed bones are placed in a distinct patterned way (for instance, placed in a heap at the foot end of the grave), this can be indicated under Patterned Layout of Bones. Disturbance of the skeleton by additional burials can also be indicated. Lastly, if the grave contained the remains of multiple individuals the Burial Order Field records whether they were deposited simultaneously or as separate consecutive burials. In the bottom half of the Skeletal Tab, the researcher can record which parts of the skeletal remains were affected by an intervention and which are missing or fragmented. The form divides the skeleton into seven zones: head, thorax, arms, hands, pelvis, legs and feet. This part of the tab only needs to be filled out for graves where there was evidence that it had been reopened. Metal staining (usually blue from copper) on the bones can also be noted on this form, since it can be an indication of moving or removing of objects during an intervention. Lastly, the vertical location of the bones at different relative heights in the grave's fill is recorded, as is done for grave goods in the Grave Goods Tab.

The Reconstructed Grave Goods Tab is an invention of Zintl's (2012: 120) that I happily

included in my database when I read about it in her dissertation. It allows researchers to collect data on objects they think may have been taken from the grave. There are often indications that a grave originally may have contained a particular object that was removed when the grave was reopened. Such indications can be fragments of a partially removed broken object, traces of iron or copper corrosion in the soil or on bones, and incomplete sets of objects like an almost complete belt set that is missing a plate buckle, or a shield grip and rivets without a corresponding shield boss. This form is somewhat similar to that of the normal Grave Goods Tab, in that it records the type, material and number of presumed missing objects. Then there is a field where the user can estimate how certain they are that the object in question was originally present in the grave. The researcher can also check the boxes to indicate which indications for a missing reconstructed object were found and list the find numbers of the relevant fragments or objects belonging to an incomplete set.

Analysis – statistical methods

The relatively large amount of data gathered in this study lends itself well to the application of simple statistical calculations such as averages and percentages. The analysis focuses on similarities and differences between reopened graves and between reopened and intact graves. Various topics mentioned in the introductory chapter are addressed, such as the relation between reopening prevalence and the deceased's gender/sex, grave dimensions, and grave construction. A comparison of the contents of intact and reopened graves can hopefully shed light on what was taken and left behind during reopenings. The exact analyses done will be explained in detail in the next chapter, as it would be impractical to do that here without the context of the data. The data are analyzed per cemetery, to avoid unjustified comparisons between graves from different soil types or cultural areas. Only after each cemetery has been studied will they be contrasted to others.

In addition to calculating averages and percentages, I very much want to use significance testing on the results. In archaeobiology specializations such as osteology, paleobotany and zooarchaeology the use of statistics, including significance testing, is standard practice. In the more socially oriented archaeological disciplines on the other hand, statistical methods are often not even taught to students and significance testing is almost never done. This difference in practice may partially result from the types of data that researchers in these respective disciplines usually work with. Archaeobiology studies often deal with standardized datasets consisting of large amounts of numerical data that easily lend themselves to statistical analysis, while the datasets gathered by more socially oriented archaeological projects are often smaller, non-numerical and more anecdotal in nature. However, the difference between these fields also seems to be due to a difference in academic culture and research practice. Archaeologists working on social topics who do not have a scientific background are often wary of statistics. When talking to colleagues about my intentions to apply statistical analysis in my research, the responses frequently varied from neutrally asking 'How will that benefit your research?' to negative responses like 'You cannot reduce everything to numbers.' and 'If it is not significant, that does not mean it is not meaningful!'. A number of colleagues from the archaeobiology department on the other hand responded positively to my intentions and were very supportive in helping me set my first uncertain steps into statistics territory.

My reason for wanting to use statistics is that in my opinion it is a useful tool for dealing with large amounts of data. I could have looked at each of my reopened graves as a piece of anecdotal evidence, but it seemed much more promising to look for the larger hidden patterns instead. Significance testing was a logical addition, as it is a way to assess whether the findings could have come about by chance. Significance means that a finding or result would come about by chance in only 5% or less of all possible scenarios, written as

$P = \leq 0.05$. In other words, it is very unlikely this situation would occur naturally, similar to a coin falling on heads 40 out of 50 times.

The lower the probability value (P), the higher the chance that this result is not random. If a finding is significant that means it is probably not a result of chance and could therefore reflect real past cultural practices and behavioral choices. If on the other hand, a finding is not significant, there is a higher probability that it results from a random variation and not may not be culturally meaningful at all. The emphasis here is on 'may'. A non-significant finding could still have resulted from a meaningful practice, but since it is not significant, there is a higher probability that it came about by chance. The line between significant and non-significant is a fine one and somewhat arbitrary, so researchers still have to use their own good judgment. Statistical calculations become more reliable when the dataset is larger and the P value is lower. In some scientific disciplines, it is customary to set the bar at 1% of all possible scenarios or $P = \leq 0.01$ for a more stringent definition of significance (Slotboom 2008: 234-235). Statistics, including significance testing are just a way to make our research more accountable and less sensitive to personal bias. It turned out that many of the patterns in this study were indeed significant, indicating that they were probably not a result of chance and therefore likely reflect real aspects of early medieval culture. I hope my experience will encourage other researchers working on social topics to try statistical analysis and significance testing with their data.

There is a learning curve for people were never taught statistical methods during their education, but it can be a real asset to your research. The specific types of significance testing used in this study are the t-test and the Z-test. The t-test is a common test for comparing the averages of two sets of data and determining whether they are significantly different from each other (Slotboom 2008: 269). The Z-test was used when the significance of a difference between proportions or percentages had to be assessed. These tests were done to compare reopened and intact graves, men's and wom-

en's graves and so forth. Brian Wong from the Investabish Interactive Learning Centre in Amstelveen assisted me in performing these significance tests. After my cooperation with Investabish, I decided I wanted to do one more test to see if the differences in grave size between reopened and intact graves were statistically significant. For this purpose I was advised by colleagues from the bioarchaeology department to use the ANOVA, which is short for analysis of variance. It is somewhat comparable to a t-test, but is designed for the analysis of datasets consisting of more than two groups

(Slotboom 2008: 279-281). This enabled me to test graves containing male, female and neutral grave goods or graves that are intact, reopened or have an unknown status in a single analysis. The ANOVA was combined with a post-hoc Tukey test, which compares all possible pairs of means in the dataset to see which categories in the dataset were significantly different from one another and which were not ([wikipedia.org/wiki/ Tukey%27s_range_test](https://en.wikipedia.org/wiki/Tukey%27s_range_test) consulted on 09-07-2016).

3. The cemeteries – analyzing the data

This chapter contains the analysis of the data from each of the eleven cemeteries included in this study. The cemeteries comprise a total of 1169 graves, of which at least 208 were probably reopened. The cemeteries are distributed over the modern Netherlands and Belgian Flanders, with a concentration in the southern Netherlands. In the discussion of the data I will try to hold to a single format, but since the cemeteries vary considerably in number of graves, data quality and excavation circumstances, it is not possible or sensible to treat them all the same. A tailored approach is necessary. This section is concluded with a summary of the data, and an attempt to answer the practical research questions formulated in the introduction. These answers will be the starting point for the interpretations discussed in the final chapter.

3.1 Broechem

The Broechem cemetery (Belgium, province of Antwerp, municipality of Ranst) was excavated in the years 2001-2003 and 2007-2008. Most of the cemetery was expertly excavated and documented by the Flemish Heritage Institute (VIOE) (Annaert 2007; Annaert & Debruyne 2009; Annaert 2010; Annaert et al. 2011). Unfortunately, a few graves were dug up by the landowner prior to start of the official excavation.

Since some of the cemeteries' boundaries fell outside the reach of the excavation, it is uncertain how many graves remained undiscovered. However, a few of the cemetery's boundaries seem to have been reached, suggesting that the majority of the graves has now been excavated. At the moment of writing, most graves from this cemetery have not been published in detail, so my analysis is based on the field documentation and preliminary data that the excavators gathered in databases to which I was

very kindly given access. The Broechem cemetery is one of the largest and best excavated cemeteries in my dataset. Its analysis therefore served as a pilot and template for the assessment of the other cemeteries in this study. The cemetery is located on an 'island' of sandy loam surrounded by sandy regions. These soil conditions are very favorable for the preservation and visibility of archaeological features. The traces of grave constructions, post-depositional interventions and taphonomic processes were often very clearly demarcated in the soil. Unfortunately, the acidity of the soil is detrimental to the preservation of skeletal remains. Only a limited number of graves yielded recognizable human remains, often in the form of teeth and skeletal silhouettes. Only small quantities of actual bone were preserved, except for calcined remains from cremation graves.

Inhumation graves

The Broechem excavation documents and databases yielded information on 431 clearly defined human inhumation graves and 9 possible inhumation grave pits which lacked distinctive grave characteristics. There were also three horse inhumations. The inhumation graves of the cemetery's first phase are orientated west-east. The graves of the second phase are laid out south-north and concentrate in the southern part of the cemetery. The phases have not been dated precisely yet, but the cemetery as a whole dates between the fifth and the first half of the eighth century. Most people were buried in relatively simple wooden coffins, but there were a few exceptions, including trench graves, so called 'chamber graves', a tree trunk coffin, and possibly a bier. Most deceased were buried with at least a few grave goods, similar to what is found in other Merovingian cemeteries. A number of graves lacked preserved grave goods, but these may nevertheless have been furnished with items made from perishable organic materials like cloth and wood.

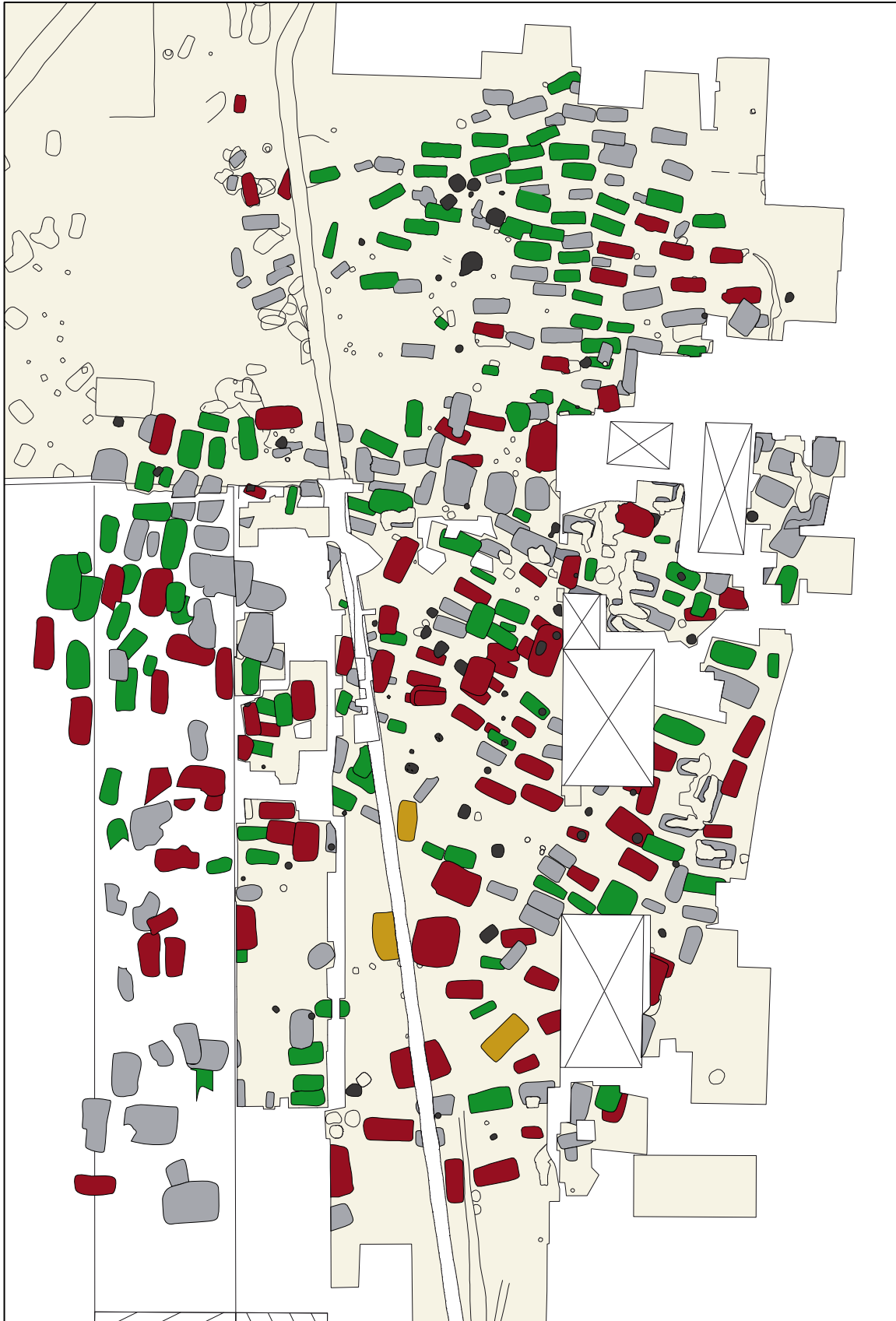


Figure 3.1.1 Map of the Broechem cemetery. Preliminary version provided by the excavators, not all graves are shown. Red=reopened inhumation, green=intact intact inhumation, light grey=indeterminate inhumation, dark grey= cremations, yellow=animal burials.

It seems that there were more graves with typical women's grave goods than with typical men's grave goods. Of 431 inhumation graves, 108 (25%) contained objects that are usually associated with women and only 66 (15%) contained objects that are usually associated with men. Two graves had a mixed set of grave goods with both typical men's and women's objects. The remaining 255 graves (59%) had only gender neutral grave goods, or no grave goods at all. Since almost no skeletal remains were preserved, the graves can only be assigned to a specific gender on the basis of the grave goods. We cannot check to what extent gender specific grave good sets were actually deposited in burials with individuals of the expected sex or whether the cemetery really contained more women's graves than men's graves.

Cremation graves

The excavation yielded at least 65 cremation burials, approximately 16% of the graves; a high number for a cemetery from this period, although not unheard of in this region (Annaert et al. 2011). The oldest cremation graves probably date to the same period as the earliest inhumation graves, the second half of the fifth century. The practice of cremation on the cemetery continues into the sixth century. Nearly all cremation graves consisted of a simple pit in which the cremation remains were buried, without any containers except possibly a wrapping of leather or cloth. There were pits containing bones and pyre remains (*Brandgrubengräber*) and deposits of compacted bones without pyre remains (*Knochenlager*). At least one cremation was buried in an urn and two others were furnished with small post-built 'cremation houses', which are the only above-ground grave markers preserved in this cemetery. The grave goods and dress accessories from the cremation graves had all been burnt, but they were otherwise very similar to those found in the inhumation graves.

The cremations were mostly scattered between and on top of the inhumation graves, but a conspicuous concentration was encountered in

the northern part of the cemetery, which was also where the urn burial and one of the cremation houses were found. Most cremation pits were dug less deep than the inhumation pits. As a result, a number of cremations were mixed in with the plough soil that covered the cemetery.

Post-depositional interventions

Of the inhumation graves 104 (24%) showed distinct traces of contemporary post-depositional interventions. A total of 124 graves (29%) was most likely left intact after the funeral. For the remaining 203 graves (47%), there is insufficient evidence to determine whether they were subjected to an intervention or had remained intact. Given the large number of indeterminate cases, in reality the percentage of reopened graves is probably much higher. If the distribution of the indeterminate group is similar to that of the other graves, we can postulate a total 194 reopened graves (45%) and 237 intact graves (55%). The topographical distribution of the reopened graves is shown in figure 3.1.1. Although the map is a preliminary version that does not show every grave that was excavated, it provides an adequate understanding of how post-depositional interventions are spread over the cemetery. The distribution is relatively even, except for a small area in the northernmost section of the cemetery where no reopened graves could be identified. The concentration of post-depositional interventions is densest in the middle and southern parts of the cemetery. These zones in the cemetery may to some extent date to different phases of the cemetery's use, so these variations in reopening rate may be related to changes in the treatment of graves that occurred over time. There is a difference between the intervention rates of presumed men's and women's graves. The cemetery has a relatively large number of graves with grave goods that are usually associated with women. Of all graves 25% were furnished with typical women's grave goods, while only 15% had typical men's grave

	Male	Female	Neutral	Total
Reopened	42% (n=28)	22% (n=24)	20% (n=50)	24% (n=102)
Intact	33% (n=22)	48% (n=52)	20% (n=50)	29% (n=124)
Indeterminate	24% (n=16)	30% (n=32)	61% (n=155)	47% (n=203)
Total	100% (n=66)	100% (n=108)	100% (n=255)	100% (n=429)

Table 3.1.1 Percentages of graves with typical men's, women's and gender neutral grave goods that were reopened or remained intact. The two graves containing both men's and women's grave goods were excluded.

goods. The remaining graves contained non-gender specific 'neutral' objects or lacked preserved grave goods altogether. However, post-depositional interventions occurred more often in burials that had grave goods associated with men. As can be seen in table 3.1.1, 42% of the graves with men's objects were reopened, compared to 22% of the graves with women's objects. This indicates that graves containing male gendered objects may have been preferred for reopenings.

The Z-test test shows that the difference between graves with men's and women's grave goods is significant for reopened graves ($P=0.005$, $F=2.825$). The difference is borderline significant for the intact graves ($P=0.055$, $F=1.918$) and not significant for the indeterminate graves ($P=0.220$, $F=-0.771$). The difference between graves with male and neutral grave goods is significant for reopened, intact and indeterminate graves ($P=0.000$, $F=3.852$; $P=0.017$, $F=2.383$; $P=0.000$, $F=-5.303$). The difference between graves with female and neutral grave goods is significant for intact and indeterminate graves ($P=0.000$, $F=0.565$; $P=0.00$, $F=-5.430$), but not for reopened graves ($P=0.575$, $F=0.565$).

No interventions in cremation graves

There is no evidence for post-depositional interventions in the cremation graves. Perhaps these graves were not reopened like the inhumations were. However, traces of potential post-depositional interventions would have been more difficult to recognize, since the cremation graves were often more shallow and had a simpler construction than the inhumations. Absence of evidence needs not be evidence of absence in this case.

Intervention types

Various types of post-depositional interventions were observed in the Broechem cemetery. Straightforward reopenings and intercuts between graves were the most common, but there were also a few cases of additional burials deposited in existing graves. Many graves were subjected to multiple intervention types. The relations between the various interventions were sometimes quite complex.

Additional burials

The deposition of additional burials in existing graves seems to be relatively rare in Broechem. This may partially be an effect of the poor bone preservation. Even if graves did contain multiple burials, this may not be apparent if the remains were not preserved. Grave 152 is the only case where the deposition of an additional inhumation was observed. The additional burial in this grave may have been reopened after its coffin had decomposed. Unfortunately this grave was documented with less detail than other graves in the cemetery, so the precise order of events is difficult to reconstruct. Graves 65, 55 and 54 were deposited in such a way that 55 almost completely overlapped 65 and 54 almost overlapped 55, thus making this cluster of intercutting graves look very similar to a single grave with multiple burials. Grave 982, which had also been reopened, showed traces of a possible second coffin at the bottom level, but these were not clear enough to be certain that it did indeed contain a second burial. Burials of cremation remains in existing inhumation graves were more common. It is not always clear whether the cremation remains were added to the grave during the funeral or

whether they were part of a post-depositional intervention. It seems both of these options took place. Four intact graves contain cremation remains (29, 349, 419, 960) which must have been deposited during the funeral. Five reopened graves contained cremation remains (22, 70, 211, 278, 445). In three cases (22, 70, 445) the cremation remains lay outside the reopening pit and had therefore most likely been deposited during the funeral. In grave 211 a concentration of cremation remains was found in the reopening pit, indicating that it was probably put in the grave during the reopening. Grave 278 is a curious case. The skeletal remains and grave goods appeared rummaged, indicating that the grave had probably been reopened, even though there were no visible traces of a reopening pit. It is unclear whether the coffin was still intact when the grave was reopened, but this seems likely as all the rummaged finds lay on the grave's bottom. A concentration of cremation remains was also found on the grave's bottom in the area of the reopening pit. The cremation deposit seemed to cut the coffin on this level. These findings could mean that the reopening and the deposition of the cremation remains were separate events, one before and one after the coffin had decayed. Alternatively, the reopening and deposition of the cremation remains took place simultaneously, at a time when the wooden container had started to decompose, but while there was still an open space inside.

Intercuts

Intercuts between graves were a very common type of post-depositional intervention in the Broechem cemetery. In total, 24% (n=104) of the inhumation burials were cut by a later grave. Intercuts occurred both in reopened and in unopened, otherwise intact graves. Of the reopened graves 29% had been cut by a later burial, versus 22% of the intact graves. The slightly higher percentage of intercuts in reopened graves is not surprising, since the new grave pits were sometimes dug into the fill of the old graves, thereby effectively reopening them. Eleven graves were reopened solely with an intercut, without any traces of a

separate reopening pit (28, 35, 36, 55, 65, 174, 389, 408, 1058, 1059, 1078). Interestingly, these invasive intercuts always seem to cut cleanly through the older graves' coffins, indicating that the wood had decayed when the intercuts took place. Invasive intercuts differ from regular reopenings in that they usually only disturb the grave's contents in the direct location of the new grave pit, and not the surrounding areas. In regular reopenings, especially if they took place while the coffin was still intact, the disturbance sometimes reached beyond the demarcated edges of the reopening pit. In a few cases like the one in figure 3.1.2, the diggers seem to have used the intercutting grave pit as a starting point from which they extended a reopening pit into the older grave (969 and perhaps 260 and 280). In most cases however, reopenings and intercuts seem to have been independent phenomena which did not take place at the same time.

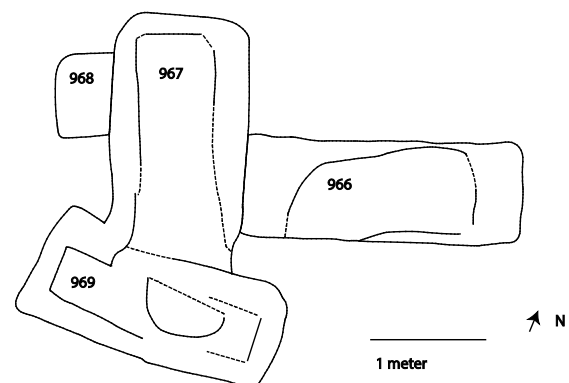


Figure 3.1.2 Grave 969 was cut by grave 967. The diggers may have expanded the grave pit to reopen grave 969. The excavators found it difficult to interpret and document the complex stratigraphic relations.

Reopenings

Straightforward reopenings are probably the most common type of post-depositional interventions in the Broechem cemetery. 'Reopenings' as a type are difficult to define, but usually a simple pit was dug into the grave, allowing the diggers access to its contents. After subtracting the eleven graves that were reopened solely by a later intercutting grave, we are left with 93 graves that reveal indications

of a regular reopening pit. The reopened graves will be analyzed in detail below.

Reopening methods

Despite the relatively well defined soil discolours observed in Broechem, the reach of the reopening pits was sometimes difficult to determine. Some graves did not reveal traces of a reopening pit, even though the disordered layout of the skeleton and finds clearly indicated that they had been reopened (118, 137, 278). In the case of grave 70, there were no signs of a disturbance apart from the flecked appearance of the coffin's fill, which the excavators considered typical for reopened graves in this cemetery.

When traces of the reopening pits were found, these often gave valuable information about how the grave was reopened. Most graves were opened with a simple pit which entered the grave from above, usually in the area of the coffin. Disturbances in the graves' contents sometimes indicated that the actual intervention reached beyond the traces of the pit (for

instance in graves 53, 186 and 421). If the coffin was still intact when a grave was reopened, the diggers could probably have reached into the open space through a relatively small hole. Grave 94 revealed a very large reopening pit in the upper levels which disappeared once the level of the coffin was reached (see figure 3.1.3), suggesting that the diggers may have exposed and lifted the whole coffin lid in order to gain access to the grave. Perhaps a similar order of events can explain the lack of reopening pit traces in aforementioned grave 70 with its characteristic flecked coffin fill. In graves 286 and 435, the diggers may have approached the coffin from the side, either to lift the lid or to make a hole in one of its walls to access the contents. When interventions took place after the wood had decayed, the diggers had to rummage around in the soil that filled the open space in the coffin. This situation is reflected in graves like 137 and 813 where many grave goods and bones are mixed with the reopening pit's fill.

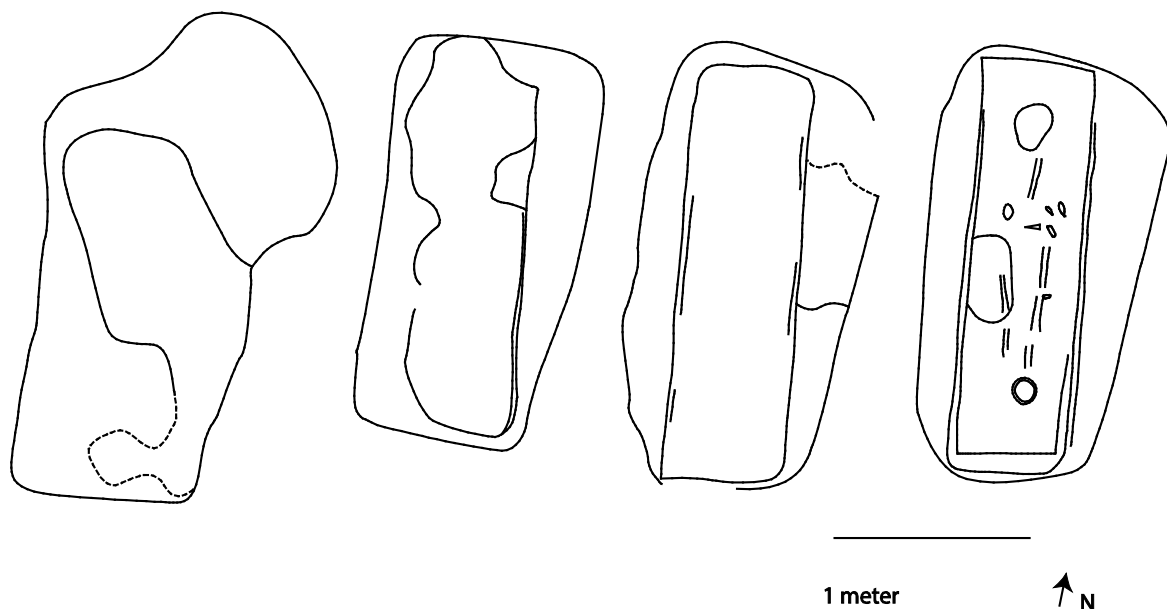


Figure 3.1.3 Levels 2-5 of grave 94. The grave showed traces of a very large reopening pit in the upper levels. Perhaps the diggers lifted the whole coffin lid.

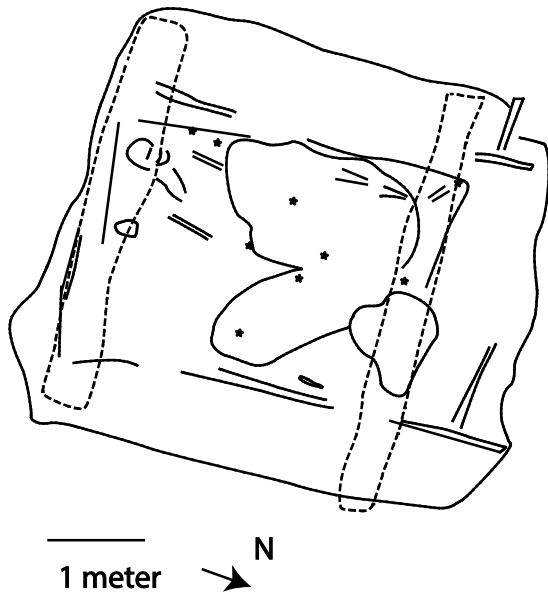


Figure 3.1.4 Grave 84, level 6. This grave showed traces of three separate reopening pits.

Most graves in Broechem seem to have been reopened with a single reopening pit, but at least four graves showed traces of multiple pits. Grave 84 had an unusually large wooden container which showed traces of at least three separate reopening pits in its fill (figure 3.1.4). Grave 186 revealed two separate reopening pits, a small one in the region of the head, and a larger one in the area of the pelvis and legs. Grave 989 also had separate reopening pits in the areas of the head and feet. Grave 141 showed two intercutting reopening pits with distinctly different colored fills. Together they covered almost the entire coffin. The intercutting pits in grave 141 suggest that at least some time passed between the interventions, since one must have been filled with earth before the other was dug. For the other cases it is unclear whether the pits were dug more or less simultaneously or whether they represent separate reopening events.

No real search trenches were found, but at least two sets of graves were reopened with a single pit (414/445 and 296/288). Both cases concern intercutting graves where the reopening pit was dug in the area of the cut, resulting in a complex stratigraphy.

It is not always clear what happened after

graves were reopened, but the reopening pits' fills were often quite homogenous and not filled with layered sediments. The field drawings are not always clear on this, - unfortunately almost no vertical profiles were documented - but the excavator told me in a personal communication that she observed homogenous fills in most of the reopening pits (Annaert on 15-07-2013). This indicates that the pits were probably backfilled soon after the interventions, but we cannot tell whether the backfilling was done by the same people who reopened the graves.

Reopening pit placement

The size and placement of reopening pits within the grave varied considerably. In most graves, the reopening pits reached down to the bottom level where the skeleton and grave goods lay. In graves 21, 32, 100, 296, 980 and 1079, the diggers clearly cut through the coffin's bottom, which indicates that the wood had probably decomposed. In graves 15, 987, 1030 and possibly graves 30 and 34 the reopening pit appears to be restricted to the upper levels of the fill. It is possible that these features are not reopening pits. They may have resulted from slumping of the graves' fill when the wooden container collapsed. However, since the graves in this cemetery were mostly very similar in construction, this raises the question why such pronounced slumping was not found in the other graves. It is even possible that these shallow pits have no intentional relation to the graves at all. However, their pronounced nature and similarity in placement and shape to the other reopening pits in the cemetery suggests that these superficial pits do indeed reflect an early medieval grave-related practice.

Table 3.1.2 shows which areas of the graves were reopened. In nearly all the graves, the reopening pit covered multiple areas. The higher the percentage listed in the table for a particular section of the grave, the higher the frequency with which those

	Head end	Head/neck	Thorax/pelvis	Legs/feet	Foot end	Sides
Men (28)	11% (n=3)	64% (n=18)	79% (n=22)	61% (n=17)	7% (n=2)	25% (n=7)
Women (25)	0% (n=0)	42% (n=10)	75% (n=18)	67% (n=16)	16% (n=4)	29% (n=7)
Neutral (50)	18% (n=9)	56% (n=28)	66% (n=33)	58% (n=29)	10% (n=5)	38% (n=19)
All graves (102)	12% (n=12)	55% (n=56)	72% (n=73)	61% (n=62)	11% (n=11)	32% (n=33)

Table 3.1.2 Placement of reopening pits in graves with men's and women's grave goods. The two graves containing both men's and women's grave goods were excluded.

sections of the graves were reopened. For instance, for the men's graves, the reopening rate of the thorax/pelvis region is 79% (n=22).

This means that in 79% of cases (22 graves), the thorax/pelvis area was reopened. Generally speaking, most reopening pits focused on areas inside the coffin. Not a single grave was completely reopened from the grave pit's head end to the foot end. The reopening pits focused primarily on the thorax area of the coffin, while fewer pits went into the area of the head/neck and the legs/feet. Reopening pits did occasionally extend beyond the confines of the coffin, reaching into the head end, foot end or sides of the grave pit. This happened more frequently in graves where the coffin had decomposed and no longer formed a physical barrier that constrained the digger's activities. The reopening pits were often wider in the upper levels of the grave, becoming more narrow and focusing on specific areas of the coffin as they went down. Grave 435 was the only grave with a reopening pit that focused on one side of the grave pit, rather than on the coffin's contents. It is unclear whether the coffin in this grave was opened, although this is suggested by the atypical placement of the beads inside. Perhaps the coffin was accessed from the side, as is suggested above.

There is no evidence that graves of men and women were reopened in different areas related to gender specific grave good distributions. The top rows of table 3.1.2 show the placement of reopening pits in graves with men's and women's grave goods. Only the head end displays a small statistically significant difference between graves with women's and neutral grave goods in the Z-test ($P = 0.027$, $F = -2.218$). Otherwise, there are only very small and non-significant differences in the place-

ment of reopening pits between graves with typical men's and women's grave goods.

Reopening chronology

Given the general lack of other dating features, the chronology of grave reopenings primarily relies on estimates of the time that passed between the burial and reopening. For Broechem, these estimates are mostly based on the state of the wooden container at the time of the reopening. For 19% of the reopened graves (n=20), it could be demonstrated that the reopening probably took place while the wooden container was still intact. About 39% (n=41) were reopened after the container had collapsed. For the remaining 41% (n=43), the state of the wooden container at the time of the reopening could not be determined. Based on these numbers, we can extrapolate that about one third of the graves was probably reopened while the container was still intact. The other two thirds were reopened after the container had decomposed. It is unclear how long it would have taken for the wood to decompose in the Broechem soils. The timing probably varied significantly, depending on the type and thickness of the wood and local variations in soil humidity. In the following analysis, we will therefore adhere to Aspöck's (2005: 251-252; 2011: 302-306) estimate that decomposition of wooden containers took 35 years. Only the small number of reopenings that took place in graves with intact coffins can potentially be dated to a delimited time period, namely the date range of the grave plus 35 years. Interventions that took place when the wooden containers had decomposed only have a *terminus post quem* of the grave's date plus 35 years. They cannot be dated to a delimited period because the reopening could

have occurred at any point in time after the wood had decayed.

Only 54 of the 104 reopened graves could be dated. The earliest reopened graves in the cemetery are 763 (dating 440-480 AD), 966 (470-570 AD) and 989 (470-570 AD). It was not possible to determine whether these graves were reopened before or after decomposition of the wooden container, so it is unclear how much time passed between the burials and reopenings. Grave 912 dates to 440-485 and was reopened after the container had collapsed, so the reopening dates between 475 and 800, assuming the reopening took place during the cemetery's use period.

A total of 35 interventions could be dated. Eleven reopenings have a date range starting before 555, 18 have a *terminus post quem* between 560 and 600 and only three reopenings have a date range starting after 600. Nineteen reopenings could be given an end date or *terminus ante quem* because they took place before the containers in the affected graves had decomposed. Six reopenings dated before 660, nine dated before 685 and the remaining four dated before 735. Assuming all reopenings took place while the cemetery was still in use, they have an end date before 750/800. To conclude, the date ranges of most datable reopenings lie between 500 and 700. Most reopenings probably took place in the second half of the sixth and first half of the seventh century, with possibly a few early cases at the end of the fifth century.

Grave goods

In this section, I reconstruct which objects may have been taken during grave reopenings. The differences between the objects found in reopened and intact graves can be seen in table 3.1.3. The table shows the number of objects found in graves with reopened, intact and indeterminate status, divided by object type. For each category of graves, the total number of objects of a particular type is displayed in the left column. The right column contains the average number of objects per grave, which is the total number of objects of that type divided by the number of graves in that

category. For instance, 39 lance heads were found, of which 21 came from reopened graves. Because there were 104 reopened graves, the average number of lance heads in reopened graves was $21/104=0.20$. These averages serve as an index that enables fair comparisons between reopened, intact and indeterminate graves when the number of graves in each category varies.

If the average number of objects in the reopened graves is low, this suggests objects may have been removed relatively often when graves were reopened. On the other hand, an equal or higher average number of objects type in the reopened graves suggests that objects were not removed during reopenings. However, such results can be interpreted in different ways. A lower number of objects in the intact graves could also mean that the diggers were not interested in opening graves containing few objects. Similarly, a higher number of objects in reopened graves could indicate that the diggers preferred to open graves containing many objects, possibly removing some and leaving others behind. The numbers of objects found in the indeterminate graves are generally low, reflecting the fact that the reopening status of graves with few finds is often difficult to determine.

It is important to note that not all types of objects commonly found in Merovingian graves were present in the Broechem cemetery. For instance, no swords and very few seaxes and shields were found. It is unclear whether this lack of weaponry is due to the burial ritual or whether these objects were systematically removed during reopenings. Lance heads and arrowheads on the other hand were found in large numbers. Interestingly, the average number of lance heads and arrowheads was higher in reopened than in intact graves. The only other object types with higher averages in the reopened graves were plate-buckles and plates of decorated belts. Most other object types such as knives, keys, simple belt buckles without plates, brooches, spindle whorls, earrings, miscellaneous rings, coins and beads were found in equal or larger numbers in the intact graves. According to the t-test, the dif-

ferences between intact and reopened graves are significant for lance heads ($P=0.006$, $F=2.785$), belt buckles ($P=0.019$, $F=-2.358$), plate buckles ($P=0.014$, $F=2.502$), belt plates/strap ends ($P=0.005$, $F=2.847$), brooches ($P=0.001$, $F=-3.325$), earrings ($P=0.033$, $F=-2.161$), miscellaneous rings ($P=0.002$, $F=-3.173$) and beads ($P=0.039$, $F=-2.080$). Looking at these data, the most conspicuous pattern seems to be that many female gendered object types are found in higher numbers in the intact graves, while a few male gendered

object types are found in higher numbers in the reopened graves. This is an interesting pattern, especially given the relatively high reopening rate of men's graves in this cemetery. Although the diggers seem to have preferentially reopened graves with male gendered grave goods, they seem to have removed fewer men's objects than women's objects. The high numbers of some grave good types in reopened graves suggest that they may even have deposited objects during reopenings.

Objects	Reopened (104 graves)		Intact (125 graves)		Indet. (203 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Seaxes	4	0,04	4	0,03	4	0,02
Shields	1	0,01	0	0	2	0,01
Axes	1	0,01	4	0,03	5	0,02
Lance heads	21	0,20	9	0,07	9	0,04
Arrowheads	24	0,23	22	0,18	14	0,07
Shears	2	0,02	3	0,02	4	0,02
Knives	37	0,36	60	0,48	33	0,16
Fire steels	1	0,01	3	0,02	1	0
Keys	1	0,01	9	0,07	1	0
Belt buckles	44	0,42	77	0,62	66	0,33
Plate buckles	19	0,18	6	0,05	6	0,03
Belt plates/strap ends	68	0,65	20	0,16	26	0,13
Leg strap plates	5	0,05	6	0,05	0	0
Belt pendants	4	0,04	10	0,08	7	0,03
Purse buckles	1	0,01	5	0,04	1	0
Brooches	7	0,07	48	0,38	20	0,10
Bracelets (mostly antique glass)	2	0,02	6	0,05	2	0,01
Tweezers	5	0,05	3	0,02	5	0,02
Spindle whorls	11	0,11	20	0,16	16	0,08
Earrings	0	0,00	6	0,05	2	0,01
Finger rings	0	0	2	0,02	0	0
Rings, miscellaneous	12	0,12	54	0,43	32	0,16
Pottery vessels	52	0,50	66	0,53	70	0,34
Glass vessels	5	0,05	3	0,02	0	0
Coins	3	0,03	24	0,19	5	0,02
Beads	759	7,30	2371	18,97	780	3,84

Table 3.1.3 Grave goods found in reopened, intact and indeterminate graves. For each category of graves, the table lists total number per type and the average per grave.

Objects	Reopened (104 graves)		Intact (125 graves)		Indet (203 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Iron	210	2,04	340	2,72	247	1,22
Copper alloy	88	0,85	127	1,02	86	0,42
Iron/copper alloy	23	0,22	4	0,03	9	0,04
Silver	23	0,22	25	0,20	9	0,04
Gold	2	0,02	10	0,08	4	0,02
Pottery	63	0,61	82	0,66	85	0,42
Glassware	5	0,05	3	0,02	0	0,00
Amber	121	1,17	231	1,85	113	0,56

Table 3.1.4 Grave good materials found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per material and average per grave.

Table 3.1.4 shows which materials were found in reopened and intact graves. The table only takes into account recognizable objects, no fragments, since it is usually unclear whether these were part of the grave's original inventory or whether they were just part of the soil used to fill the graves. The data in this table mostly reflects and confirms the results of the previous analysis. According to the t-test, the differences between intact and reopened graves are significant for iron ($P=0.000$, $F=3.724$), iron/copper alloy ($P=0.020$, $F=2.357$) and glass ($P=0.041$, $F=-2.066$). The differences for the other material categories are not significant. Relatively few precious metal objects were found, especially very little gold. The average numbers of silver objects are very similar for reopened and intact graves. The number of gold objects is slightly higher for the intact graves, but the numbers are somewhat skewed because of one intact grave with a small coin hoard. The intact graves yielded a substantially higher number of iron objects and slightly more copper alloy objects than the reopened graves. However, the reverse was true for composite iron and copper alloy objects, which predominated in reopened graves. This somewhat surprising result is caused by the previously discussed predominance of decorated belt fittings in reopened graves, which are often made from an iron base plate with copper alloy rivets and inlays. The pottery numbers are very similar for reopened and intact graves, with a slightly higher average for

the intact graves. Too few glass vessels were found to draw any conclusions about them. In accordance with the high numbers of beads in intact graves, amber objects were found in much larger numbers in intact graves.

The question remains whether the objects in reopened graves were left behind on purpose or by accident. To answer this question we need to look at where these objects were found. Table 3.1.5 shows how many objects from reopened graves were found inside and outside the reopened area. If an object lay inside the reach of the reopening pit, the diggers could have seen it and left it behind on purpose, especially if the object was large. Nearly all object types were found more frequently inside the reopening pits than outside them. This was to be expected since we have seen above that reopening pits focus on areas of the grave where the grave goods lay. Nevertheless, it is interesting to see that the diggers left so many objects behind. It certainly is possible that they overlooked some objects while rummaging in the grave's fill, but probably not all of them. As we have seen above, at least 19% of the reopenings took place in the open space of an intact wooden container. These conditions would yield relatively good visibility of objects during the reopening. Large objects such as lance heads would have been hard to overlook even in the fill of a collapsed coffin, especially since their placement in the grave was relatively standardized, so the diggers knew where to look.

The cemeteries – analyzing the data

Object type	In pit	Outside pit	Unknown
Seaxes	1	0	3
Shields	1	0	0
Axes	0	1	0
Lance heads	9	4	8
Arrowheads	13	5	6
Shears	1	0	1
Knives	25	6	6
Fire steels	1	0	0
Keys	0	0	1
Belt buckles	25	6	13
Plate buckles	11	2	6
Belt plates/strap ends	34	5	12
Leg straps	3	0	2
Belt pendants	1	2	1
Purse buckles	0	1	0
Brooches	6	0	1
Bracelets (mostly antique glass)	0	0	1
Tweezers	4	0	1
Spindle whorls	6	3	2
Rings, miscellaneous	8	0	4
Pottery vessels	26	12	12
Glass vessels	2	2	1
Coins	3	0	0
Beads	341	97	321
Fragments iron	109	97	218
Fragments copper alloy	8	0	2
Fragments pottery	292	438	1020

Table 3.1.5 Objects found inside and outside reopening pits in reopened graves.

	Reopened		Intact		Indeterminate	
	Completeness	N=	Completeness	N=	Completeness	N=
Lance heads	90%	11	93%	8	100%	3
Arrowheads	76%	14	95%	14	84%	5
Knives	81%	9	91%	20	92%	13
Belt buckles	91%	28	96%	50	93%	38
Plate buckles	78%	15	100%	2	73%	4
Belt plates/strap ends	89%	22	94%	5	100%	3
Brooches	93%	3	88%	21	89%	9
Spindle whorls	100%	10	100%	14	93%	12
Pottery vessels	75,4%	37	97,4%	46	84,5%	46

Table 3.1.6 Fragmentation and completeness of objects from reopened, intact and indeterminate graves.

Only pottery fragments were found in significantly larger numbers outside the reopening pits than inside. This anomaly probably results from the fact that the grave fills contained a lot of stray pottery fragments which had a different distribution than the intentionally deposited grave goods.

The database also contains information about the fragmentation and completeness of the objects found in graves. Unfortunately, assessments of the objects' completeness were often lacking from the cemetery documentation and had to be estimated on the basis of the descriptions in the excavators' database, which was not always possible. In table 3.1.6, the left columns show the average completeness of objects, while the right columns (N) contain the number of objects of that type for which a completeness percentage could be estimated. Many object types are excluded from this table because there is insufficient data about their completeness.

The table shows that on average, objects from intact graves were missing fewer fragments than those from reopened graves. This suggests that the diggers removed pieces of broken objects from the reopened graves. The pattern is most pronounced for pots, plate buckles and arrowheads. Brooches and spindle whorls show contradictory results, but this may not be meaningful since the number of brooches from reopened graves is very low and spindle whorls do not break easily. Perhaps the missing fragments were not removed intentionally but simply scattered in the vicinity of the grave or mixed with the backfilled soil. Reopened graves contained many more indeterminate fragments than intact graves (on average 22 versus 14 per grave). It can be very difficult to recognize the origin of a fragment, especially in the case of corroded iron fragments. For pottery however, it should be possible to trace scattered fragments back to the pot.

Addition of objects to reopened graves?

It is unclear whether objects were ever added to the graves when they were reopened. We can hypothesize that the diggers sometimes

deposited objects like the lance heads and arrowheads and decorated belt fittings in the graves during a reopening. This would explain the relatively high numbers of these types objects that were found in the reopened graves. The large numbers of all object types found inside the reopening pits also suggests the diggers may occasionally have deposited something in the reopening pit. But as discussed above, these findings could also have come about if the diggers were simply not interested in taking certain objects from the grave's inventory and therefore left them behind. Both in intact and reopened graves, lance heads and arrowheads were sometimes found in the graves' fills rather than on the bottom, so objects in the fill are not necessarily a result of deposition during reopenings. The dates of the objects and graves are also not detailed enough to allow definitive identification of later additions to the grave's inventory.

Grave constructions

As can be seen in table 3.1.7, the reopened graves were on average larger than the intact graves, indicating that grave reopenings occurred more frequently in large graves than in smaller ones. On average, the reopened grave pits were 26 cm wider and 37 cm longer than the intact ones. The coffins in the reopened graves were 15 cm wider and 31 cm longer than those in the intact graves. Significance testing was done on the differences in grave pit length. The differences between grave pit width, coffin width and coffin length were not tested, because these all correspond with the grave pit length. The differences in coffin length were overall significant ($P=0.000$, $F=15.455$). With the post-hoc Tuckey test, significant differences were found between reopened and intact graves ($P=0.000$) and reopened and indeterminate graves ($P=0.000$). The difference between intact and indeterminate graves was not significant. There were only seven graves with unusually elaborate grave constructions such chamber graves, two part coffins and tree trunk coffins. All but one of these seven graves had been reopened.

	Reopened (N= 104)	Intact (N= 125)	Indet (N=203)
Grave pit width	126 cm	100 cm	104 cm
Grave pit length	243 cm	206 cm	201 cm
Coffin width	68 cm	53 cm	60 cm
Coffin length	201 cm	170 cm	188 cm

Table 3.1.7 Average width and length of grave pits and wooden containers in reopened, intact and indeterminate graves.

As we shall see below, similar patterns are also found in other cemeteries in the research area. On some of these sites the graves from the cemeteries' last phase were relatively small and were reopened less often than those from previous phases, so the difference in size between reopened and intact graves may result from the reopening of more large early graves and fewer small late ones. However, it is unclear whether a similar explanation is valid for Broechem, since this cemetery does not seem to have a clearly defined end phase with smaller graves. The grave reopeners may therefore really have had a preference for larger graves.

3.2 Meerveldhoven

The first excavations at the cemetery site of Meerveldhoven (the Netherlands, province of Noord-Brabant, municipality of Veldhoven) took place in 1955. The excavation uncovered 25 graves and was carried out by workmen under the direction of Jaap Ypey from the State Archaeology Service (ROB). Excavation of the site continued in 1975, when State Service employees excavated 38 additional contexts. The drawings from the first excavation are somewhat schematic, but the drawings of the second campaign have an extraordinary level of detail, especially where the grave constructions and fills of the grave are concerned.

The excavation results have remained largely unpublished except for a concise report by Verwers (1978). Since that article lacks detailed depictions of most graves, the present analysis is based on the original field drawings in conjunction with Verwers' text. Unfortunately, it seems that not all original drawings were present in the data files that we retrieved from the State Service. Verwers' publication

often had additional information that was not included on the drawings, especially concerning the first 25 graves that were excavated in 1955. Unfortunately, the skeletal remains and body silhouettes from this cemetery have never been examined by an osteologist.

The cemetery was situated close to the river Dommel in the southern Netherlands, near the present city of Eindhoven. The area in which the cemetery was located has a sandy soil rich in loam that offers good conditions for the preservation and visibility of archaeological features. The traces of wooden grave constructions, post-depositional interventions and taphonomic processes were often clearly demarcated. Nevertheless, wood objects were only preserved as soil discolorations, not as physical remains. For example, in grave 15 the excavators found traces of the wooden shaft of a lance, visible as a color difference in the soil. Unfortunately, this type of soil leaches minerals from bone material, so uncalcined skeletal remains were poorly preserved. Nevertheless, basic body positions could often be reconstructed based on the skeletal silhouettes.

Inhumation graves

The excavation yielded 54 inhumation graves. It appears that the cemetery as a whole has an approximately rectangular shape and the excavation seems to have covered at least three of its boundaries. Only the east boundary was not fully excavated (see figure 3.2.5). It is likely that only a small number of graves remain *in situ* on the site. Unfortunately, some graves were damaged by sand extraction previous to the excavation. The cemetery probably came into use around the end of the sixth century. Burials on the site may have continued into the first half of the eighth century, but most graves date to the seventh century.

The graves were all oriented west-east and most were laid out in irregular rows. As far as could be established, all the dead were buried in supine position with extended legs. Most deceased were buried in wooden containers of variable size. The graves in Meerveldhoven were relatively large compared to other graves from this period in the region. The grave constructions were also quite elaborate and since they were documented with a great level of detail, they would make a wonderful subject of study which we cannot do justice here. There were 24 chamber graves, 14 partitioned coffins, nine simple coffins and seven cases where the type of grave construction could not be determined.

Nearly all graves contained at least a few grave goods and many graves were quite richly furnished compared to the general furnishings of graves from this region. There were more graves with typical women's grave goods than with typical men's grave goods. Of the 54 inhumation graves, 20 (37%) contained objects that are usually associated with women and 14 (26%) contained objects usually associated with men. The remaining 20 graves had only gender neutral grave goods, or no grave goods at all. Since no osteological data are available for this cemetery, the graves can only be assigned to a specific gender on the basis of the grave goods. We cannot check to what extent gender specific grave good sets actually lay in burials with individuals of the expected sex.

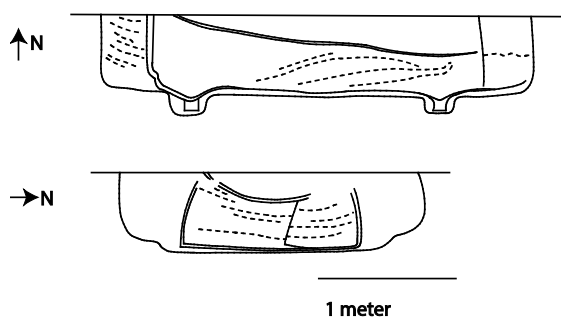


Figure 3.2.1 Length- and width-wise sections of intact grave 49 with sedimentation layers inside the chamber and coffin.

Taphonomic processes

The detailed field drawings that were made during the excavation in 1975 offer valuable material for the study of taphonomic processes that took place in the graves after burial. These data are relevant here, because they allow us to compare the results of natural decomposition with the disturbances caused by intentional anthropogenic interventions. The drawings also demonstrate the importance of combining excavation levels and sections for understanding stratigraphic relations within the grave. The examples below illustrate the taphonomic processes that can be observed in the graves of the Meerveldhoven cemetery and other cemeteries included in this study.

Figure 3.2.1 shows width- and lengthwise sections of an intact grave. It consisted of a grave pit and a bipartite wooden coffin. The coffin lid has sagged somewhat under the weight of the soil above it, but appears to have remained largely intact and did not collapse down into the grave. It is supported from below by layers of sediment that have probably crept into the coffin through crevices between the boards before the coffin's construction became unstable. A similar process can be observed in figure 3.2.2. This level drawing of grave 46 shows layers of sediment that filled up the wooden chamber, coffin and box through crevices in the corners.

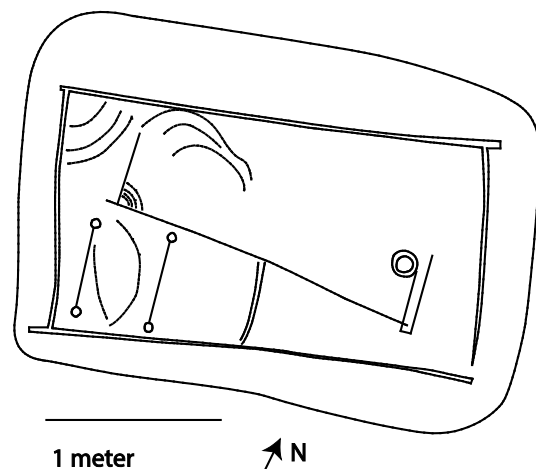


Figure 3.2.2 Grave 46, level 4, showing layers of sediment that entered the wooden containers through crevices in the corners.

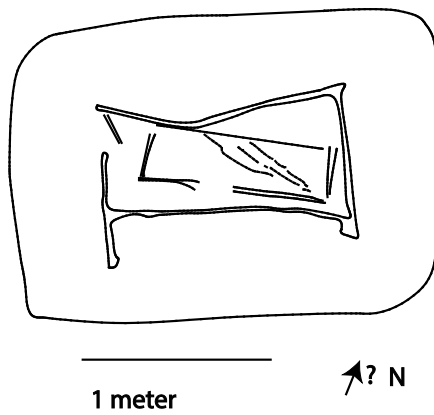


Figure 3.2.3 Grave 19. The walls of the wooden chamber were pressed inwards by the pressure of the surrounding soil.

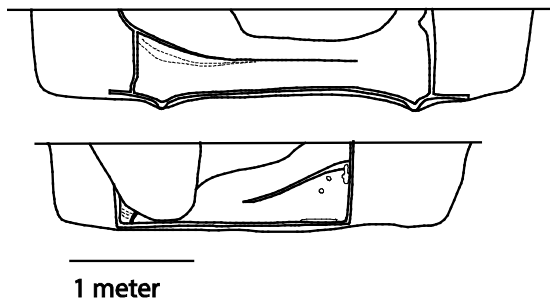


Figure 3.2.4 Length- and width-wise sections of reopened grave 45.

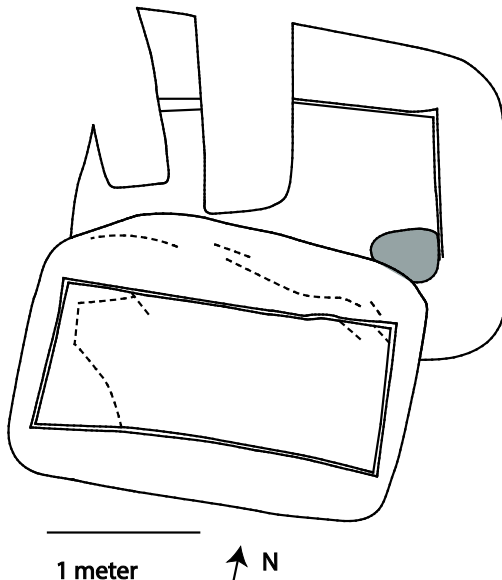


Figure 3.2.5 Grave 43 was cut by grave 42 and contained a concentration of cremated bone.

In some cases, the walls of the wooden container were bent inwards under the pressure of the surrounding soil. This process can be observed in grave 19 shown in figure 3.2.3.

These are only two examples of the results of natural taphonomic processes that take place after burial, but observations on other intact graves in this cemetery and others confirm what we see here. Coffin lids may show some amount of slumping and the sides of coffins are sometimes pressed inwards a little by the pressure of the surrounding soil, but in general, decomposing coffins retained their shape rather well, probably because they were already partially filled with soil before they became structurally unstable.

For comparison, figure 3.2.4 shows the section drawings of the reopened grave 45. The lengthwise section is quite similar to that of intact graves 49 and 46. However, the slumped down soil on top of the lid seems to have two separate fills and near the foot end, a section of the coffin's lid is missing. In the width-wise section we see the cause of this partial lid, as an intervention pit was dug into the grave. On the side opposite the intervention pit, a few objects including a horse's bit were found high in the coffin's fill. It seems unlikely that these objects were displaced by the intervention. Perhaps they had been deposited on top of the coffin's lid and sunk down into the fill as the wood decayed. These – and other – examples confirm the hypothesis that distinctly colored fills are an important indicator for reopened graves, especially if they persist down to the grave's bottom. Natural decomposition slumps are usually much more evenly colored and rarely reach down to the grave's bottom.

Cremation graves

The excavation yielded nine possible cremation graves. Since the bones were not examined by an osteologist, it is not certain that they were human cremations. This nevertheless seems likely given the finds of similar deposits of burnt human bone in other Merovingian cemeteries from the region. Seven cremations were buried in independent shal-

low round pits, one was contained in a small wooden box that was deposited in a similar round pit and one was deposited in inhumation grave 43.

It is unclear whether the concentration of cremated bone from inhumation grave 43 was placed in the coffin during the funeral or whether it was deposited at a later time, possibly when the grave was cut by grave 42 or during a separate intervention (see figure

3.2.5). The cremations were not dated, but it seems likely that they date to approximately the same period as the other graves in the cemetery. They were placed between the younger inhumation graves. Since the pits of the cremation graves were rather shallow, it is possible that additional cremation graves were destroyed by later ploughing and the sand extraction that took place on the site.

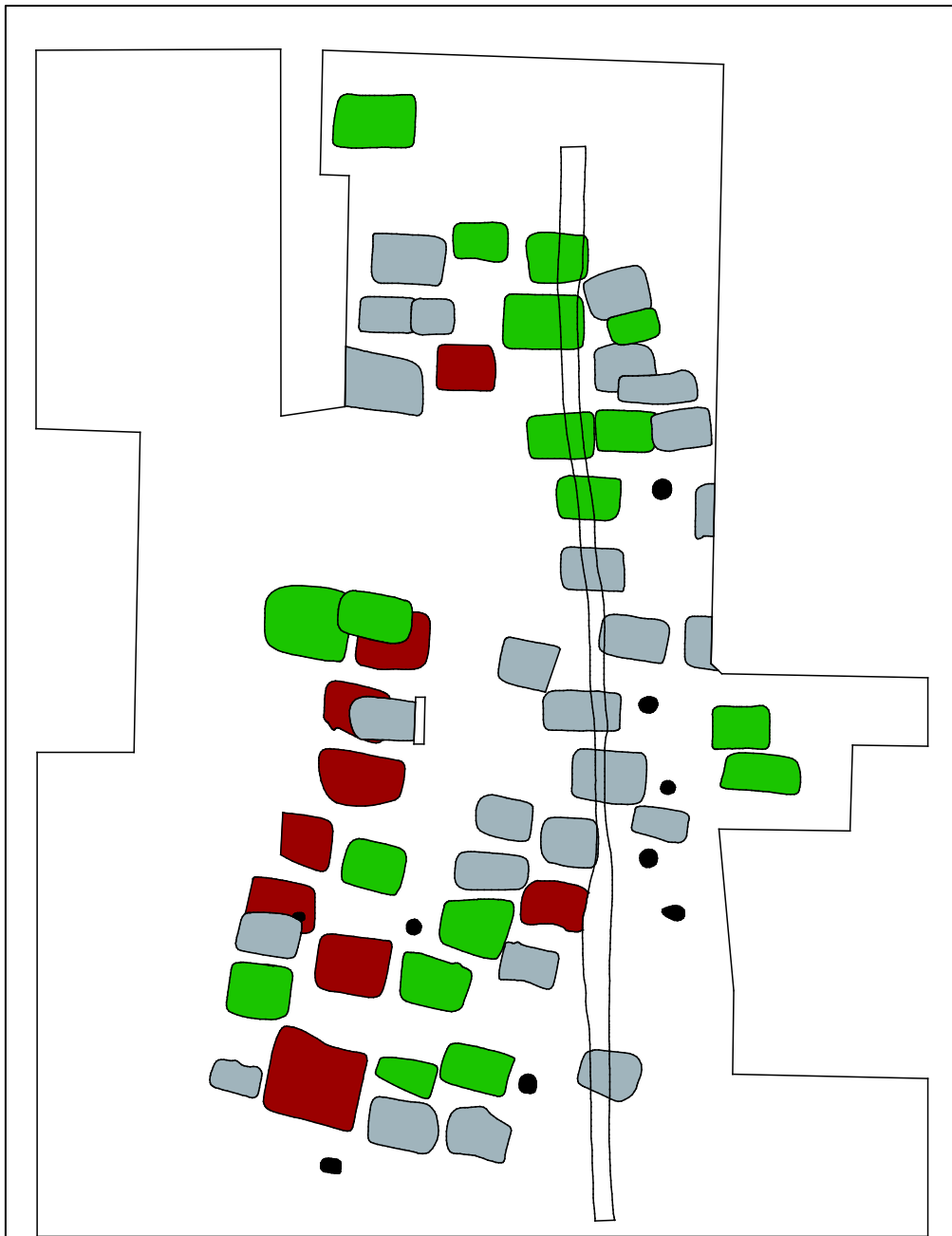


Figure 3.2.6 Map of the Meerveldhoven cemetery. Red=reopened inhumation, green=intact inhumation, light gray=indeterminate inhumation, dark grey=cremation.

Post-depositional interventions

Of the 54 inhumation graves 9 (17%) were reopened. A total of 18 graves (33%) were most likely left intact after the funeral. For the remaining 27 graves (50%), there is insufficient evidence to determine whether they were subjected to an intervention or remained intact. Given the large number of graves with an indeterminate status, the percentage of reopened graves is probably higher than 15%. If the distribution of the indeterminate group is similar to that of the other graves, we can postulate a total of 18 reopened graves (33%) and 36 intact graves (67%).

Of the 9 reopened graves, two contained typical men's grave goods, and four yielded typical women's grave goods. Figure 3.2.6 displays the spatial distribution of reopened graves. The reopenings seem to concentrate in the south-western section of the cemetery, but given the large number of indeterminate cases, it is difficult to be certain. There is no evidence for post-depositional interventions in the cremation graves. Perhaps these graves were not reopened like the inhumations were. However, traces of potential post-depositional interventions in these graves are more difficult to recognize, since the cremation burials were more shallow and most had a simpler construction than the inhumations.

Types of post-depositional interventions

There were multiple types of post-depositional interventions in the Meerveldhoven cemetery, mostly reopenings and intercuts. As far as could be established there were no additional burials in the inhumation graves. The only possible exception was grave 43, which – as discussed above – contained a concentration of possible human cremated bone in addition to the non-cremated skeletal remains of the main burial.

In total, 15% (n=8) of the inhumation burials were cut by a later grave. Three of these graves had also been reopened and two were otherwise intact. The status of the remaining three could not be determined. Interestingly, the

new grave pits always seem to cut cleanly through the older graves' coffins, indicating that the wood had decayed when the intercuts took place. Most intercuts were non-invasive, affecting only the peripheral sides of the grave pits and sometimes an edge of the coffin of the cut grave. Only graves 50 and 51 were affected by invasive intercuts where the new grave cut the inner coffin. In both cases, the old graves may simultaneously have been reopened. Similarly, in grave 43 (figure 3.2.5) the diggers may have used the grave pits of intercutting graves as starting points for reopening pits. However, the reopenings and intercuts could also have been independent events.

Reopenings

After subtracting the two graves that may have been reopened by a later intercutting grave, we are left with seven graves that revealed straightforward reopening pits. In all reopened graves except 38, the excavators observed traces of a reopening pit. However, it was often unclear whether these features accurately represent the extent of the interventions. All the regular reopening pits went down to the graves' bottoms. In grave 50, which may have been reopened during an intercut, the depth of the reopening pit is unclear. Most graves were reopened with a single pit, except perhaps for grave 45 which yielded two possible reopening pits (figure 3.2.7). However, the excavators interpreted only the upper pit as a disturbance or reopening pit, and thought that the lower pit was a slump in the grave's fill. Unfortunately the excavators dubbed all reopening pits 'disturbances' and did not document their fills as carefully as they documented other soil features. Therefore, it is somewhat unclear what happened after graves were reopened. The drawings seem to indicate that the reopening pits' fills were quite homogeneous. This would mean that the pits were backfilled soon after the interventions.

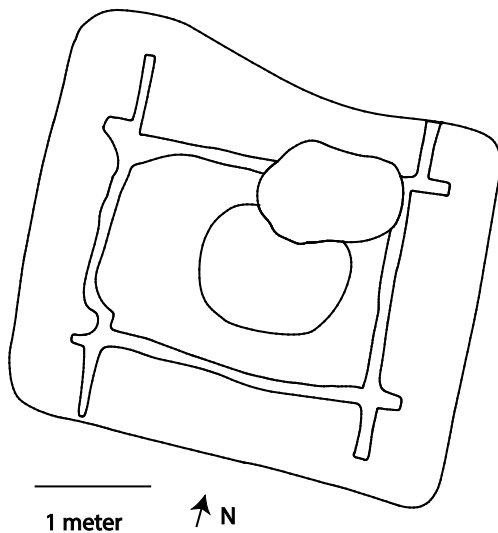


Figure 3.2.7 Grave 45, level 1 with two possible reopening pits.

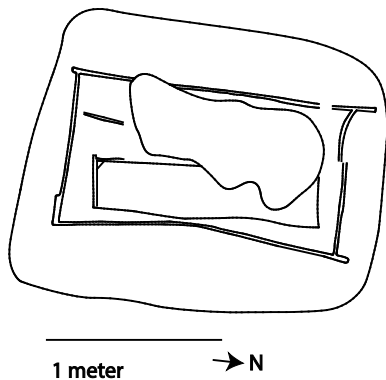


Figure 3.2.8 Grave 44, where the reopening pit focused on the area in the chamber next to the coffin.

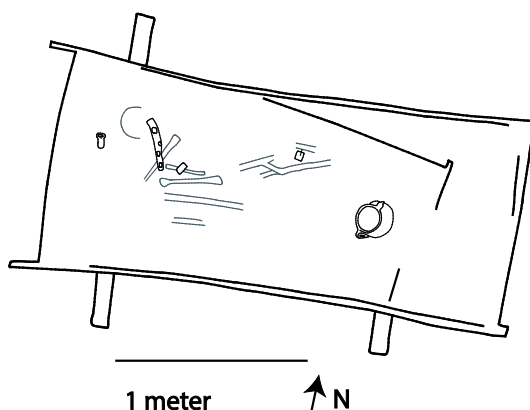


Figure 3.2.9 Reopened grave 29, bottom level. The excavators documented traces of a leather of belt strap decorated with metal plates, which may still have been intact when the grave was reopened.

All reopening pits focused on the inside of the wooden container, usually on the area where the deceased lay. The reopening did often reach beyond the confines of the coffin, going either into the head end, foot end and/or sides of the grave pit. In only one case had the entire grave been reopened from the head end to the foot end and sides. The reopening pit in chamber grave 44 (figure 3.2.8) atypically concentrated on the half of the wooden chamber that did not contain the coffin with the deceased's body. The thorax/pelvis region was reopened most often. Fewer pits went into the area of the head/neck and the legs/feet. The dataset is too small to analyze differences in reopening technique between women's and men's graves, but interestingly the one grave where only the leg region had been reopened held grave goods that are usually associated with women. This does not fit with the hypothesis that women's graves were usually opened in the head and chest region.

Reopening chronology

Five out of nine graves were reopened after the container had decomposed. Only the container of grave 29 was probably still intact at the time of the reopening. This grave even yielded traces of an intact leather belt strap fitted with plates that may have been moved during the intervention (figure 3.2.8), indicating that at maximum only a few years could have passed between the burial and reopening. Unfortunately none of these graves could be dated precisely, so we cannot assign absolute dates to the reopenings. For the remaining three graves, the status of the wooden container at the time of the reopening could not be determined. These graves were dated 575-625, 600-650 and 650-700, covering the cemetery's entire use period. The fact that most reopenings took place after the wooden containers had decomposed, suggest that the reopenings may have taken place relatively late in the cemetery's history, possibly when the last generation buried its dead here, or even when the cemetery was no longer in active use.

Grave goods

The graves in Meerveldhoven were relatively well furnished with grave goods. This is true for both the intact and reopened graves. Reopened grave 29 is an interesting example. Despite the disorderly and atypical distribution of the bones and artefacts in this grave (figure 3.2.9), Verwers (1978: 284) does not mention a possible disturbance in his report. Perhaps an intentional post-depositional intervention was not considered as a possibility because the grave still contained so many objects, including a belt fitted with an iron plate buckle and copper alloy plates, 78 beads and a biconical pottery jug.

Given the relatively small number of reopened graves in this cemetery, it is difficult to make a statistical comparison between the grave goods found in reopened and intact graves. Nonetheless, a few interesting observations can be made. Table 3.2.1 shows the number of objects found in graves with reopened, intact and indeterminate status. For each category of graves, the total number of objects of a particular type is displayed in the left column. The right column contains the average number of objects per grave, calculated by dividing the total number of objects by the number of graves in that category.

Some object types were found more often in reopened graves and others in intact ones. The numbers of objects found in the graves with an indeterminate status are low, reflecting the fact that the reopening status of graves with few finds is often difficult to determine. A few object categories, including swords, seaxes, axes and knives were entirely absent in the reopened graves. Shields, lance heads and arrowheads, simple buckles, plate buckles and pottery vessels were found slightly more often in intact than reopened graves. A few singular objects such as a key, bracelet and coin were found exclusively in reopened graves, but this may well be a coincidence. The 19 pieces of horse gear also originated from a single reopened burial, grave 45, and were probably part

of one set of horsegear (figure 3.2.6). Surprisingly, traces of wooden bowls were observed more often in reopened graves than in intact ones. The averages of belt plates and beads were also higher in reopened than in intact graves. This is partially due to the 10 belt plates and 78 beads from reopened grave 29. These findings suggest that when the diggers reopened a grave, they may have targeted weaponry such as seaxes, knives, and possibly belt fittings and pottery vessels. The removal of large weapons is also suggested by concentrations of oxidized iron as observed in grave 45. These may represent the former locations of iron objects that were removed during an intervention. At the bottom of the rusty features the excavators found a few copper alloy mounts. The diggers may have been less interested in belt plates, wooden bowls, beads and perhaps horse gear, although the set of horse gear in grave 45 was probably incomplete, so parts of it may have been removed. These findings deviate from the general patterns of object removal found in this study. It is important to keep in mind that the Meerveldhoven dataset is too small to provide statistically significant results, so any variations may be due to chance rather than patterns in past behavior. In any case, the diggers did not systematically remove all the grave goods.

Table 3.2.2 shows that the reopened graves still contained relatively large numbers of metal objects. Fragments were excluded from the analysis. The numbers for iron and copper alloy are somewhat skewed by the 19 pieces of horse gear from reopened grave 45 and the 10 copper alloy belt plates from grave 29. Only a few precious metal objects were found: three of silver, one of gold, which nearly all came from reopened graves. The combined iron/copper alloy objects are mostly decorated belt fittings, which predominated in intact graves. In accordance with the high numbers of beads in intact graves, amber objects were found in much larger numbers in graves that were not reopened.

Objects	Reopened (9 graves)		Intact (18 graves)		Unknown (27 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Swords	0	0,00	1	0,06	0	0,00
Seaxes	0	0,00	6	0,33	2	0,07
Axes	0	0,00	1	0,06	0	0,00
Shields	2	0,22	7	0,39	3	0,11
Lance heads	2	0,23	7	0,39	2	0,07
Arrowheads	3	0,33	7	0,39	0	0,00
Knives	0	0,00	9	0,50	7	0,26
Horse gear	19	2,11	0	0,00	0	0,00
Keys	1	0,11	0	0,00	0	0,00
Belt buckles	2	0,22	5	0,28	2	0,07
Plate buckles	4	0,44	11	0,61	7	0,26
Belt plates	17	1,89	19	1,06	35	1,30
Bracelets	1	0,11	0	0,00	0	0,00
Rings, miscellaneous	3	0,33	0	0,00	2	0,07
Glass vessels	1	0,11	1	0,06	1	0,04
Pottery vessels	3	0,33	10	0,56	4	0,15
Bowls, wood	5	0,56	5	0,28	2	0,07
Coins	1	0,11	0	0,00	0	0,00
Finger rings	1	0,11	2	0,11	2	0,07
Beads	148	16,44	260	14,44	218	8,07

Table 3.2.1 Grave goods found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per type and the average per grave.

Objects	Reopened (9 graves)		Intact (18 graves)		Unknown (27 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Iron	35	3,89	39	2,17	26	0,96
Copper alloy	21	2,33	12	0,67	36	1,33
Iron/copper alloy	2	0,22	10	0,56	1	0,04
Silver	2	0,22	0	0,00	1	0,04
Gold	1	0,11	0	0,00	0	0,00
Pottery	3	0,33	10	0,56	5	0,19
Glass (vessels)	1	0,11	1	0,06	1	0,04
Amber	4	0,44	19	1,06	5	0,19

Table 3.2.2 Grave good materials found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per material and average per grave.

Object type	In pit	Outside pit	Unknown
Shields	2	0	0
Lance heads	1	1	0
Arrowheads	0	0	3
Keys	0	0	1
Belt buckles	0	0	2
Plate buckles	4	0	0
Belt plates/strap ends	13	0	4
Fingerring	0	1	0
Ring miscellaneous	1	0	2
Pots	0	2	1
Glass vessels	1	0	0
Coins	1	0	0
Beads	80	27	41
Bowls, wood	2	3	0
Fragments iron	32	0	18
Fragments pottery	2	0	1

Table 3.2.3 Objects found inside and outside reopening pits in reopened graves

As can be seen in table 3.2.3 the majority of objects that were left behind in the reopened graves were found inside the reopening pits. This was to be expected since most of the reopening pits focused on areas of the grave where the grave goods lay. If an object lay inside the reach of the reopening pit, the diggers could have seen it and therefore left it behind on purpose, especially if the object was large. Since many graves in Meerveldhoven were reopened after the container had collapsed, the objects may have been more difficult to spot, which makes it more likely that they were overlooked and left behind accidentally. Grave 29 is an obvious example of the contrary, because it yielded many grave goods from the reopened area, even though the intervention seems to have taken place while the container was still intact.

Addition of objects to reopened graves?

It is unclear whether objects were ever added to the graves when they were reopened. We can hypothesize that the diggers sometimes deposited objects like belt plates and wooden

bowls in the graves during a reopening. This would explain the relatively high numbers of these types of objects that were found in the reopened graves. The relatively large numbers of all object types found inside the reopening pits also suggests the diggers may occasionally have deposited something in the reopening pit. These findings could however also have come about if the diggers were simply not interested in taking certain objects from the graves' inventories and therefore left them behind. Unfortunately, the dates of the objects and graves are not detailed enough to allow the identification of later additions to the grave's inventory.

Grave constructions

Of the reopened graves, six had a chamber construction, one had a partitioned coffin and two had a wooden container of which the type could not be determined. As can be seen in table 3.2.4, the chamber graves were slightly overrepresented among the reopened graves, while the intact graves more often had partitioned and simple coffins.

	Reopened (n=9)		Intact (n=18)		Unknown (n=27)	
	number	percentage	number	percentage	number	percentage
Simple coffin	0	0%	2	11%	7	25%
Partitioned coffin	1	11%	6	33%	0	0%
Chamber	6	67%	10	56%	0	0%
Unknown	1	11%	0	0%	0	0%

Table 3.2.4 Grave constructions in reopened, intact and indeterminate graves.

	Reopened (n=9)	Intact (n=18)	Indeterminate (n=27)
Pit depth	37 cm	38 cm	38 cm
Pit width	217 cm	200 cm	173 cm
Pit length	294 cm	273 cm	268 cm
Coffin width	218 cm	207 cm	206 cm
Coffin length	133 cm	107 cm	104 cm

Table 3.2.5 Average width and length of grave pits and wooden containers in reopened, intact and indeterminate graves.

On average, the reopened graves were slightly wider and longer than the graves that had remained intact (table 3.2.5). On average, the reopened grave pits were 17 cm wider and 21 cm longer than the intact ones. The coffins in the reopened graves were 11 cm wider and 26 cm longer than those in the intact graves. Due to the small numbers of graves, these differences were not statistically significant. The depths of reopened and intact graves were very similar. It is unclear whether the difference in size between the reopened and intact graves resulted from conscious choices on the part of the diggers. Since Merovingian graves tend to become smaller toward the end of the period, it is possible that the difference in size between reopened and intact graves resulted from fewer small late graves being reopened than large early graves.

3.3 Dommelen

The site Dommelen Kerkakkers (the Netherlands, province of Noord-Brabant, municipality of Valkenswaard) was excavated between 1980 and 1987, by a team from the University of Amsterdam, under the direction of Frans Theuws. The excavations uncovered an early medieval settlement and several clusters of graves that were scattered over the settlement area. At the moment a publication of the excavation results is in preparation (Theuws forth-

coming).

The Dommelen grave group was situated on a relatively narrow stretch of land between the rivers Dommel and Keersop, near the modern towns of Valkenswaard and Eindhoven. The site was located in an area with a sandy soil. The soil conditions were quite favorable to the preservation and visibility of archaeological features. The traces of grave constructions, post-depositional interventions and taphonomic processes were often clearly demarcated. Nevertheless, wooden objects were only preserved as soil discolorations, not as physical remains. Unfortunately, this type of soil quickly leaches minerals from bone material, so bone remains were only preserved as skeletal silhouettes.

Graves

The excavation yielded 24 inhumation graves and no cremation graves. The excavators think no graves are left *in situ*. All datable graves date between 670 and 750, but there are many graves with few grave goods on the site, which may date later than this. The graves were distributed over the settlement area and were contemporaneous with the settlement. All graves were oriented approximately west-east. The graves were divided into a northern and a southern cluster and three isolated graves (8, 9 and 24) which are not depicted here. The northern cluster consisted of 14 graves with no

additional burials (figure 3.3.1). The southern cluster consisted of seven graves that contained nine or ten burials (figure 3.3.2). The layout of the two grave clusters differed significantly. The graves in the southern cluster were relatively large and were spaced at a distance from one another. In the northern cluster, the graves were much smaller and most of them were packed together with no open spaces between them. The cluster consists of a large group of eight packed graves, a smaller group of three packed graves and three separate graves. This mostly tightly packed layout of relatively small graves seems to be typical of

the last phase of graves in some cemeteries from the region, including Bergeijk and to a lesser extent Posterholt that are discussed below (Theuws & van Haperen 2012: 43; De Haas & Theuws 2013: 63).

The documented skeletal silhouettes were extremely vague, but as far as could be established, all the dead were buried in supine position with extended legs. Nearly all deceased were buried in wooden containers. There were 18 graves with simple wooden coffins, three with a chamber, one partitioned coffin, one trench grave and one grave where the construction could not be determined.

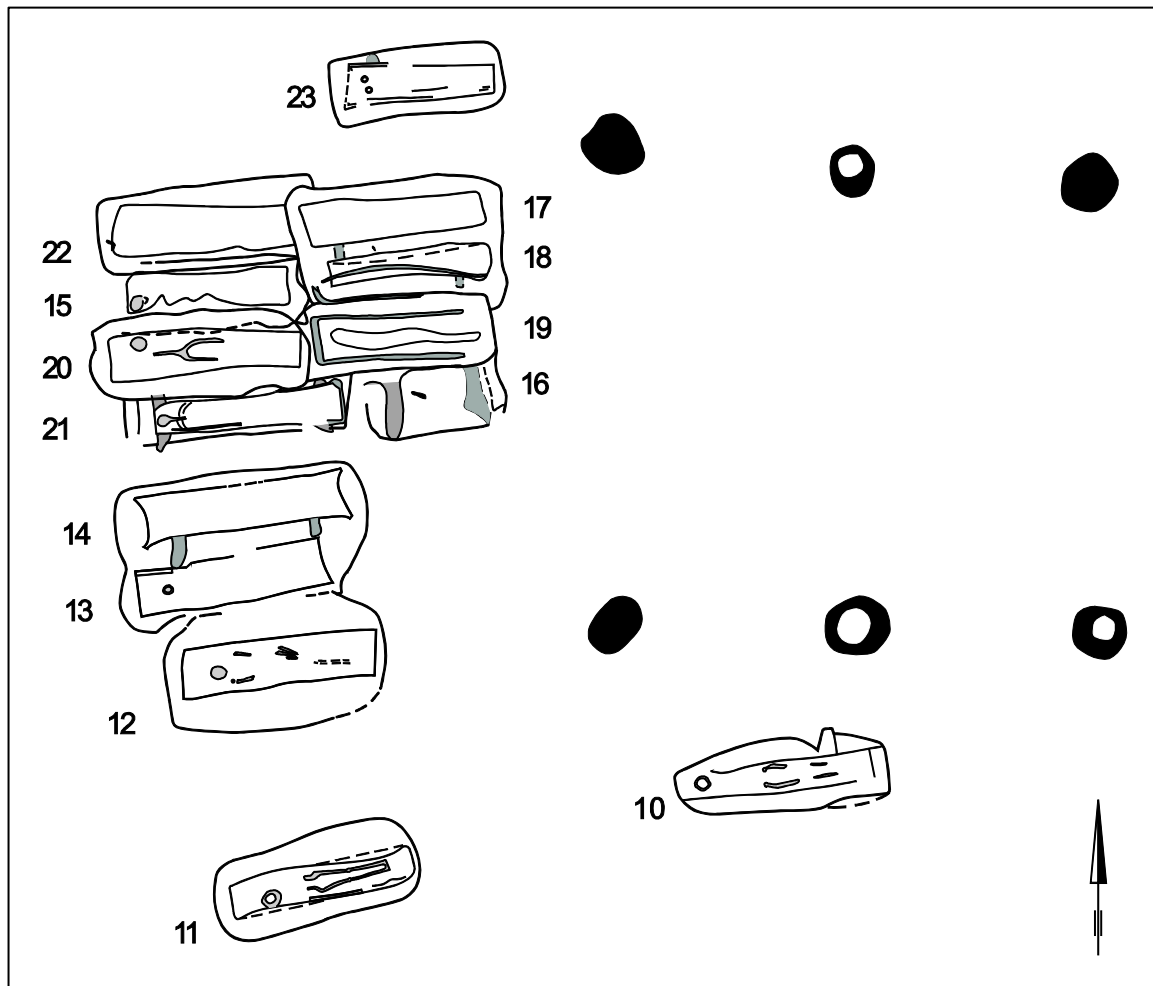


Figure 3.3.1 Map of the northern grave group showing graves and post holes. Drawing by Frans Theuws.

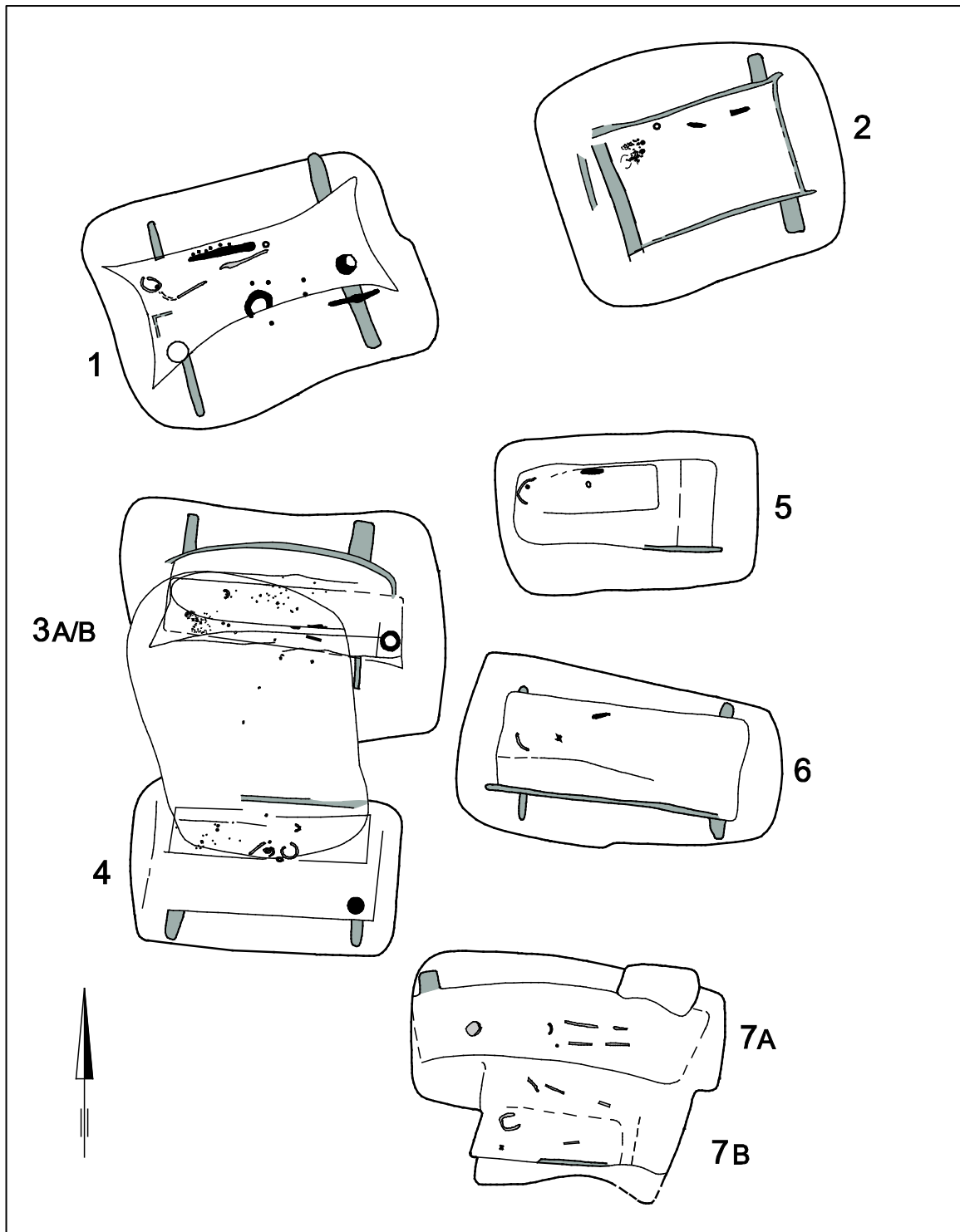


Figure 3.3.2 The southern grave cluster, including grave 3 with burials A and B, grave 4 and a reopening pit. Drawing by Frans Theuvs.

A few graves were furnished with many grave goods, while others - especially those in the northern cluster - had no grave goods at all. This lack of grave goods in the northern cluster falls in line with the hypothesis that these graves are part of the last phase of Merovingian graves in the region, when the grave good

deposition custom was in decline. Unfortunately, the lack of grave goods in these burials means that they cannot be dated precisely. No osteological data are available, so the graves can only be assigned to genders on the basis of the grave goods. Four graves contained objects that are typically associated with women and

only one yielded objects typically associated with men. The remaining 19 graves had only gender neutral grave goods, or no grave goods at all.

Post-depositional interventions

Various types of post-depositional interventions were observed in the Dommelen graves. Relatively few graves had been reopened, but quite a few contained additional burials. Intercuts between graves were also common. A few graves were subjected to multiple interventions types. The relations between the various interventions are sometimes quite complex.

Additional burials

Graves with multiple burials come about in quite different ways. A true double grave requires the remains of two people who died at approximately the same time. Especially in winter it may have been possible to keep a body above ground for a few weeks before decomposition set in. No such time constraints apply to graves with a later additional burial, since the grave can be reopened at any time to deposit a second individual. Between four and six graves contained two burials. In graves 9/24, the first and second body seem to have been buried simultaneously. For graves 13/14 and 17/18 it is unclear whether they were double graves or intercutting single graves. In grave 3, the second burial was added to the grave at a later time. For grave 7, it is unclear whether burials A and B were deposited simultaneously or consecutively. The grave also contained additional bone (7C) that was found between the coffins of 7A and 7B (see figure 3.3.2). Perhaps this bone belonged to burial 7B, but it is also possible that it belonged to a third individual. Based on the field drawings it seems most likely that B and possibly C were added to grave 7A at a later time. Compared to other cemeteries in the region, Dommelen has a high number of graves containing more than one individual. Especially the true double graves where two individuals were buried simultaneously in a single grave pit are relatively rare. Most double graves from

the region contain adult individuals, but in Dommelen one double grave yielded an adult and a child, and one contained two children. Grave 7 which possibly received three consecutive burials also held the remains of at least one adult and one child. Grave 3, with two consecutive burials, contained the remains of two adults.

Intercuts

At least four and possibly six graves were cut by a later grave. As mentioned above, graves 13/14 and 17/18 could either be intercutting graves or double burials. All intercuts were non-invasive, affecting only the peripheral areas of the cut grave pits. The intercuts were all found in the northern grave cluster, where the burials were packed tightly together. None of the cut graves had been reopened.

Reopenings

Of the 24 excavated inhumation graves in the grave group only 2 (8%) showed traces of a contemporary reopening. Nine graves (38%) had most likely been left intact. For the remaining 13 graves (54%), there was insufficient evidence to determine whether they had been subjected to an intervention or had remained intact. If the distribution of the indeterminate group is similar to that of the other graves, we can postulate 4 reopened graves (18%) and 20 intact graves (82%). This is a very low reopening rate compared to the other cemeteries in the region. As observed in other cemeteries like Bergeijk and Posterholt, graves from the last phase of the Merovingian period were reopened much less frequently than earlier burials, so the low reopening rate in Dommelen may very well be due to the relatively large number of late graves on the site. This hypothesis is confirmed by the fact that the reopened graves (3 and 4) both lay in the southern cluster of graves, which probably belongs to an earlier phase.

Graves 3 and 4 form an interesting complex. They were seemingly reopened with a single pit and an additional burial was added to grave 3 (see figure 3.3.2). All three burials are

accompanied by grave goods that are associated with women. The order of events by which this complex was created is difficult to reconstruct. The coffin containing individual 3B was deposited as a consecutive burial on top of individual 3A. At that time, the larger wooden container in which 3A had been buried was probably still at least partially intact. Since burial 3A appears disturbed and 3B does not, it seems likely that 3A was reopened before or during the deposition of 3B. There are no separate traces of a grave pit for 3B, so the coffin was probably deposited in the reopening pit. This hypothesis is confirmed by the fact that a fragment of an iron belt chain that probably originated from burial 3A was found underneath a pot that was probably part of burial 3B. The other fragments of this belt chain had been scattered throughout the grave and the reopening pit. The reopening pit into which burial 3B had been deposited extended to grave 4, which also had an at least partially intact wooden container at the time of the reopening. We can conclude that the reopenings of graves 3A and 4, and the deposition of burial 3B were probably part of a single intervention, for which one large pit was dug. In both graves 3A and 4 the reopening pit covered the entire contents of the wooden container. It did not extend very far into the peripheral areas of the graves, except for the sides of the grave pits in the area in between the containers of both graves, which had to be dug out in order to reopen both graves with a single pit. The pits went down to the graves' bottoms where the skeleton and grave goods lay. The graves were reopened while the wooden containers were still at least partially intact. Grave 4 dates to 675-700 and grave 3 dates to 700-725. If they were indeed reopened in one event, the reopening took place between 700 and 735.

Grave goods

The reopened graves contained many grave goods. Given the grave group's small size and the low number of reopened graves, a statistical comparison between the objects found in reopened and intact graves would not produce

meaningful results. This paragraph will therefore be limited to a short discussion of the objects found in the reopened graves. Grave 3A contained 24 glass beads, one complete and one half silver earring, a silver sceatta coin which was deposited in the deceased's mouth, a silver knife hilt knob, an iron belt chain, four iron keys and an iron knife. All of these items were found within the reach of the reopening pit, so the diggers could potentially have noticed them. The grave good set in grave 4 consisted of 14 glass beads, a pottery vessel, two gold foil disc brooches a silver finger ring and a silver knife hilt knob. Apart from the pot, all these were found within the reach of the reopening pit. The find of a knife hilt knob without a knife suggests that the knife may have been broken and partially removed during the reopening. The relatively low number of beads suggests that beads may also have been removed from this grave. Interestingly, the intact additional burial 3B was furnished with a set of grave goods that was quite similar to those in 3A and 4. This grave contained two silver earrings, 60 glass beads, a knife, a pottery vessel, a silver fastening ring, two gold foil disc brooches, one silver equal armed brooch and a sceatta of the same type as that found in 3A which was also deposited in the mouth. If the grave good set in burial 3A was originally truly similar to that in grave 3B, the diggers may have removed a pot, a number of beads, and brooches from 3A during the reopening. It is even possible that some items from graves 3A and 4 were reused in burial 3B. Since the wooden containers of graves 3A and 4 were probably still intact at the time of the reopening and the deposition of burial 3B, the grave goods date so close together that it is not possible to distinguish between reused and newly deposited items. However, it is equally possible that burials 3A and 4 were left largely intact and few or no items were removed. There are no indications that any objects were added to the graves during the reopenings, other than those associated with burial 3B.

Grave constructions

The reopened graves both had a chamber construction. Only one other grave on the site had a wooden container of this type. Most other graves were furnished with simple wooden containers of varying sizes. The reopened graves were not exceptionally large or small compared to the other graves in the southern group, but as mentioned above, the graves in this group were on average much larger than the graves in the northern group, which probably dated to a later phase.

3.4 Bergeijk

The cemetery of Bergeijk-Fazantlaan (the Netherlands, province of Noord-Brabant, municipality of Bergeijk) was discovered when a house was built on the site in 1957. A number of graves was partially destroyed before the site was recognized as an early medieval cemetery. The State Archaeology Service (ROB) assumed responsibility and excavated approximately 75 graves. In 1959, employees from the State Service returned to the site and excavated an additional 55 potential graves along the paths that led to the house (see figure 3.4.1). The terrain between these paths and the area north of the house remained unexcavated, so a considerable number of graves are probably still present *in situ*.

For many years, the excavation results were largely unpublished. Reports about some of the finds were published by Ypey (1957/1958; 1977). A brief overview of the excavated material appeared in Verwers (1987). Unfortunately, part of the finds were lost after the excavation and could not be retrieved. The descriptions of these missing finds in the final publication and in this study are therefore based on the limited information from the excavation find records. The field documentation and finds were eventually taken up by Frans Theuws and his students at the University of Amsterdam. These efforts led to the creation of the NWO funded ANASTASIS Merovingian cemetery backlog project, which aimed to analyze and publish the data from a number of cemeteries. The final publication of the Ber-

geijk cemetery was a combined effort of Frans Theuws and myself (Theuws & Van Haperen 2012). This publication also contains an analysis of the reopened graves, which served as a pilot study for this thesis.

Bergeijk is situated in the Kempen region, near the cemetery of Dommelen, which is also discussed in this thesis. The early medieval landscape around the cemetery was characterized by brook valleys, stretches of unfertile lands and smaller fertile zones. The area in which the cemetery was located has a sandy soil. The soil conditions are quite favorable to the preservation and visibility of archaeological features, even though wood was only preserved as soil discolorations. The traces of grave constructions, post-depositional interventions and taphonomic processes were often clearly demarcated. Unfortunately, this type of sandy soil quickly leaches minerals from bones, so uncalcined skeletal remains were poorly preserved. At the time of the excavations, most of the site was covered by a young pine tree forest. The naturally rather poor preservative conditions were probably exacerbated by the influence of the tree roots.

Inhumation graves

The excavations uncovered 117 inhumation graves. As mentioned above, more graves remain *in situ*. The excavated graves date between the later sixth or early seventh century and the first half of the eighth century. The graves were all oriented approximately west-east and most were laid out in relatively well-ordered rows. The cemetery's spatial layout seems to have developed from north to south. Nearly all deceased were buried in wooden containers of variable size. There were three possible trench graves and three graves with tree trunk coffins. Most deceased were buried with at least a few grave goods, but a few lacked preserved grave goods of all types. These may nevertheless have been furnished with items made from perishable organic materials like cloth and wood. The cemetery's southernmost section was occupied by a distinct group of the youngest graves which were relatively small and had few or no grave goods.

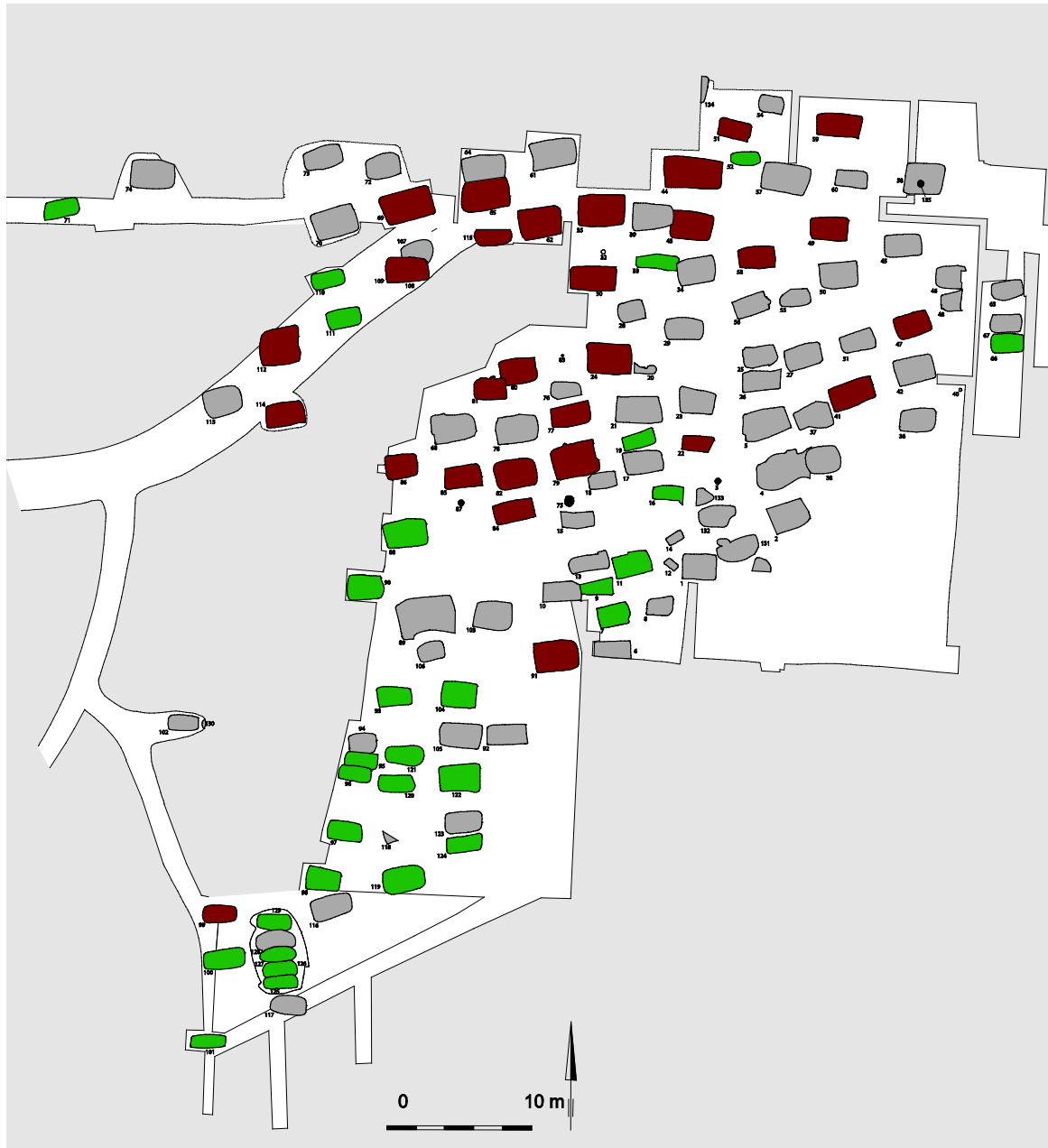


Figure 3.4.1 Map of the cemetery, showing the excavated sections and reconstructed possible graves in the unexcavated areas. Red=reopened inhumation, green=intact inhumation, light gray=indeterminate inhumation, dark gray=cremation. After Theuws & Van Haperen (2012: 49).

There were more graves with female gendered grave goods than with male gendered grave goods. Of 117 inhumation graves, 28 (24%) contained objects that are usually associated with women and only 17 (15%) yielded objects usually associated with men. Two graves (56 and 82) had a mixed set of grave goods which included both typical men's and women's grave goods. The remaining 70 graves (60%) had only gender neutral grave goods, or no grave goods at all. Since almost no skeletal remains were preserved in these graves, they could only be assigned to a specific gender on the basis of the grave goods. We cannot check to what extent gender specific grave good sets actually lay in burials with individuals of the expected sex. There may have been fewer men's graves in the cemetery or men may have been buried with gender specific artefacts less often than women.

	Male	Female	Neutral	Total
Reopened	59% (n=10)	39% (n=11)	10% (n=7)	24% (n=28)
Intact	18% (n=3)	36% (n=10)	25% (n=18)	27% (n=31)
Indet.	24% (n=4)	25% (n=7)	65% (n=48)	49% (n=58)
Total	100% (n=17)	100% (n=28)	100% (n=72)	100% (n=117)

Table 3.4.1 Percentages of graves with typical men's, women's and gender neutral grave goods that were reopened or remained intact.

Cremation graves

Seven contexts on the sited yielded cremated bone. Four were small round pits and three were inhumation graves containing concentrations of burned bone. These pits and concentrations were very similar to the finds of human cremated bone from other early medieval cemeteries in the region. Unfortunately, the bones from Bergeijk are lost, so it is no longer possible to determine whether these pits did indeed contain the remains of human cremations.

Compared to the inhumation grave pits, the cremation pits were rather shallow. No grave goods were found in them. It is unclear whether they had been subjected to post-depositional interventions.

Post-depositional interventions

Of the 117 excavated inhumation graves in the cemetery 28 (24%) showed traces of contemporary post-depositional interventions (see table 3.4.1). Thirty-one (27%) had most likely been left intact. For the remaining 58 graves (50%), there was insufficient evidence to determine whether they had been subjected to an intervention or had remained intact. If the distribution of the indeterminate group is similar to that of the other graves, we can postulate 55 reopened graves (47%) and 62 intact graves (53%). As can be seen in figure 3.4.2, the reopened graves were concentrated in the cemetery's northern half. Of the late graves in the southern section, only one had been reopened. This difference in the distribution of the reopened graves may have resulted in changes in reopening frequency during the cemetery's use period. The chronology of the reopenings will be discussed in more detail below.

Similar to the Broechem and Posterholt cemeteries, the Bergeijk cemetery showed a difference between the intervention rates of presumed men's and women's graves. The cemetery had a relatively large number of graves with grave goods that are usually associated with women. Of all graves 24% was furnished with typical women's grave goods, while only 15% had men's grave goods. The remainder of the graves contained non-gendered 'neutral' grave goods or lacked preserved grave goods altogether. As in the Broechem cemetery, post-depositional interventions occurred more often in burials that had grave goods associated with men. As can be seen in table 3.4.1, 59% of the graves with men's objects were reopened, compared to 39% of the graves with women's objects. The Z-test test showed that there was a statistically significant difference between the numbers of reopened graves with male and neutral grave goods ($P=0.000$, $F=4.632$) and between reopened graves with female and neutral grave goods ($P=0.001$, $F=3.455$). However, the difference between the numbers of graves with men's and women's grave goods is non-significant. The diggers appear to have preferred graves with gendered grave goods over graves with neutral grave goods, but did not select graves with men's or women's grave goods in a way that led to a statistically significant difference.

Additional burials

Because almost no unburned bone was preserved, there was no conclusive evidence for additional inhumations in older graves. Grave 56 revealed both beads and a lance head, suggesting that the grave may have contained the remains of both a woman and a man. In grave 82, the grave good types and their distribution indicate that the grave may have contained

two burials, a woman in the northern part of the container and a man in the southern part. If these graves did indeed contain multiple individuals, these could either have been deposited simultaneously or the graves could have been reopened for additional burials. There were three cases of possible cremation remains found in inhumation graves. As mentioned above, the bone has gone missing, so it is uncertain whether it was human. It is unclear whether the concentrations of burned bone were deposited during the original burial, or whether they were added to the graves at a later time. In grave 34, the burned bone fragments were scattered throughout the grave, with a concentration in the south. These remains may have originated from a cremation that was disturbed by the inhumation grave pit, but they could also have been deposited in the grave intentionally. Grave 58 also contained a concentration of cremated bone, which had probably been placed underneath the coffin. There is evidence that a fire may have been lit in the vicinity of the concentration of burned bone at the time of its deposition. More burned bone was scattered in the grave's fill. It could not be determined whether graves 34 and 58 had been reopened. Grave 108 contained a concentration of cremated bone which had not been scattered. This grave had probably been reopened, but it is unclear whether the cremated bone was deposited during the original funeral or during the reopening.

Intercuts

Intercuts between graves were comparatively rare in the Bergeijk cemetery. Only ten graves (9%) were cut by a younger grave and none of these intercuts were invasive. They only cut the peripheral areas of the older grave's pit and did not reach into the coffin. Interestingly, intercuts were more common in the younger southern section of the cemetery, where there were fewer reopenings.

Reopenings

Of the 117 excavated inhumation graves, 28 had been reopened. Despite the clearly defined soil features observed in this cemetery, the coverage of the reopening pits was sometimes difficult to determine. Some graves did not reveal any traces of a reopening pit, so reopened graves could only be recognized on the basis of the chaotic layout of the skeleton and grave goods. In most cases where intervention pits were observed, the graves were opened with a simple pit which entered the area of the coffin from above. Disturbances in the graves' contents sometimes indicated that the actual intervention reached beyond the traces of the pit (for instance in graves 24, 41, 43 and 84). As far as could be established, all reopening pits were dug down to the graves' bottoms where the grave goods and skeletal remains lay. It was usually unclear whether the pits were backfilled after the reopenings. In a few cases the reopening pit fills contained many relatively well preserved grave goods, making it likely that the pits had been backfilled soon after the interventions.

In a few graves the reopenings deviate from this general pattern. In grave 27 the diggers seem to have approached the container from one side, and then have freed up and removed the entire lid to gain access to the space within (see figure 3.4.2). If there was still an open space inside the container, the diggers had easy access after lifting the lid, which could explain why the grave's remaining contents look relatively undisturbed.

In grave 35 the wooden container may have been taken from the grave as a whole. Alternatively the grave may never have had a wooden container to begin with. Because of this grave's unusual appearance, the excavators made a section drawing. The drawing shows sedimentation layers, suggesting that the reopening pit may have been left open after the intervention and slowly filled with natural sediments.

	Head end	Head/neck	Thorax/pelvis	Legs/feet	Foot end	Sides
Men (10)	10% (n=1)	60% (n=6)	100% (n=10)	90% (n=9)	0	30% (n=3)
Women (11)	36% (n=4)	82% (n=9)	91% (n=10)	64% (n=7)	18% (n=2)	45% (n=5)
Neutral (7)	0	71% (n=5)	100% (n=7)	43% (n=3)	0	29% (n=2)
All graves (28)	18% (n=5)	71% (n=20)	96% (n=27)	68% (n=19)	7% (n=2)	36% (n=8)

Table 3.4.2 Placement of reopening pits in graves with men's and women's grave goods.

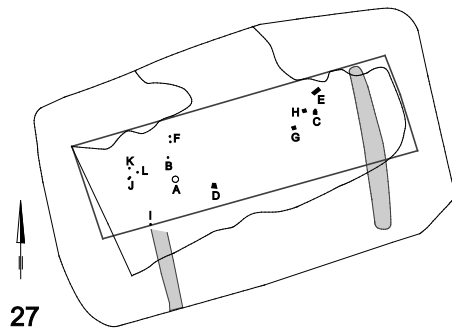
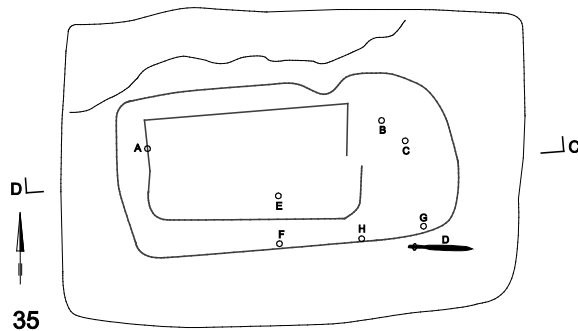


Figure 3.4.2 Grave 27 with a reopening pit which approached the coffin from the side.



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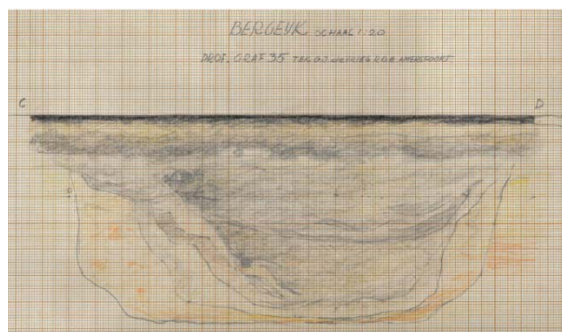


Figure 3.4.3 Level and section drawings of reopened grave 35 where the diggers may have taken out the wooden container.

Table 3.4.2 shows which areas of the graves were reopened. The data in this table differ slightly from those presented in the chapter on post-depositional interventions in the original publication (Van Haperen 2012: 47), because I changed the definition of the grave zones to include the grave pit and not just the area inside the wooden container. In nearly all the graves, the reopening pit covered multiple areas. Most reopening pits focused on areas inside the wooden container, especially on the thorax and pelvis regions which were almost always reopened. Fewer pits went into the area of the head/neck and the legs/feet. In 12 cases, the entire coffin had been reopened. The reopening pits occasionally extended beyond the confines of the coffin, reaching either into the head end, foot end or sides of the grave pit. In only two cases (27 and 108) the entire grave had been reopened from the head end to the foot end. In grave 27, the reopening pit also covered part of the grave pit's sides. Both these graves contained grave goods that are usually associated with women. There were no cases where the reopening pit focused specifically on the peripheral areas of the grave.

There is very little evidence for differences between the ways graves with typical men's and women's grave goods were reopened. The top rows of table 3.4.2 show the placement of reopening pits in presumed men's and women's graves. The head end, head/neck area and foot end were opened slightly more often in women's graves than in men's graves. The legs/feet area on the other hand was opened slightly more often in men's graves. However, grave 85 which contained typical women's grave goods was only reopened in the leg/feet area and foot end. Of the 12 graves where the entire coffin had been reopened, five contained grave goods usually associated with women and six had grave goods associated

with men. Only the difference for the reopening of the leg/feet area between graves with female and neutral grave goods was statistically significant ($P=0.036$, $F=-2.099$).

Reopening chronology

Seven graves were reopened while the container was still intact (27, 44, 47, 77, 79, 82 and 99). The skeletal silhouette in grave 99 indicates that this grave was probably opened after the corpse had skeletonized, but while there was still an open space within the wooden container. According to Aspöck's scale (2005: 251-252) this would indicate a reopening between 10 and 35 years after burial. Six graves were probably reopened after the container had collapsed (22, 24, 41, 43, 51 and 62). For the 15 remaining graves, it was not possible to determine the state of the container at the time of the reopening. The reopenings that could be dated based on the state of the container took place in 565-655, 580-685 (3 graves), 610-735, 610-715 and 640-715. The excavated section of the cemetery probably dates between 580 and 750. Both the dates of the reopened graves and the reopenings themselves cover the cemetery's entire use period. It seems likely that the mostly intact graves in the southern part of the cemetery form its last phase, but it is difficult to be certain because these graves contained very few datable grave goods. However, even this southern group has at least one reopened grave (99). Reopenings probably occurred during most if not all of the cemetery's use period. The majority of the reopenings probably took place in the seventh century, with possibly a few early cases at the end of the sixth century and a few late cases in the beginning of the eighth century. However, it is also possible that nearly all reopenings were carried out at the end of the seventh and the beginning of the eighth century, perhaps by the generation who constructed the final group of mostly intact graves in the southern section.

Grave goods

The differences between the objects found in reopened and intact graves can be seen in table 3.4.3. The table shows the number of objects found in graves with reopened, intact and indeterminate status. For each category of graves, the total number of objects of a particular type is displayed in the left column. The right column contains the average number of objects per grave. Since many finds were lost after the excavation, some of the grave goods had to be reconstructed on the basis of the find records. As a result, some of the numbers are an estimate of what was actually found. The reopened graves in Bergeijk contained relatively large amounts of grave goods. The average numbers of lance heads, arrowheads, horse gear, knives, plate buckles, belt plates, leg strap plates, necklace pendants, pottery vessels and glass vessels were all higher for reopened than for intact graves. Only simple belt buckles, earrings and beads were found in larger numbers in intact graves. The differences between intact and reopened graves are significant for arrowheads ($P=0.043$, $F=2.121$), belt plates/strap ends ($P=0.013$, $F=2.661$), leg strap fittings ($P=0.039$, $F=2.167$) and pots ($P=0.020$, $F=2.427$). The differences for the other object types were not significant. The differences for the other object types were not significant. The low numbers of grave goods in the intact graves probably result at least partially from the fact that most intact graves date to the cemetery's end phase, when the deceased were buried with relatively few or no grave goods.

It is important to note that the objects found in the reopened graves were often fragmented and missing fragments. For instance, forty-five percent of the pottery vessels from the reopened graves were missing some shards, while the pots in intact graves were all complete, even when they were broken (Van Haperen 2012: 51-52). Because of the many objects that have gone missing after the excavation, there are insufficient data to systematically analyze the completeness of other object types.

Objects	Reopened (28 graves)		Intact (31 graves)		Indet (58 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Swords	2?	0,07	0	0	0	0
Seaxes	0	0	1	0,03	0	0
Shields	1	0,04	0	0	2	0,03
Lance heads	4	0,14	1	0,03	2	0,03
Arrowheads	4	0,14	0	0	2	0,03
Horse gear	3	0,11	0	0	0	0
Knives	10	0,36	8	0,26	15	0,26
Fire steels	0	0	0	0	1	0,02
Spurs	1	0,04	0	0	1	0,02
Belt buckles	8	0,29	11	0,35	9	0,16
Plate buckles	7	0,25	0	0	0	0
Belt plates/strap ends	46	1,64	7	0,23	18	0,31
Leg strap plates	13	0,46	2	0,06	1	0,02
Belt pendants	2	0,07	0	0	0	0
Earrings	1	0,04	4	0,13	0	0
Fingerrings	1	0,04	1	0,03	1	0,02
Brooches	1	0,04	0	0	0	0
Bracelets	0	0	1	0,03	0	0
Necklace pendant	2	0,07	0	0	1	0,02
Rings, miscellaneous	2	0,07	2	0,06	7	0,12
Decorative pin	1	0,04	0	0	0	0
Pottery vessels	20	0,71	7	0,23	14	0,24
Glass vessels	2	0,07	0	0	5	0,09
Coins	0	0	1	0,03	1	0,02
Beads	98	3,50	206	6,65	87	1,50

Table 3.4.3. Grave goods found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per type and the average per grave.

Nevertheless, there are a number of cases where objects from reopened graves were fragmented and partially removed, that are worth discussing. Grave 59 contained a lance head's socket. The diggers may have taken the lance, broken it, removed the blade and redeposited part of the socket in the grave. Of the two swords listed with a question mark in table 3.4.4, only fragments were found. The excavation find list of grave 69 mentions a sword point and a hand guard or grip. Unfortunately, these finds have gone missing so their nature could not be verified. It is possible that a sword was buried here and was later broken and partially removed from the grave. A similar scenario may apply to the iron frag-

ment gg2 from grave 24. This fragment, which is partly covered in mineralized leather fixed with small rivets, closely resembles the point of a sword or seax. When graves contain partial fragmented objects, it is always the question whether the fragmentation resulted from actions that took place during the reopening, or whether the objects were fragmented previously by other processes and were simply mixed with the grave's fill. Given the predominance of fragmented objects in reopened graves and the lack thereof in intact graves, it seems likely that the fragmentation was indeed at least partly caused by processes that took place during the reopenings. Breakage may have come about accidentally when

the diggers accessed the grave, but purposeful fragmentation is equally possible. Many reopened graves contained large iron rivets which were sometimes plated with bronze foil and lay scattered over part of the grave (24, 30, 41, 44, 49, 49, 59, 62, 65 and 85). Although such rivets could have originated from various types of objects, they probably often belonged to wooden shields. This is confirmed by the fact that many of these rivets revealed traces of mineralized wood. Some of the graves in question also yielded relatively large flat fragments of iron, some of which had rivets attached, that may have belonged to shield bosses and grips. The rivets and fragments indicate that the graves in question may originally have contained shield bosses and grips that were removed from the grave during reopenings.

There are also a few cases where it is likely that belt fittings were removed from reopened graves. Grave 82 yielded a large counter plate with silver inlay in geometric style (find-number h). Such plates were normally part of a set of multiple belt fittings which included at least a decorated plate buckle and often a back plate as well, neither of which were found. In grave 69, the excavators found a rectangular back plate decorated with geometric silver inlay (11). This fitting was most likely originally on a belt that also had a plate buckle and counter plate, which were no longer present in the grave when it was excavated. Since the fittings were originally attached to a belt, they probably lay close together in the grave. The people reopening graves must have known, like we do, that these fittings were part of sets and usually lay in close proximity to one another. When parts of these sets were left behind in reopened graves, it is likely this was due to a choice on the part of the participants. Apart from the large decorated counter plate, grave 82 also contained two pyramid-shaped copper alloy sword belt fittings (d1 and j). It is one of three reopened graves that yielded sword belt fittings. Grave 79 held a similar

pyramid-shaped mount (f). In grave 44 the excavators found two rectangular belt sword-belt mounds with incised decoration (v1 and w1). It is not certain whether these fittings belonged to complete sword belts, but it is nevertheless likely that these mounts were originally associated with other fittings that were taken from the graves when they were reopened. They may also have been associated with swords that were removed.

Table 3.4.4 shows which materials were found in reopened and intact graves. The table only takes into account recognizable objects. Fragments are excluded, because it is often unclear whether these were part of the grave's original inventory or whether they were just mixed with the soil that was used to fill the graves.

The data in this table reflects and confirms the results of the previous analysis, which indicated that the reopened graves contained relatively large numbers of grave goods compared to the intact graves. Few objects of precious metal were found: four of silver and four of gold. They were found both in reopened, intact and indeterminate graves. Objects made of iron, copper alloy and pottery were found in much higher numbers in the reopened graves. The differences between intact and reopened graves are statistically significant for iron ($P=0.003$, $F=3.198$), copper alloy ($P=0.030$, $F=2.270$) and pottery ($P=0.000$, $F=4.187$).

Table 3.4.5 shows where objects from reopened graves were found in relation to the reopening pit. All object types were found more frequently inside reopening pits than outside them. This was to be expected since we have seen above that reopening pits in this cemetery were often quite large and focused on areas of the graves where most objects were deposited. If an object lay inside the reach of the reopening pit, the diggers could have seen it and left it behind on purpose, especially if the object was large. At least seven graves were reopened while there was still an open space inside the wooden container, so the visibility in these cases would have been relatively good.

The cemeteries – analyzing the data

Objects	Reopened (28 graves)		Intact (31 graves)		Indet (58 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Iron	98	3,50	32	1,03	58	1,00
Copper alloy	55	1,96	9	0,29	25	0,43
Iron/copper alloy	30	1,07	2	0,06	8	0,14
Silver	1	0,04	3	0,10	0	0,00
Gold	2	0,07	0	0,00	2	0,03
Pottery	21	0,75	8	0,26	14	0,24
Glass (vessels)	2	0,07	0	0,00	5	0,09
Amber	7	0,25	6	0,19	4	0,07

Table 3.4.4 Grave good materials found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per material and average per grave.

	In pit	Outside pit	Unknown
Swords	2	0	0
Shields	0	1	0
Lance heads	2	2	0
Arrowheads	4	0	0
Horse gear	3	0	0
Knives	10	0	0
Spurs	0	0	1
Belt buckles	7	0	1
Plate buckles	7	0	0
Belt plates/strap ends	45	0	1
Leg straps	8	0	5
Belt pendants	1	0	0
Earrings	1	0	0
Finger rings	1	0	0
Brooches	1	0	0
Necklace pendants	0	0	1
Rings, miscellaneous	2	0	0
Decorative pins	1	0	0
Pottery vessels	10	5	5
Glass vessels	1	0	1
Beads	59	28	11
Fragments iron	179	10	16
Fragments copper alloy	1	0	0
Fragments pottery	31	0	6

Table 3.4.5 Objects found inside and outside reopening pits in reopened graves

Addition of objects to reopened graves?

It is unclear whether objects were ever added to the graves when they were reopened. We can hypothesize that the diggers sometimes deposited objects like lance heads, arrowheads, knives, plate buckles and belt plates in the graves during a reopening. This would explain the relatively high numbers of these types of objects found in the reopened graves. The large numbers of all object types found inside the reopening pits also suggests the diggers may occasionally have deposited items in them. These findings could however also have come about if the diggers were simply not interested in taking certain objects from the grave's inventory and therefore left them behind. The dates of the objects and graves are not detailed enough to allow the identification of later additions to the graves' inventory. There is some evidence for the redistribution of pottery fragments over multiple graves. The excavators' find administration states that a number of pottery fragments from grave 22 fitted to others found in the adjacent grave 23. Unfortunately all the fragments in question have gone missing, but it is likely that the graves contained fragments of a single pot. Similarly the neighboring graves 62 and 65 contained pottery fragments that looked very similar, but could not be fitted together. They could either belong to a single pot or to two nearly identical pots. Since the graves 22, 62 and 65 were certainly reopened and grave 23 may have been reopened as well, various scenarios can be conceived which account for the distribution pattern of these pottery fragments (Van Haperen 2012: 52). Some of these scenarios require one or both graves to be reopened, while in others, the graves could have remained intact. The fragments may have been introduced into the graves during the funerals (1). This could mean that the graves were dug simultaneously or within a short time of one another and that the pots were broken during the funeral after which the fragments ended up in the graves. The fragments may also have been introduced into the graves when they were reopened. This could

mean that the graves were reopened around the same time. In this scenario (2a) the pot could have been taken from one of the graves and its fragments afterwards spread over both of them. Alternatively (2b), a 'new' pot could also have been broken at the time of the reopening and the fragments put into the graves when they were backfilled. Here, the pot could date to a later period than one or both of the graves. If one of the graves was constructed later than the other (3a), fragments of a broken pot from an older grave could have been removed during a reopening and then introduced into the newer grave when it was first dug. The other way around (3b), a pot could have been broken during the funeral after which part of the fragments were put into a neighboring grave that was being reopened around the same time. Here, the graves may differ in date so one of the graves could contain finds that do not date to the moment of burial. As shown above, the fragmentation and especially the removal of fragments from graves seems to have occurred primarily during reopenings, so scenarios 2a, 2b and 3a are more likely to approximate the true course of events than 1 and 3b. In all these scenarios the fragments could have been introduced into the graves intentionally or by accident. Since both the pairs of graves in question lay in close proximity to one another, accidental dispersal of the fragments is certainly a possibility, since they may simply have mixed with the soil used to refill the graves after the funeral or reopening.

Grave constructions

As can be seen in table 3.4.6, the reopened graves were larger than the intact graves, indicating that grave reopenings occurred more frequently in large graves than in smaller ones. On average, the grave pits of the reopened graves were 49 cm wider and 35 cm longer than those of intact burials. The coffins in the reopened graves were 29 cm wider and 28 cm longer than those in the intact ones. Significance testing was done on the differences in grave pit length which were overall significant ($P=0.014$, $F=4.449$). With the post-hoc Tuck-

	Reopened (n=28)	Intact (n=31)	Indet (n=58)
Grave pit width	181 cm	132 cm	164 cm
Grave pit length	279 cm	244 cm	252 cm
Coffin width	91 cm	62 cm	76 cm
Coffin length	228 cm	200 cm	200 cm

Table 3.4.6 Average width and length of grave pits and wooden containers in reopened, intact and indeterminate graves.

ey test, significant differences were found between reopened and intact graves ($P=0.015$) and reopened and indeterminate graves ($P=0.049$). The difference between intact and indeterminate graves was not significant. This difference in size between reopened and intact graves may partially result from the fact that a relatively high number of large early dating graves from the cemetery's northern area was reopened compared to a much lower number of the smaller late graves from cemetery's south-eastern edge.

3.5 Posterholt

The first small-scale excavation at the cemetery of Posterholt-Achterste Voorst (the Netherlands, province of Limburg, municipality of Roerdalen) was carried out in 1983 by local amateur archaeologists from the Heemkundevereniging Roerstreek. Six Roman cremation graves and five Merovingian inhumation graves were found. The work was continued in 1984 by the State Archaeology Service who launched a full-scale excavation. The excavations were conducted with reasonable care and the documentation is quite detailed. The State Service excavated only 94 potential grave contexts and dug a number of trial trenches to estimate the cemetery's size (see figure 3.5.1). The remaining contexts are still *in situ*, although some may have been damaged in 1953 when a road was constructed across the site.

For many years, the excavation results remained largely unpublished. A short report was made by Willems, Van Kregten (1984). The field documentation was eventually taken up by Frans Theuws and his students at the

University of Amsterdam. These efforts led to the creation of the NWO funded ANASTASIS Merovingian cemetery backlog project, which aimed to analyze and publish a number of cemeteries including Posterholt. The final publication of Posterholt was a combined effort of Maaïke de Haas and Frans Theuws (De Haas & Theuws 2013).

Posterholt is situated in the middle of the Dutch province of Limburg near the German border, along the banks of the river Roer, a tributary of the Meuse. The area in which the cemetery was located has a sandy soil. The conditions are quite favorable to the preservation and visibility of archaeological features. Wood remains were preserved as soil discolorations. The traces of grave constructions, post-depositional interventions and taphonomic processes were often clearly demarcated. Unfortunately, this type of porous soil quickly leaches minerals from bone material, so unburned skeletal remains were poorly preserved.

Inhumation graves

The excavation and trial trenches revealed 123 potential inhumation graves, of which 78 human inhumation graves and 5 possible inhumation grave pits were excavated completely. The cemetery was probably in use from the sixth until the first half of the eighth century, but the majority of the excavated graves date to the seventh century. The graves were all oriented west-east and most were laid out in relatively well-ordered rows. The cemetery's spatial layout stratigraphy seems to have developed from west to east. The unexcavated portion of the site, west of the excavated graves, may harbor the oldest burials.

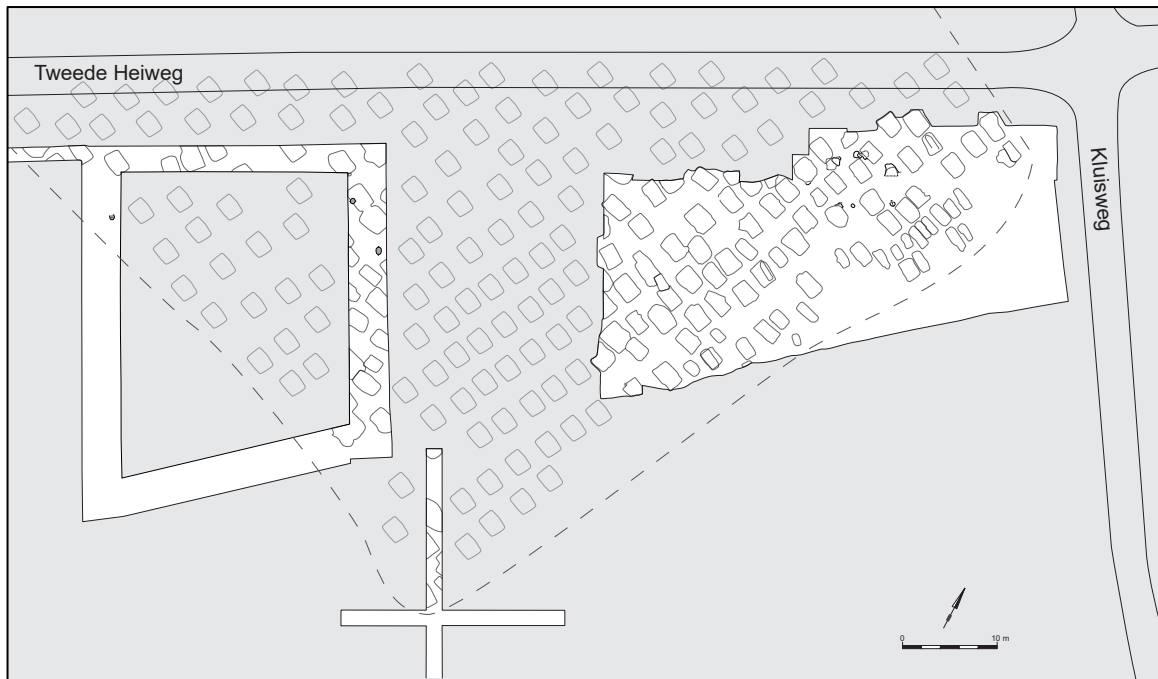


Figure 3.5.1 Reconstruction of the cemetery's layout based on the data from the excavation and trial trenches. From De Haas & Theuws (2013: 161).



Figure 3.5.2 Map of the excavated part of the Posterholt cemetery. Red=reopened inhumation, green=intact inhumation, light gray=indeterminate inhumation. After De Haas & Theuws (2013: 71).

Most deceased were buried in wooden containers of variable size. There were six possible trench graves, two tree trunk coffins, one two-part coffin and one bier burial. Most deceased were buried with at least a few grave goods, but a few lacked preserved grave goods of all types. These may nevertheless have been furnished with items made from perishable organic materials like cloth and wood. Nineteen graves did not yield traces of a wooden container. Some of these graves may have been trench graves, but the De Haas and Theuws assume that in most cases, the grave had a wooden container of which no traces were preserved. Since all the graves without containers had been reopened or possibly reopened, they suggest that the containers may have been damaged or even removed from the grave. Alternatively, the disturbance may have interfered with the preservation of organic remains, causing the containers to decompose more readily after a reopening (De Haas & Theuws 2013: 59).

There were more graves with female gendered grave goods than with male gendered grave goods. Of 78 inhumation graves, 18 (23%) contained objects that are usually associated with women and only 8 (10%) contained objects that are usually associated with men. The remaining 52 graves (67%) had only gender neutral grave goods, or no grave goods at all. Since almost no skeletal remains were preserved, the graves can only be assigned to a specific gender on the basis of the grave goods. We cannot check to what extent gender specific grave good sets actually lay in burials with individuals of the expected sex. A number of other graves did contain sufficient skeletal material for age and sex determinations. Eight women's graves could be identified based on osteological data. None of them were buried with gender specific grave goods. No men were found in the osteological analyses. The cemetery also yielded remains of eight children

between 4 and 12 and three adolescents. It is unclear whether there were truly fewer men's graves in the cemetery, or whether men were simply buried with gender specific artefacts less often than women.

The osteological data suggest that there really were more women's than men's graves, but the graves that yielded well preserved bone were all located on the cemetery's east boundary, so the sample may be biased (Panhuysen 2013: 144).

Cremation graves

The excavated section of the cemetery contained 12 cremation graves of which three were Merovingian, eight were Roman and one dated to the Roman period or Iron age. The Roman cemetery was marked with a rather large stone grave monument of which only fragments remained. The Roman cremations were sometimes cut by the Merovingian inhumation graves, but showed no indications of intentional reopenings. The Roman cremations will not be discussed in detail.

The three Merovingian cremation graves (25, 26, and 27) were quite shallow and had all been disturbed by ploughing. The constructions of the cremation graves were all slightly different, but consisted of small round or oval pits containing charcoal, cremated bone and pottery fragments. Some of the pottery may have served as urns. Apart from the pottery, the cremation graves did not contain any grave goods. The graves contained relatively little bone, between 25 and 170 grams, which is a very small proportion of the bone left over after the cremation of an adult body. The minimum number of individuals for every cremation grave is one. The remains belonged to three adult individuals, one woman and two adults whose sex could not be determined (Panhuysen 2013: 140-141).

Post-depositional interventions

Of the 78 excavated inhumation graves in the cemetery 33 (42%) showed traces of contemporary post-depositional interventions. At least 23 (29%) appeared to have been left intact. For the remaining 22 graves (28%), there was insufficient evidence to determine whether they had been subjected to an intervention. If the distribution of the indeterminate group is similar to that of the other graves, we can postulate that there were approximately 46 reopened graves (59%) and 32 intact graves (41%) in this cemetery. As can be seen in figure 3.5.2, the reopened and intact graves form two unusually distinct sections of this cemetery. This is probably because the intact graves in the cemetery's eastern section most likely belong to the cemetery's end phase, when graves were reopened less frequently. The diggers focused their efforts on graves with gender specific objects. Similar to the Broechem and Bergeijk cemeteries, Posterholt yielded a relatively high percentage of reopened graves with typical men's grave goods, compared to the cemetery as a whole which is dominated by graves with typical women's grave goods. As can be seen in table 3.5.1, all graves (100%) with men's objects had been reopened, while only 61% of the graves containing women's objects had been reopened. Also, the majority of the reopened graves contained gendered objects, while none of the intact graves yielded any gendered objects. In addition, no children's graves appear to have been reopened. Statistically significant differences were found between reopened graves with men's and women's grave goods ($P=0.039$, $F=2.063$), with male and neutral grave

goods ($P=0.000$, $F=3.993$) and with female and neutral grave goods ($P=0.009$, $F=2.609$). It can be concluded that the diggers generally focused on graves with gendered grave goods, and seem to have been most interested in graves containing objects associated with men.

Additional burials

Various types of near-contemporary post-depositional interventions were observed in the Posterholt cemetery. Straightforward reopenings and intercuts between graves were the most common, but there were also three cases of additional burials deposited in existing graves. Some graves were subjected to multiple interventions types.

A few graves from Posterholt yielded evidence of multiple burials. Given the relatively poor preservation of bone in the cemetery, more double burials may have gone unnoticed.

Grave 14 contained two wooden containers, each holding the remains of one individual, a child and a young adult. They were probably buried simultaneously. The grave did not contain any grave goods and was not subjected to visible interventions after the burial.

Grave 42b was reopened to deposit second burial 42a. Almost no skeletal material was found in 42b. It is unclear whether it was removed from the grave or had simply decayed. The individual in 42a was an adolescent of unknown sex. No age or sex data are available for 42b.

Grave 46b contained a skull (19), a number of bones and parts of a decorated iron belt. It was cut by pit 46a which yielded an additional skull (20) and a few pieces of bone, together with a silver coin and 13 beads.

	Male	Female	Neutral	Children	Total
Reopened	100% (n=8)	61% (n=11)	27% (n=14)	0	42% (n=33)
Intact	0	0	44% (n=23)	64% (n=7)	29% (n=23)
Indet.	0	39% (n=7)	29% (n=15)	36% (n=4)	28% (n=22)
Total	100% (n=8)	100% (n=18)	100% (n=52)	100% (n=11)	100% (n=78)

Table 3.5.1 Percentages of graves with typical men's, women's and gender neutral grave goods that were reopened or remained intact.

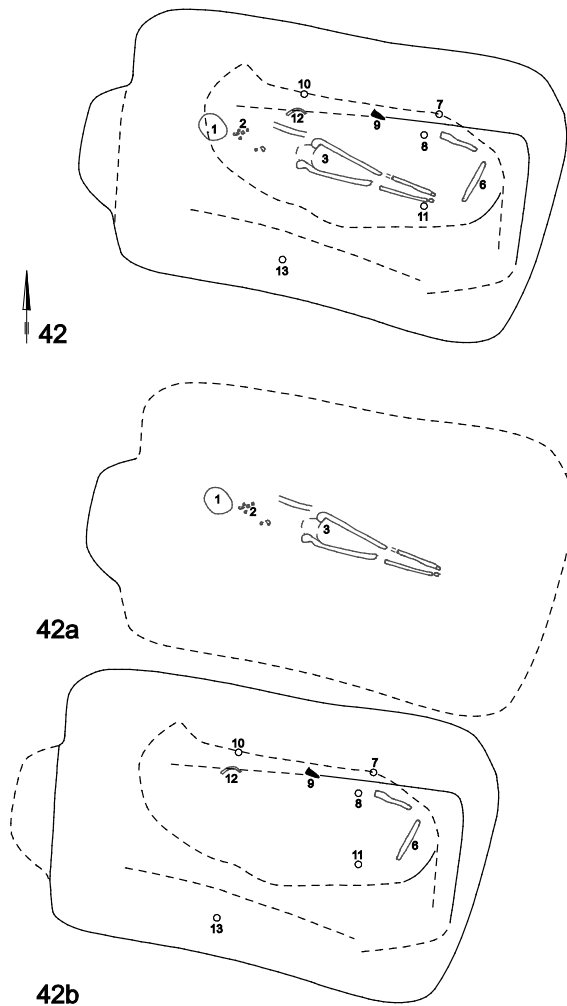


Figure 3.5.3 Grave 42b and second burial 42a. After De Haas & Theuws (2013: 219).

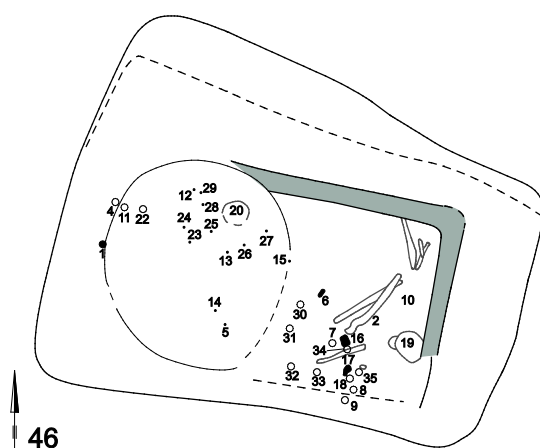


Figure 3.5.4 Pit 46a in grave 46b. A second skull (20) was found in the pit. After De Haas & Theuws (2013: 222).

The individual in 46b was an older adult of unknown sex. No osteological data are available for the individual from 46a. The way the bones in burial 46b are scattered suggests that they were disturbed by an intervention that extended into the entire coffin, far beyond the documented limits of pit 46a. It is unclear whether 46a contained a complete body or just a skull and grave goods. Most finds were located on the bottom of the grave, indicating that it was reopened while there was still an open space inside the container, even though the pit seems to cut the container's wood. This situation could have come about in several ways. (1) The grave could be a reopened double burial of which some remains were left in the coffin while others were deposited in the reopening pit 46a. (2) The grave could be a single burial which was cut by a reopening pit in which the diggers deposited the – articulated or disarticulated – remains of a second individual. (3) It is also possible that the reopening and disarticulation of the remains in grave 46b and the deposition of the additional remains in 46a were separate events that took place at different points in time. Since no beads were found outside pit 46a, scenarios 2 and 3 are the most likely.

In grave 48, two wooden containers outlines were visible. The small container held the remains of a young adult female. No human remains were recovered from the large container. The grave either held a single burial with a double container (a wooden coffin in a wooden chamber), or it held an additional burial. The latter scenario seems more likely since the small container seems to cut the large one, indicating that it was deposited after the large container had started to decompose. The outline of the north wall of the large container was only visible at level IV, underneath the small container. The remains in the large container could have been disturbed during the deposition of the additional burial. This second burial remained undisturbed.

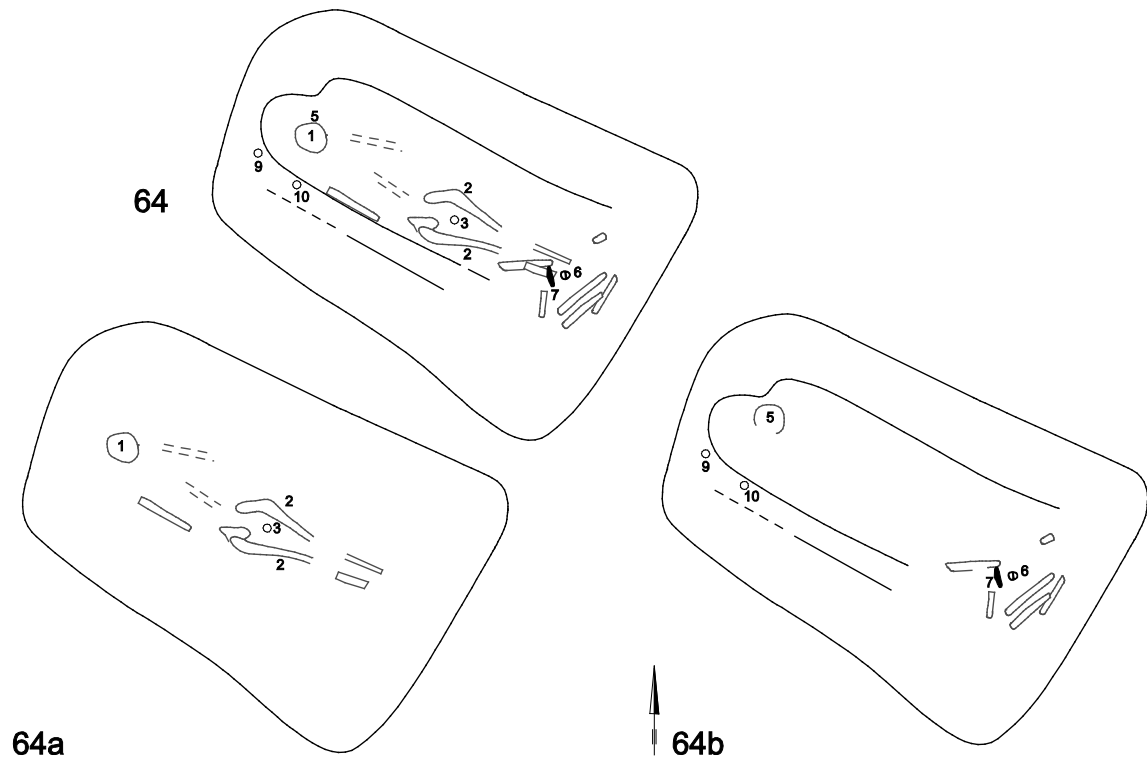


Figure 3.5.5 The two burials in grave 64. After De Haas & Theuws (2013: 242).

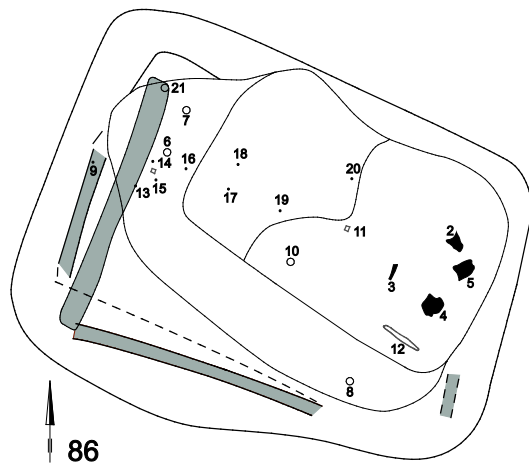


Figure 3.5.6 Grave 86 with two nested reopening pits. From De Haas & Theuws (2013: 266).

Grave 64 was also reopened to deposit a second individual. There was probably still an open space inside the wooden container when the second burial took place. The remains of the second individual (64a) lay only five centimeters above those of the first (64b). The post-cranial skeleton of the first burial was moved to a pile at the grave's foot end, but the skull was left *in situ*. The individual in 64a was an adult female. No osteological data are available for 64b.

Grave 86 may have had two nested reopening pits that were both visible on excavation level 2. One was rectangular with slightly rounded corners, the other was more irregular in shape. Given the rectangular shape and the presence of human remains in the upper pit, it is possible that this pit was in fact an additional smaller inhumation grave deposited on top of the already reopened grave. This hypothesis cannot be confirmed because the upper pit is very shallow. Alternatively, all the observed features could belong to a single reopening pit with different fills.

Intercuts

Intercutting graves were relatively rare in the Posterholt cemetery. Six or seven inhumations (8%) were cut by a later grave. Intercuts were found only in graves that had also been reopened and graves of indeterminate status. A few intercuts were invasive and may have been extended into a reopening of the older grave. In other cases the intercut and reopening seem to have been separate events. Some of the documented intercuts were not invasive and only touched the peripheral areas of the older graves (21, 33, 54). No otherwise intact graves had been affected by an intercut.

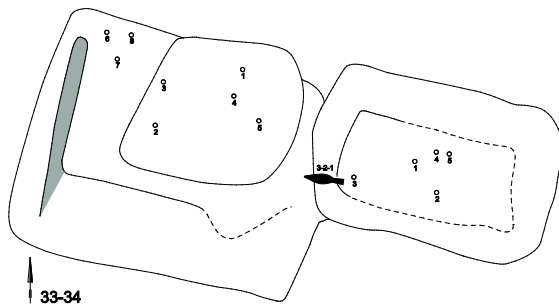


Figure 3.5.7 Intercutting graves 33 and 34. A lance head was found in the overlapping area between the two graves. After De Haas & Theuws (2013: 215).

The edge of the grave pit of grave 33 was cut by grave 34. Grave 33 had been reopened and a lance head was found in the overlapping area between the graves, but the reopening pit appears to be separate from the intercut. If the reopening took place after the intercut, it is possible that the diggers took the lance head from grave 33 and placed above the overlap. It is also possible that the lance head was always part of the furnishings in grave 34 and its placement is unrelated to the reopening of grave 33.

Graves 74a and b form an ambiguous case that could be classified both as an intercut and as a deposition of a second burial in an older grave. The upper layer of grave 74b was almost completely cut by grave 74a. The lower levels of 74b may also to have been reopened, possibly when 74a was dug.

Grave 79 was largely dug away when it was cut

by grave 80. It is unclear whether the uncut section of this grave had also been reopened. Grave 80 in turn was cut by possible grave 81, which was either an inhumation grave or a reopening pit that extended between grave 80 and 82. It contained a fragment of a decorated belt back plate of which the other half was found in grave 82. This case will be discussed further below.

Reopenings

Regular reopenings are by far the most common type of contemporary post-depositional intervention in the Posterholt cemetery. After subtracting the graves that were opened during the deposition of a second burial and the graves that were opened by an intercutting grave, between 26 and 28 graves remain that were opened with simple pit that had the sole purpose of allowing the diggers access to the grave's contents.

Despite the clearly defined soil features, the reach of the reopening pits was sometimes difficult to determine. Some graves did not reveal clear traces of a reopening pit, while the chaotic layout of the skeleton and finds indicated that they had been reopened (graves 4, 24, 51, 82). Most graves were opened with a simple pit which entered the grave from above, usually in the area of the wooden container. All graves were reopened with a single pit, except perhaps grave 86 which was discussed above. No true search trenches were found, but two sets of graves may have been reopened from a single pit (80/82 and 89/90). The diggers either did not know the exact location of the grave they were targeting, or wanted to reopen two graves simultaneously. In the case of graves 89 and 90, the reopening pit was dug in the area of the intercut between the graves. Fibula 11-I-8 was found in this area and could have come from either of the graves. As mentioned above, grave 80 and 82 were both cut by context 81, which was either a very small inhumation grave or a reopening pit that extended between grave 80 and 82. Context 81 contains a fragment of a back plate of which the other half was found in grave 82. All reopening pits went down to the graves'

bottoms. No partial reopenings were found. In grave 78 the excavators documented digging traces on the reopening pit's bottom, indicating that a spade was probably used to dig a hole in the grave. The traces cut the coffin's bottom, which means that the wood had probably decayed by the time the grave was reopened.

Disturbances in the graves' contents sometimes revealed that the actual intervention reached beyond the traces of the pit (for instance in graves 24, 31, 58, 70, 80, 88, 91). In most of these cases it was unclear whether the coffin was still intact when the grave was reopened, but if it was, the diggers could probably have reached into the open space through a relatively small hole, thus causing a disturbance that was larger than the intervention pit itself.

Figure 3.5.8 is a part of a section drawing made along the eastern limits of the excavation, showing the vertical cuts of two reopened graves with reopening pits ('*roofkuil*' in

Dutch). Unfortunately, these graves were not fully excavated, so there are no level plans that show what the graves looked like in the horizontal plane. The pit in the grave on the right extends beyond the burial pit. The part of the reopening pit that lay outside the grave contained charcoal fragments ('HK'), suggesting that a small fire may have been lit here. The purpose of this fire is unclear, but the stratigraphic relation with the reopening pit indicates that it was part of the chain of events that took place when the grave was reopened. The reopening pit in the grave on the left has a homogenous fill, indicating that it was probably backfilled soon after the intervention. The pit on the right grave has two distinct fills, suggesting that it was only partially backfilled after the reopening and may have remained partially open for quite a long time. De Haas and Theuws think it may not have been filled up until the field was brought into cultivation in the later medieval period (De Haas & Theuws 2013: 73-75).

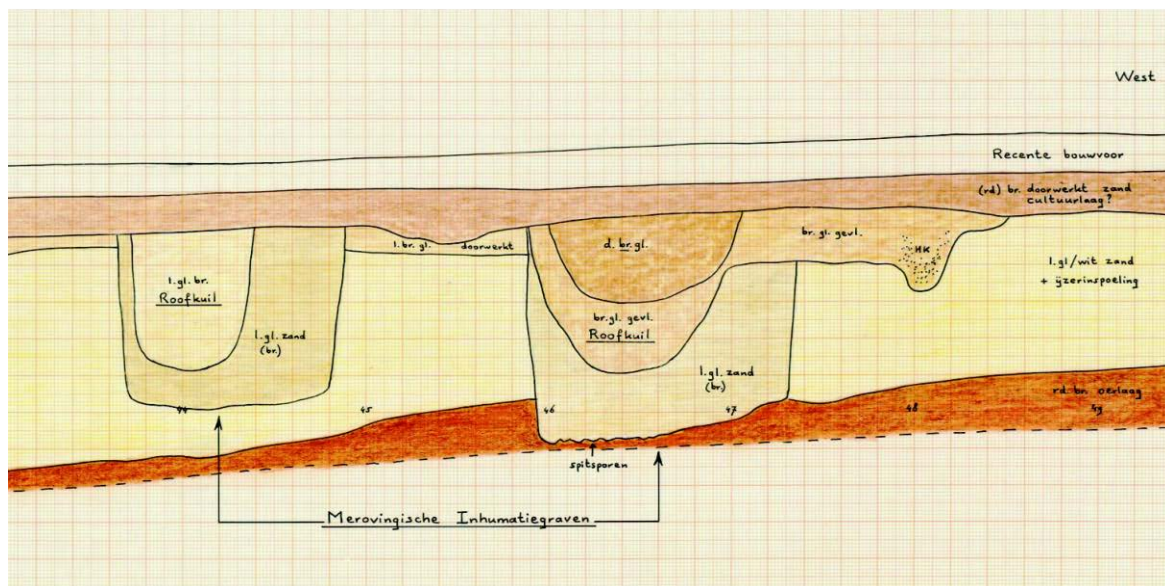


Figure 3.5.8. Section drawing of two reopened graves. The graves were not fully excavated or documented, so they were not given numbers. After De Haas & Theuws (2013: 58).

	Head end	Head/neck	Thorax/pelvis	Legs/feet	Foot end	Sides
Men (8)	0% (n=0)	75% (n=6)	100% (n=8)	100% (n=8)	25% (n=2)	25% (n=2)
Women (11)	36% (n=4)	91% (n=10)	100% (n=11)	82% (n=9)	36% (n=4)	45% (n=5)
Neutral (14)	21% (n=3)	64% (n=9)	93% (n=13)	86% (n=12)	29% (n=4)	14% (n=2)
All graves (33)	21% (n=7)	76% (n=25)	97% (n=32)	88% (n=29)	30% (n=10)	27% (n=9)

Table 3.5.2 Placement of reopening pits in graves with men's and women's grave goods.

It is often unclear how graves were treated after a reopening, but it seems at least some of the reopening pits in Posterholt had layered fills, suggestive of filling in stages or gradual filling by sedimentation. Unfortunately only these two vertical sections were documented, so it is difficult to be certain.

Reopening pit placement

All reopening pits reached down to the bottom level where the skeleton and grave goods lay. The reopening pits were relatively large compared to the pits observed in other cemeteries in the research area. Table 3.5.2 shows which areas of the graves were reopened. In nearly all the graves, the reopening pit covered multiple areas. Most reopening pits focused on the interior of the wooden container, especially on the thorax and pelvis area which were almost always reopened. Fewer pits went into the area of the head/neck and the legs/feet. Reopening pits did occasionally extend beyond the confines of the coffin, reaching either into the head end, foot end and/or sides of the grave pit. In only two cases (84 and 85), the entire grave had been reopened head end to foot end and sides. Both these graves contained grave goods that are usually associated with women. There were no cases where the reopening pit focused specifically on the peripheral areas of the grave.

There is little evidence that graves of men and women were reopened in different areas related to gender specific grave good distributions. The two top rows of table 3.5.2 show the placement of reopening pits in presumed men's and women's graves. There may have been a slightly heavier focus on the region around the head in women's graves, but otherwise there is little to no difference. In 22 graves the entire coffin area had been reopened. Six of these graves (75%) contained grave goods usually associated with men and eight (73%) had grave goods associated with women. The only statistically significant differences were for the reopening of the head end between graves with men's and women's grave goods ($P=0.005$, $F=-2.839$) and be-

tween graves with women's and neutral grave goods ($P=0.032$, $F=2.138$).

Reopening chronology

It is difficult to date the post-depositional interventions in Posterholt, because there is little evidence for the state of the human remains and wooden containers at the time of the reopenings. Five graves were reopened while the container was still intact (24, 46b, 77, 85, 90). Two graves were probably reopened after the container had collapsed (30, 87). For the remaining graves, it was not possible to determine the state of the container at the time of the reopening. The reopenings that took place before the container had decomposed can roughly be dated to within 35 years of the burial, according to Aspöck's scale (2005: 251-252). The reopenings that could be dated based on the state of the container took place in 580-785, 610-685, 610-715, 615-800, 620-745 and 720-785.

The excavated section of the cemetery probably dates between 580 and 750. Reopened graves are among the earliest graves in the cemetery, dating 510-590 and 510-620. Reflecting the chronology and burial frequency of the cemetery as a whole, the majority of reopened graves dates squarely in the seventh century. A smaller number of reopened burials dates to the end of the sixth and the start of the seventh century. The latest dated intact grave in the cemetery was constructed in 710-750. The latest dated reopened graves date to 610-710 and 580-750. Unfortunately, the intact graves in the southern part of the cemetery, which are presumed to be its last phase, are difficult to date precisely because they contain almost no grave goods.

Reopenings probably occurred during most if not all of the cemetery's use period. The date ranges of most datable reopenings lie between 610 and 750. Most reopenings probably took place in the seventh century. There may have been a few early cases in the sixth century when the cemetery had just come into use and a few late cases at the end of its use period. However, since most reopenings could hypothetically date to the later seventh century, it is

Objects	Reopened (33 graves)		Intact (23 graves)		Indet (24 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Seaxes	1	0,03	0	0	0	0
Shields	1	0,03	0	0	0	0
Lance heads	3	0,09	0	0	0	0
Arrowheads	8	0,24	0	0	0	0
Shears	1	0,03	0	0	0	0
Knives	8	0,24	5	0,22	4	0,17
Fire steels	1	0,03	0	0	0	0
Belt buckles	10	0,30	7	0,30	7	0,29
Plate buckles	2	0,06	0	0	0	0
Belt plates/strap ends	32	0,97	0	0	6	0,25
Brooches	1	0,03	1	0,04	0	0
Earring	1	0,03	0	0	0	0
Spindle whorls	4	0,12	0	0	0	0
Rings, miscellaneous	2	0,06	0	0	2	0,08
Pottery vessels	13	0,39	1	0,04	1	0,04
Glass vessels	4	0,12	0	0	0	0
Coins	6	0,18	2	0,09	1	0,04
Beads	97	2,94	1	0,04	74	3,08

Table 3.5.3 Grave goods found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per type and the average per grave.

also possible that they were all carried out near the end of the cemetery's use period, possibly by the generation who constructed the final group of smaller graves at the edge of the cemetery.

Grave goods

In this section, I reconstruct which objects may have been taken during grave reopenings. The differences between the objects found in reopened and intact graves can be seen in table 3.5.3. The table shows the number of objects found in graves with reopened, intact and indeterminate status. For each category of graves, the total number of objects of a particular type is displayed in the left column. The right column contains the average number of objects per grave.

The Posterholt cemetery yielded relatively few grave goods. No swords or axes were found. There were also no shield bosses, although reopened grave 30 contained a shield grip. One seax was found in reopened grave 58.

Jewelry and dress accessories like plate buckles, bracelets, earrings and fibulae were also rare or absent. Interestingly, most grave goods were found in reopened graves. Only knives and simple belt buckles were found in roughly equal numbers in all grave types. The other object types were almost completely absent in intact graves. Belt plates and pottery vessels were particularly well represented in the reopened graves. Other object types that were mostly found in reopened graves include lance and arrowheads, spindle whorls, glassware and coins. Oddly, almost equally high numbers of beads were found in reopened and indeterminate graves, while only one single bead was found in an intact grave. The differences between intact and reopened graves are statistically significant for arrowheads ($P=0.037$, $F=2.179$), belt plates/strap ends ($P=0.001$, $F=3.867$), spindle whorls ($P=0.044$, $F=2.101$), pots ($P=0.004$, $F=3.057$), glass vessels ($P=0.044$, $F=2.101$) and beads ($P=0.018$, $F=2.485$). The differences for the other object types were not significant.

Objects	Reopened (33 graves)		Intact (23 graves)		Indet (24 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Iron	182	5,52	29	1,26	60	2,50
Copper alloy	43	1,30	0	0,00	7	0,29
Iron/copper alloy	10	0,30	0	0,00	4	0,17
Silver	1	0,03	2	0,09	0	0,00
Gold	1	0,03	0	0,00	0	0,00
Pottery	17	0,52	1	0,04	1	0,04
Glass (vessels)	4	0,12	0	0,00	0	0,00
Amber	14	0,42	0	0,00	8	0,33

Table 3.5.4 Grave good materials found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per material and average per grave.

Object type	In pit	Outside pit	Unknown
Seaxes	0	0	1
Shields	1	0	0
Lance heads	1	0	2
Arrowheads	5	0	3
Shears	0	0	1
Knives	6	0	2
Fire steels	1	0	0
Belt buckles	8		2
Plate buckles	2	0	0
Belt plates/strap ends	27	0	5
Brooches	1	0	0
Earrings	1	0	0
Spindle whorls	3	0	1
Rings, miscellaneous	2	0	0
Pottery vessels	10	0	3
Glass vessels	3	0	1
Coins	5	0	1
Beads	90	0	7
Fragments, iron	150	0	34
Fragments, copper alloy	8	0	0
Fragments, pottery	49	0	161

Table 3.5.5 Objects found inside and outside reopening pits in reopened graves.

These findings suggests that the diggers preferred to reopen graves with grave goods, even though they did not systematically remove the objects from the graves. The diggers may also have deposited objects in the graves during reopenings. This possibility will be discussed further below. Graves that only contained a knife and simple belt buckle were often left untouched. These graves could however date

to the cemetery's end phase, when grave reopenings may have been less frequent. The objects that were left behind in the reopened graves sometimes do give clues about objects that were taken. For instance, grave 30 contained a shield grip, indicating that a shield boss may have been removed from the grave. In four other graves, the presence of large dome-shaped rivets also suggested the former

presence of a shield. Five graves yielded fragments of seax and sword scabbards. However, scabbards need not always have been accompanied by a seax or sword. Many reopened graves contained incomplete sets of belt fittings, indicating that plate buckles and belt plates had been taken. For a detailed attempt at reconstructing the original belt sets see cemetery publication (De Haas & Theuvs 2013: 76-77). The relatively low number of pots, compared to the numbers found in other cemeteries in the region, suggests that pottery may also have been removed from the graves.

Table 3.5.4 shows which materials were found in reopened and intact graves. The table only takes into account recognizable objects. Fragments are excluded, because it is often unclear whether these were part of the grave's original inventory or whether they were just mixed with the soil that was used to fill the graves. The data in this table mostly reflects and confirms the results of the previous analysis. Only a few precious metal objects were found: three of silver, one of gold. They were distributed equally over reopened and intact graves. All the other materials were found in much higher numbers in the reopened graves. Copper alloy objects were even completely absent from the intact graves. The differences between intact and reopened graves are significant for iron ($P=0.009$, $F=2.727$), copper alloy ($P=0.003$, $F=3.207$), iron/copper alloy ($P=0.015$, $F=2.576$), pottery ($P=0.008$, $F=2.788$), glass ($P=0.015$, $F=2.564$) and amber ($P=0.037$, $F=2.178$). The numbers of objects found in the indeterminate graves are low, reflecting the fact that the reopening status of graves with few finds is often difficult to determine.

As can be seen in table 3.5.5 most objects that remained in the reopened graves were found in the reopening pits. In fact, no objects or even fragments of objects lay distinctly outside a reopening pit, although there were cases where it was unclear whether an object or fragment lay inside or outside the pit. The majority of objects lay squarely inside the reopening pits. This is once again a testament to the relatively large size and breadth of the

reopening pits in this cemetery. Pottery fragments were the only exception, probably because the grave fills contained many stray pottery fragments that were not part of the graves' furnishings. If an object lay inside the reach of the reopening pit, the diggers could have seen it and left it behind on purpose, especially if the object was large. At least five graves were reopened while there was still and open space within the wooden container, so the visibility inside the grave would have been relatively good.

Addition of objects to reopened graves?

It is unclear whether objects were ever added to the graves when they were reopened. We can hypothesize that the diggers sometimes deposited objects like the lance heads and arrowheads, belt plates and pots in the graves during a reopening. This would explain the relatively high numbers of these types of objects that were found in the reopened graves. The large amount of all object types found inside reopening pits also suggests the diggers may occasionally have deposited something when they reopened a grave. However, these findings could also have come about if the diggers were simply not interested in taking certain objects from the grave furnishings and therefore left them behind. The dates of the objects and graves are also not detailed enough to allow the identification of later additions to the grave's inventory.

The fill of the reopening pit in grave 58 contained a dog's jawbone. This is a rather unique find, both for this cemetery and for Merovingian graves from this region in general. The bone may have been part of the grave's original furnishings or it may accidentally have been mixed with the fill. However an intentional deposit in the reopening pit cannot be excluded. In the same grave, a complete belt set was found in the container's northwest corner. This is an unusual position for this type of object. It may have been moved or even newly deposited in the grave during the reopening.

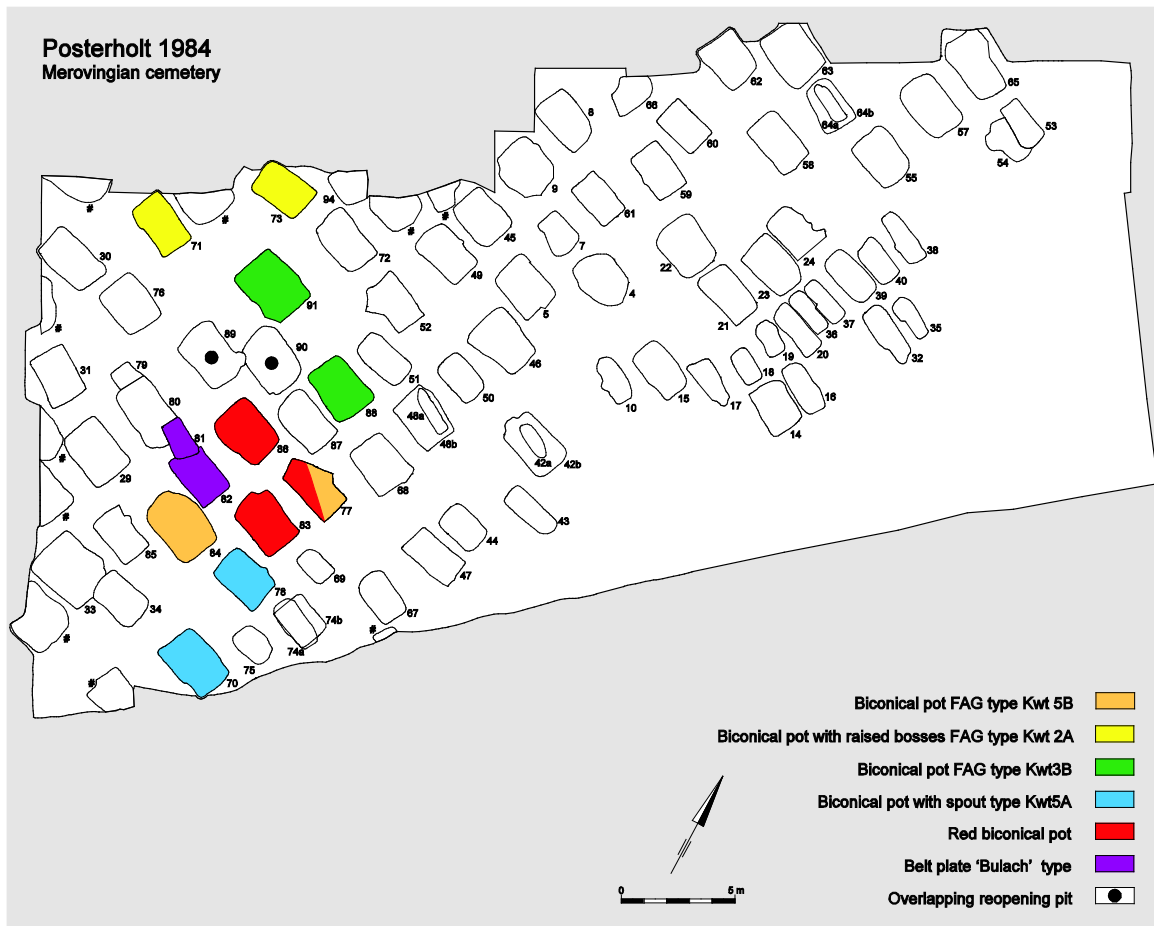


Figure 3.5.9 Distribution of fragmented artefacts over multiple graves. From De Haas & Theuws (2013: 78).

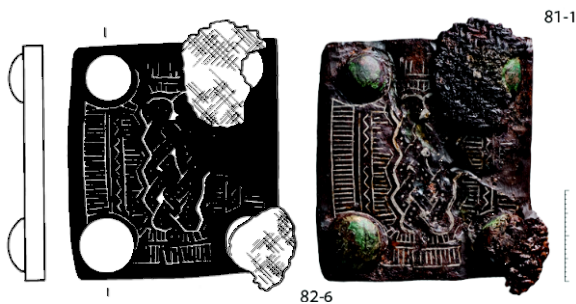


Figure 3.5.10 Broken belt plate. One half was found in grave 82 and the other in possible grave 81. From De Haas & Theuws (2013: 259).

There is some evidence for the redistribution of objects and fragments over multiple graves. In at least three cases, fitting fragments of at least three and possibly five pots were found distributed over multiple burials (graves 78/70, 77/83/86, 88/91 and possibly 71/73 and 77/84). Also, fragments of the same decorated belt plate were found in grave 82 and possible grave 81. Since the objects were not

eroded, it seems likely that they were deposited in the graves soon after breaking. As can be seen in figure 3.5.9, the graves containing these fragments lay in close proximity to one another. Perhaps these graves were reopened simultaneously and backfilled with soil and fragments from a common heap. The diggers may accidentally or on purpose have redistributed fragmented artefacts (and soil) between the graves. It seems likely that the graves which contained the largest portion of fragments were the original contexts of those objects. It is also possible that new broken objects were introduced into the graves during the reopenings, either intentionally or by accident.

Intentional damage

Since the intact graves contained relatively few objects, there are insufficient data to compare the fragmentation and completeness of objects from intact and reopened graves. It is never-

theless noteworthy that the overall degree of artefact fragmentation in Posterholt was quite high compared to other cemeteries in the dataset. Several objects from reopened graves showed indications of deliberate damage. The distributed fragmented pottery vessels mentioned above are one example, but the most striking and obvious case is the decorated belt plate of which fragments were found in contexts 81 and 82. The plate has a star shaped impact fracture that radiates out from the center to the edges. It has been restored with a high degree of perfection, so the fracture may be difficult to see on the photograph in figure 3.5.10. One would not expect a solid iron plate to accidentally break in such a way, so it may have been broken on purpose, possibly with a hammer-like impact tool (De Haas & Theuvs 2013: 77). However, the damage could also have been caused by a metal digging tool that was used to open the grave. Skeletal remains

De Haas and Theuvs (2013: 77) hold the opinion that not only grave goods, but also human bones may have been removed from the reopened graves. Although the general preservation of human bone in Posterholt was quite poor, there was a marked difference between reopened and intact graves. Of the intact graves 91% contained skeletal remains (n=21), while only 36% of the reopened graves yielded human bone or skeletal silhouettes (n=12). Perhaps the disturbances associated with reopenings accelerated the degradation of human remains, but this hypothesis is negated by the finds of bone in reopening pits and the presence of disarticulated remains in some reopened graves. Unfortunately, most human remains recovered from reopened graves were unrecognizable, so there are insufficient data to do a detailed analysis of which bones were taken.

Grave constructions

Grave reopenings in Posterholt occurred more frequently in large graves than in smaller ones. Table 3.5.6 shows the average grave pit widths and lengths of reopened, intact and indeterminate graves. On average, the grave pits of

	Reopened (n=33)	Intact (n=23)	Indet (n=24)
Width	175 cm	129 cm	167 cm
Length	253 cm	233 cm	232 cm

Table 3.5.6 Average width and length of grave pits in reopened, intact and indeterminate graves.

the reopened graves were 46 cm wider and 30 cm longer than the intact ones. However, significance testing on the differences in grave pit length and showed that they were borderline non-significant ($P=0.072$, $F=2.733$). It is unclear whether these difference in size between the reopened and intact graves are a result of conscious choices on the part of the diggers. Since many graves from the cemetery's late phase were relatively small, the difference in size between reopened and intact graves may result from the reopening of fewer small late graves and more large early graves.

3.6 Borgharen

Borgharen-Pasestraat (The Netherlands, province of Limburg, municipality of Maastricht) is a small cemetery located on the site of an abandoned Roman villa. The graves were constructed in and around the hypocaust system, and are oriented approximately west-east parallel to the villa walls. Life in the villa probably had its height in the Middle Roman Period. According to the pottery finds, activities on the site continued into the fifth century, but it is unclear whether there was actual habitation at that time. In the sixth and seventh century the site was used as a cemetery. No indications for later medieval activity were found. The villa and cemetery are situated on a bank of the river Meuse, on an elevated area that is part of a late Pleistocene gravel filled gully. The soil is dark and contains many pebbles and Roman building debris, making grave construction features very difficult to discern. It offer relatively good conditions for preservation of bone material. Since some of the graves were very shallow, it seems likely that the original surface level of the site has eroded, possibly during inundations by the river Meuse.

The first excavations were carried out in 1995 and 1999 by the municipality of Maastricht. Ten inhumation graves were found, of which eight were excavated. Unfortunately, the quality of the field documentation and publications of these excavations (Dijkman 2003; Hulst & Dijkman 2008) was insufficient for the study of grave reopenings. Therefore, graves excavated in these campaigns will not be included in the present analysis. In 2008-2009 the Dutch State Archaeology Service started a second excavation on the site, in cooperation with specialists from the University of Amsterdam. I was a master student at the time, and assisted with the excavation work. The excavators identified 14 additional graves of which seven were fully or partially excavated. The aim of the excavation was to determine whether the materials in the graves were deteriorating, or whether they could be preserved *in situ*. The excavation also served as an experiment for developing an ideal methodology for the excavation of Merovingian burials. The excavation methodology was based on a protocol developed at the University of Amsterdam (Panhuysen et al. 2011). The excavations were carried out with great care and the field documentation was exceptionally detailed. The excavators also took samples for a range of scientific tests, including DNA and isotope analyses and handheld XRF. The preliminary results of these excavations are accessible in a report published in 2011 (Lauwerier et al. 2011). In 2012 the State Archaeology Service returned to the site to finish excavating two graves that had been partially excavated in 2008-2009. The report of this third excavation was published recently (Lauwerier & De Kort 2015).

Unfortunately, the site has been subject to several cases of recent robbery by clandestine metal detector pilots, both between and during the excavations (see below). Since it was determined that the material in the graves was not actively deteriorating, the State Service decided to leave the remaining unexcavated graves *in situ*, protected by layers of sturdy woven plastic sheet, wire netting and gravel.

Inhumation graves

The excavations on the site uncovered 26 grave-like structures of which 15 human inhumations and two horse inhumations were completely excavated. No cremation graves were found in this cemetery. The graves found during the first campaigns will not be discussed here, which leaves seven human inhumations for the present study. The graves all date between 550 and 700 and are evenly distributed over this period.

On the basis of the combined results of DNA analysis, osteological sexing and gender associations of grave goods the burials could be identified as nine adult women, six adult men, two adolescent girls, four young boys and one child of unknown sex. There was one possible case of contradiction between DNA and grave good gendering. The man in grave XIV was buried with a piece of jewelry that is usually associated with women.

At the time of writing, the DNA analyses had not yet been completed, but in a few cases genetic family relationships could already be demonstrated. The man in grave XI was probably the father of the adolescent girl in grave VI and the woman in grave XIII was the mother of at least one of the young boys whose remains were buried near her feet. Isotope analyses were done on seven individuals. Four men had non-local isotope signatures, while three women had local signatures. Given the geological diversity of the area around the site, a non-local signature does not necessarily indicate a distant origin. Similarly, a 'local' signature could also have come about in a non-local environment with a geological composition that was similar to that of the area surrounding the cemetery.

Since the soil features on the site were very difficult to read, few detailed observations about the graves' constructions could be made. As far as could be established based on the positioning of the deceased's bones, it seems that all the corpses decomposed in an open space, indicating that they were probably buried in wooden coffins.

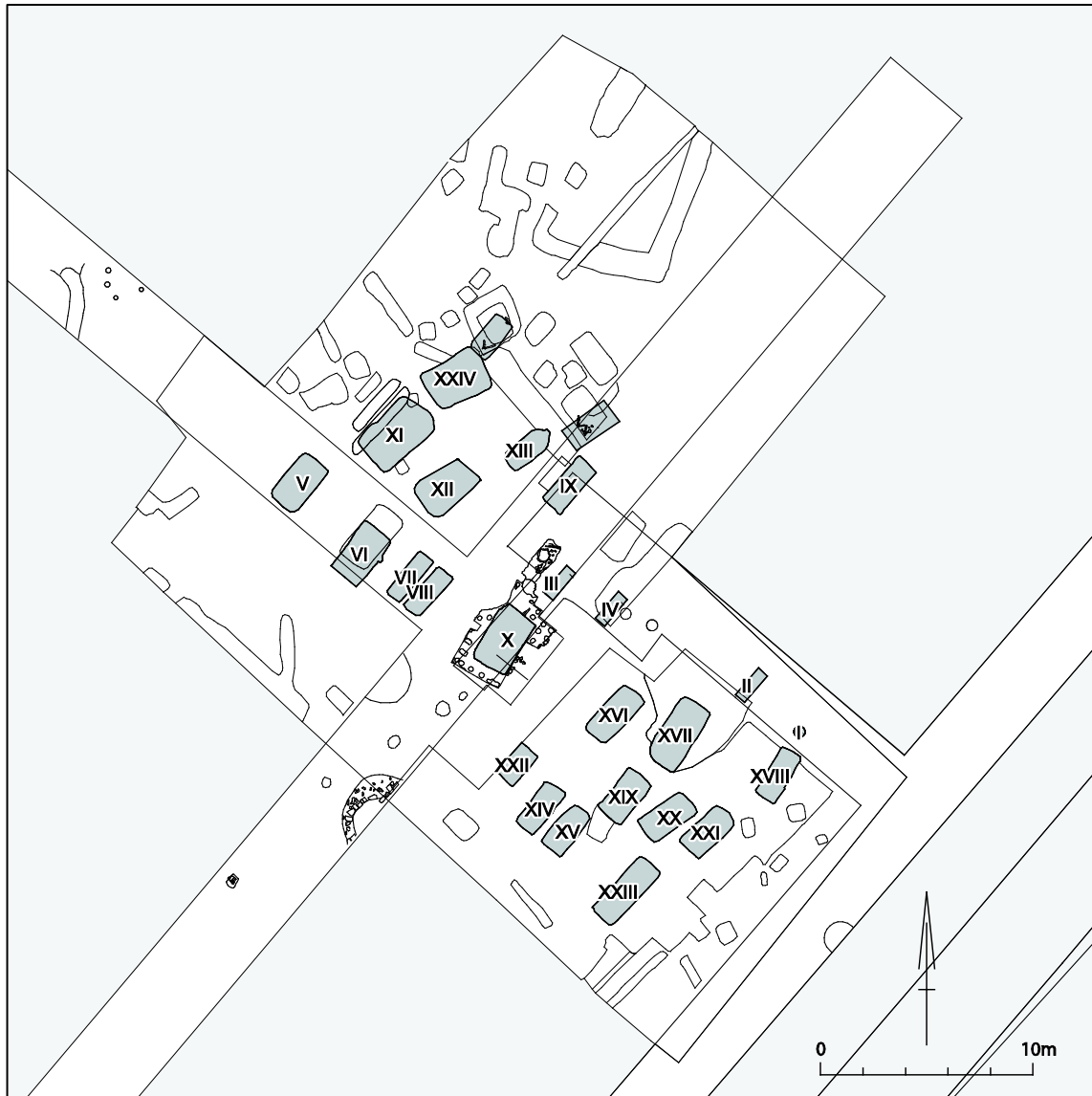


Figure 3.6.1 Map of the cemetery, plotted against the remains of the Roman villa. From Lauwerier & De Kort (2015: 210).

Horse inhumations

The two horse graves both contained young male horses that were killed with a stab to the heart, possibly with a sword. They had not been skinned. It is unclear whether the horse burials were meant to be connected with the burials of particular humans on the cemetery. As far as could be established their graves lacked wooded containers. An axe was found on the jaw of the southern horse, but otherwise the horses were buried with only a few pieces of gear. One of the horses had a local isotope signature and the other had a non-local signature. According to radiocarbon analyses of the horses' bones, the graves prob-

ably date 535-641 and 561-649. The horse graves did not show any indications of post-depositional interventions.

Post-depositional interventions

Various types of post-depositional interventions were observed in the Borgharen cemetery: ancient reopenings and additional burials, but also recent robberies. Some graves may have been subjected to multiple intervention types. The relations between the various interventions are quite complex. There are also indications for disturbances by burrowing animals. Interestingly, the graves that were affected by ancient post-depositional interven-

tions (VI, XII and XIII) are positioned in a loose row running north-west to south-east.

Recent robbery

Since its discovery, the site has suffered a lot of disturbance by clandestine metal detector pilots, both between and during the excavations. Despite security measures, two graves were partially destroyed in 2008 when the excavation was broken into during the night. The recent metal detector disturbances could often be recognized thanks to finds of plastic deep in the graves' fills. In grave XVI, pieces of plastic waste were found near the bottom of the grave. A small tissue bag could be dated quite precisely to the year 1999.

Disturbance by animals

The non-human animal bone that was collected during the excavation offers insights into the animals that may have burrowed into the graves. The graves' fills yielded surprisingly large quantities of bones belonging to small animals like mice, rats, moles, frogs and even foxes. The activities of such animals could have caused the displacement of small objects and bones in the grave. However, when the bones in question were subjected to carbon dating, it turned out that many were older than the presumed dates of the burials in which they were found. They were probably part of the soil used to fill the grave pits. Nevertheless, some bones dated to the Merovingian period and may have belonged to animals that dug their way into the graves, potentially disturbing the contents in the process.

Additional burials

Grave XIII contained two additional burials, which were probably deposited simultaneously. It is a very unusual case, since the bodies that were added to the grave were disarticulated, indicating that the soft tissues had already decomposed. The first individual buried in grave XIII was a middle aged woman. She was buried with two silver earrings. The way the woman's bones were displaced indicates that decomposition took place in the open space of

a wooden container. The grave's foot end was later reopened to deposit the disarticulated remains of two young boys. DNA analysis has shown the oldest boy was the woman's son. The younger child may also have been her son, but this is uncertain. The children's remains were probably wrapped in cloth and accompanied by two small pottery vessels, a belt, beads and an iron knife, some of which were unfortunately stolen when the excavation was broken into during the night in 2008. The disarticulated position of the children's bones indicates that their bodies had skeletonized before they were placed in the grave. Previous to their deposition in grave XIII these remains may have been buried elsewhere or stored above ground. At the time of her death the woman was probably beyond childbearing age, so it seems likely that the children died and were buried before her, and were later redeposited in her grave after she herself had died and was buried. The state of the grave at the time of the additional burials is unclear. The reopening disturbed the woman's foot bones, indicating that her feet had skeletonized by time the remains of the boys were added to her grave. This indicated that some time must have passed between the woman's funeral and the deposition of the boys' remains in the grave.

Grave XII contained the remains of two individuals, a man aged between 20 and 25 and a child of seven to nine years old, probably a boy, based on his grave goods. Figure 3.6.2 shows the distribution of the bones of the man (individual 23, in red) and those of the child (individual 16, in yellow). The arrows indicate how the bones of the man may have been displaced from their original position assuming the man was buried in a standard west-east supine position. The grave contained a number of grave goods, including a pot. The pot was broken and most of the fragments were scattered on the grave's bottom. The excavators hypothesize that the man was probably buried first. His grave was reopened while there was still an open space inside the wooden container, so that when the pot was broken, the fragments were scattered on the bot-

tom. After the container had collapsed and filled with soil, the grave was opened a second time. This time, the man's bones and some of the pottery fragments were mixed with the reopening pit's fill. Figure 3.6.3 shows the horizontal displacement of the man's bones from their presumed original positions. The pattern of the movements suggests that the diggers may have had at least two separate points of entry from which they rummaged the remains, one near the head and chest and one around the legs and feet. It is unclear whether these two entry points represent two separate reopening events, or whether these areas were opened simultaneously.

The burial of the child may date to this first or second reopening, but could also have been a separate event. The child's bones were mostly found on the higher levels of the grave's fill, not on the bottom. Panhuysen (2015: 99) argues that the child's remains may already have been disarticulated when they were deposited in the grave, as was the case with the children in grave XIII. The upper layers of the grave were probably also disturbed by bioturbation. The multiple disturbances in this grave make it difficult to be certain about the order of events that took place here.

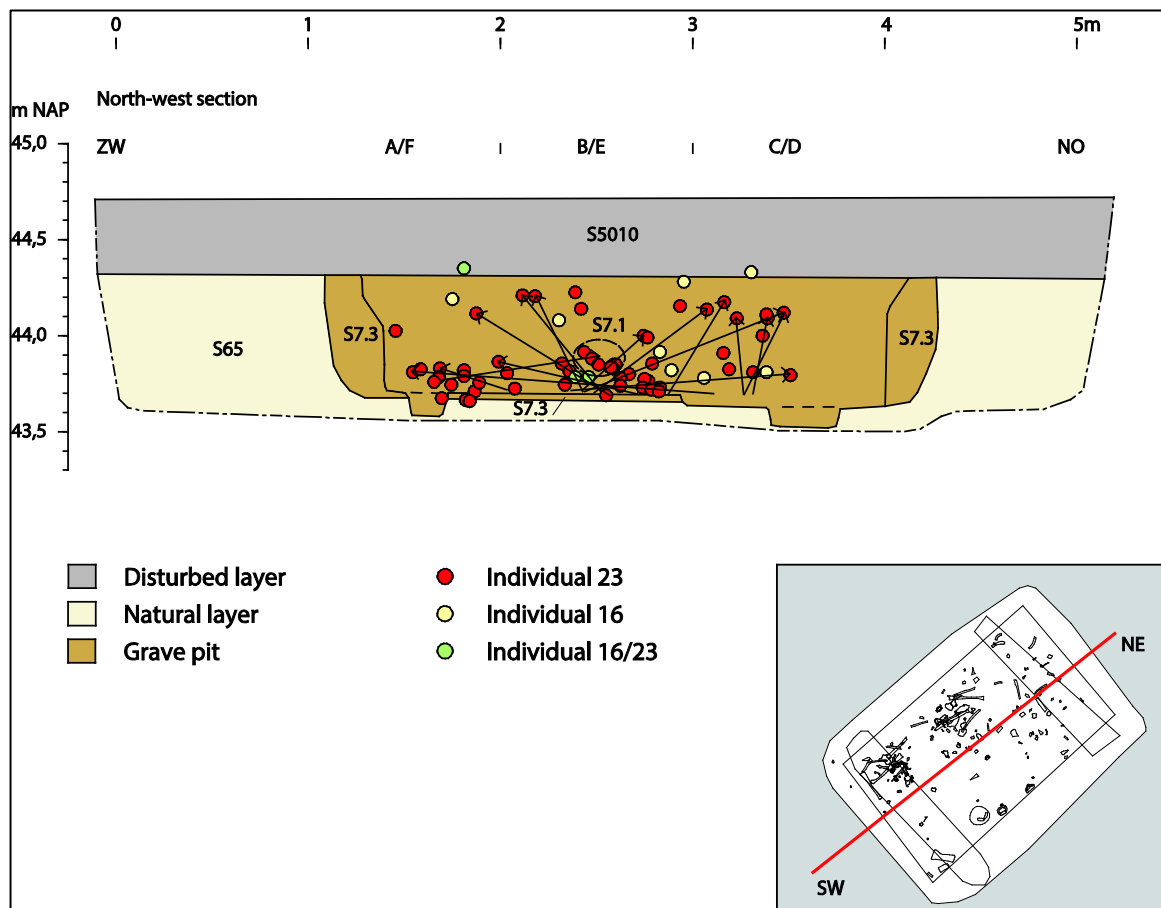


Figure 3.6.2 Vertical distribution of the remains of the man (red) and the child (yellow) in grave XII. From Lauwerier & De Kort (2015: 98).

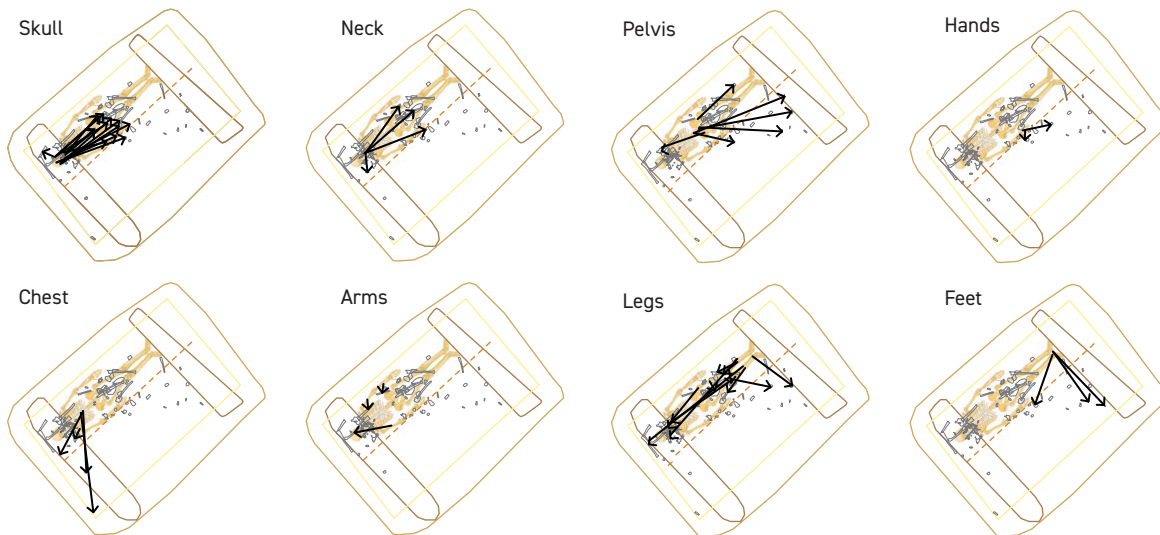


Figure 3.6.3 Attempt to track the horizontal displacement of the man's bones in grave XII. From Lauwerier & De Kort (2015: 203).

Reopenings

Besides the graves with the additional burials, only grave VI revealed traces of an ancient reopening. This grave contained the remains of a girl aged between 9 and 13, the skeletal material of the upper body had a chaotic distribution. The bones were scattered on the grave's bottom, indicating that it was disturbed while there was still an open space within the wooden container. The disturbance could be due to animal activity, but in my opinion, the activities of an animal large enough to cause such significant disturbance would most likely have resulted in a chaotic distribution of bone across the entire grave. Since the intervention is concentrated in the upper body region, it seems more likely that it resulted from intentional human activity. No outline of a wooden container was visible, but wood remains were found on the grave's bottom underneath a copper alloy bowl, indicating that it was probably furnished with a wooden container. Since the fragmented grave goods were scattered both on the grave's bottom and in the reopening pit's fill, the excavators suggest that the grave may have been reopened twice, once while there was still an open space inside the wooden container, and again after the container had collapsed. Alternatively, some of these items could have been mixed

with the grave's fill during backfilling, so they need not represent a second reopening event. If there was a second intervention, it probably dates to the early medieval period, since late medieval and sub-recent material was lacking from the lower parts of the grave's fill. Unfortunately, a detailed analysis of the displacement of bones within the grave, as was done for grave XII, has not yet been conducted for this grave.

Reopening chronology

Given the complexity of the post-depositional interventions in the Borgharen cemetery, reconstructing their chronology is complicated. In the case of grave XIII which contained the remains of the woman and the two boys, the grave goods all date to the seventh century. It is unclear whether the objects that accompanied the boys' remains were added during the deposition in the woman's grave or whether they were taken along from a previous burial site. In any case, the reburial of the boys' remains must have taken place while their relationship with the woman was still remembered, no later than 30-40 years after her death. That would place the reburials in the seventh century or at the start of the eighth century.

As discussed above grave XII may have been reopened multiple times, once while there was

still an open space within the wooden container, once after the container had collapsed (possibly for the child's burial). The grave dates to 600-640, so the first reopening could have taken place between 600 and 675 and the second after 635. Grave VI was probably reopened while the wooden container was still intact. Since this grave dates to 550-625, the reopening probably took place between 550 and 600.

Grave goods

The graves in the Borgharen cemetery are relatively well furnished with objects. This is true for both the intact and reopened graves. Given the small number of graves, a statistical comparison between the grave goods found in reopened and intact graves is not possible. This paragraph will therefore be restricted to a few anecdotal observations.

Grave XII contained several sheath fragments, rivets and a sword pommel that suggest a sword and perhaps a seax may originally have been present in this grave. It is unclear whether the objects in question were removed during the first or second reopening. Other finds from this grave include a broken but nearly complete pot, a gold coin, an arrowhead, an axe, a shield boss and grip, and a pair of stirrups.

Grave VI contained 190 glass beads, 15 silver necklace pendants, a copper alloy bowl, a glass beaker, two pottery vessels, a number of copper alloy buckles and leg strap fittings, an iron belt chain, an iron key, a kauri shell, a golden and a copper alloy coin and a copper alloy decorative pin. Given the rich furnishings of the grave, one would expect the deceased to be buried with one or more brooches. Since this was not the case, and considering the concentrated disturbance in the chest area, it is possible that the brooches were taken during the reopening. Since the grave was reopened while the wooden container was still intact, the diggers could easily have removed more objects from the grave, but it seems they chose to take only a few specific items.

3.7 Wijchen

The Wijchen-Centrum cemetery (The Netherlands, province of Gelderland, municipality of Wijchen) was discovered in 1981 by local amateur archaeologists. Excavations were started by the State Archaeology Service in 1991, when the municipality of Wijchen decided to renovate the town center. Further excavations took place in 1992 and 1996. The excavators uncovered approximately 350 inhumation and cremation graves dating to the later Roman and early medieval period. A large section of the cemetery probably remains unexcavated. Several sites in the surrounding area have yielded traces of late Roman habitation and early medieval settlements and pottery production, at least some of which were probably contemporaneous with part of the cemetery's use period.

At the time of the excavations, there were no legal requirements for the publication of archaeological finds, so the excavation material was stored for later study. Tom Hazenberg dedicated his master thesis to the analysis of the cemetery (Hazenberg 1993), but the work remained unpublished. In 2010, the cemetery finds were finally published in detail by Stijn Heeren and Tom Hazenberg as part of the NWO funded Odyssee backlog program (Heeren & Hazenberg 2010). The present analysis is based on this publication, in addition to a table containing height measurements for the finds, which was downloaded from the DANS Easy repository for archaeological data.³

The cemetery was situated in a river dune landscape associated with the river Meuse, near the town of Nijmegen. The site was located along the top and flank a sandy dune. The soil conditions are quite favorable to the preservation and visibility of archaeological features, even though wood was only preserved as soil discolorations. Unfortunately, this type

³ WC91_bijgift_informatie.csv downloaded from <https://easy.dans.knaw.nl/ui/datasets/id/easy-dataset:34099/tab/2>, accessed on 13-09-2012

of porous soil quickly leaches minerals from bone material, so unburned skeletal remains were poorly preserved. Unfortunately, due to the intensive use history of the site, the upper layer of the cemetery was disturbed and of many graves only the bottoms were preserved.

Inhumation graves

The excavation and trial trenches yielded 302 human inhumation graves and seven possible inhumation graves. The excavated graves date between the fifth and seventh century, with majority dating to the seventh century. No graves could be dated after 650, but some of the graves without datable grave goods may nevertheless date to the end of the seventh and the beginning of the eighth century. The unexcavated section of the cemetery may also contain graves from a later phase.

The graves were all approximately oriented west-east, with variations that probably correlate to the cemetery's chronological phases. Most graves were laid out in a row-like pattern, but there were a lot of overlaps and intercuts between older and younger graves. Most people were buried in simple wooden coffins (167 graves) or trench graves (101 graves). A small number of graves (16) were furnished with a chamber construction. The choice of grave constructions seems to have changed during the cemetery's use period. The graves dating to the cemetery's first phase (300-450) had long narrow coffins. In the second phase (450-530) wooden containers were often lacking. The third phase (530-570) was characterized by very diverse grave constructions. In the fourth phase (570-640) comparatively broad containers were favored. Most deceased were buried with at least a few grave goods, similar to what is found in other Merovingian cemeteries. A number of graves lacked preserved grave goods, but these may nevertheless have been furnished with items made from perishable organic materials like textile, bone and wood. Burned remains of such objects were found in the cremation graves.

Of the 302 inhumation graves, 49 (16%) contained objects that are usually associated

with women and 55 (18%) contained objects that are usually associated with men. One double burial contained grave goods associated with both women and men. The remaining 197 graves (65%) yielded only gender neutral grave goods, or no grave goods at all. Only two contexts revealed unburnt skeletal remains of sufficient quality to allow osteological analysis. Possible grave 16 yielded two long bone fragments of woman or adolescent person. Grave 255 probably held a adult woman. Neither of these contexts contained gender specific objects.

Cremation graves

The excavation yielded at least 36 cremations, which amounts to approximately 10% of all graves. Additional human cremated bones were found mixed with the fills of the inhumation graves and the surrounding soil. These may have been the remains of disturbed cremation graves. The cremation graves and scattered cremated bones were distributed more or less evenly over the cemetery, without conspicuous concentrations. The oldest disturbed cremation graves in the cemetery probably date to the fourth century, before the earliest inhumation graves. Most cremations date to the fifth and sixth centuries. The youngest cremations can be dated to the first half of the seventh century. As far as could be established, all cremation graves consisted of small pits in which the cremation remains were buried, without any containers except possibly a wrapping of leather or cloth. Most of the graves yielded less bone than expected from a human cremation, indicating that only part of the deceased's bones were deposited in the graves. The grave goods in the cremation graves were similar to those found in the inhumation graves, although they were somewhat fewer in number. Both burnt and unburnt objects were present. The remains of four children, one adolescent and 27 adults were found. Of the adults, four individuals could be identified as male and four as female. Two additional cremations contained grave goods that are usually associated with men and women respectively. There were no cases of

contradiction between the osteological sex and the gendering of the grave goods.

Post-depositional interventions

Of the 302 inhumation graves, only 22 (7%) showed distinct traces of contemporary post-depositional interventions. A total of 63 graves (21%) had most likely been left intact after the funeral. For the remaining 217 graves (72%), there was insufficient evidence to determine whether they had been subjected to an intervention or had remained intact. Given the large number of indeterminate cases, in reality the percentages of reopened and intact graves were probably higher. If the distribution of the indeterminate group is similar to that of the other graves, we can postulate a total 79 graves with a post-depositional intervention (26%) and 223 intact graves (74%). The reopened

graves seem to be distributed relatively evenly over the cemetery. There may be a few concentrations, but given the large number of graves of which the reopening status could not be determined, it is unclear whether these concentrations reflect historical reality or whether they result from differences in the graves' preservation.

Apart from the 16 cremations that were cut by inhumation graves, there was no evidence for post-depositional interventions in the cremation graves. Perhaps these graves were not reopened like the inhumations were. However, traces of potential post-depositional interventions would have been more difficult to recognize, since the cremation graves were more shallow and had a simpler construction than the inhumations. Absence of evidence need not be evidence of absence in this case.



Figure 3.7.1. Map of the Wijchen cemetery. The black stars indicate the locations of reopened graves. After <https://easy.dans.knaw.nl/ui/datasets/id/easy-dataset:34099/tab/2> downloaded on 11-12-2014.

	Male	Female	Neutral	Total
Reopened	16% (n=9)	12% (n=6)	4% (n=7)	7% (n=22)
Intact	35% (n=19)	57% (n=28)	8% (n=16)	21% (n=63)
Indet.	49% (n=27)	31% (n=16)	88% (n=174)	72% (n=217)
Total	100% (n=55)	100% (n=49)	100% (n=197)	100% (n=301)

Table 3.7.1 Percentages of graves with typical men's, women's and gender neutral grave goods that were reopened or remained intact. The grave containing both men's and women's grave goods was excluded.

As can be seen in table 3.7.1 there are slightly more reopened graves containing objects associated with men, while there is a higher percentage of intact graves containing objects associated with women. The Z-test test showed that there was a statistically significant difference between the numbers of reopened graves with male and neutral grave goods ($P=0.001$, $F=3.445$) and between reopened graves with female and neutral grave goods ($P=0.015$, $F=2.434$). The numbers of reopened graves with men's and women's grave goods did not differ significantly, but there was a significant difference for the intact graves with men's and women's grave goods ($P=0.021$, $F=-2.311$). This lack of significant differences may be due to the low number of reopened graves and the high number of indeterminate cases. We can conclude that the diggers appear to have preferred graves with gendered grave goods over graves with neutral grave goods, but it is unclear whether they also had a significant preference for graves with men's or women's grave goods.

Intercuts

The post-depositional interventions observed in the Wijchen cemetery were reopenings and intercuts between graves. In the graves that were both reopened and cut by a later grave, it is often difficult to determine whether the intercut and reopening were separate events or occurred simultaneously. No indications were found for additional burials in existing graves. Intercuts between graves were the most common type of post-depositional intervention in this cemetery. In total, 35% (n=107) of the inhumation burials were cut by a later grave. Intercuts occurred both in reopened and in unopened, otherwise intact graves. In total,

50% of the reopened graves and 34% of the 'intact' graves had been cut by a later grave. Six graves may have been reopened solely with an intercut, without any traces of a separate reopening pit (64, 118, 131, 132, 238, 260, 283). These invasive intercuts often cut through the older graves' coffins, indicating that the wood had decayed when the intercuts took place. It is unclear whether the diggers used the intercutting grave pits as starting points from which to extend a reopening pit into the older graves, but the relatively high percentage reopened graves with intercuts makes it likely that they did.

Reopenings

After subtracting the seven graves that were probably reopened solely by a later intercutting grave, we are left with 15 graves that revealed indications straightforward reopening. Since very little skeletal material was preserved and only four graves revealed reopening pit traces, it was difficult to reconstruct the diggers' methods and the extent of the reopenings.

As far as could be determined, all reopening pits reached down to the bottom level where the skeleton and grave goods lay. Table 3.7.2 shows which parts of the graves were reopened. In nearly all the graves, the reopening pit covered multiple areas. The higher the percentage listed in the table for a particular section of the grave, the higher the frequency with which those sections of the graves were reopened. Most reopenings seem to have focused on areas inside the wooden container, especially on the thorax/pelvis area which was almost always reopened. Many reopenings also reached into the area of the head/neck and the legs/feet. Reopening pits did occasionally ex-

	Head end	Head/neck	Thorax/pelvis	Legs/feet	Foot end	Sides
Men (9)	11% (n=1)	56% (n=5)	100% (n=9)	44% (n=4)	0% (n=0)	11% (n=1)
Women (6)	50% (n=3)	83% (n=5)	100% (n=6)	66% (n=4)	17% (n=1)	17% (n=1)
Neutral (7)	14% (n=1)	57% (n=4)	86% (n=6)	71% (n=5)	43% (n=3)	14% (n=1)
All graves (22)	23% (n=5)	64% (n=14)	95% (n=21)	59% (n=13)	18% (n=4)	14% (n=3)

Table 3.7.2 Placement of reopening pits in graves with men's and women's grave goods.

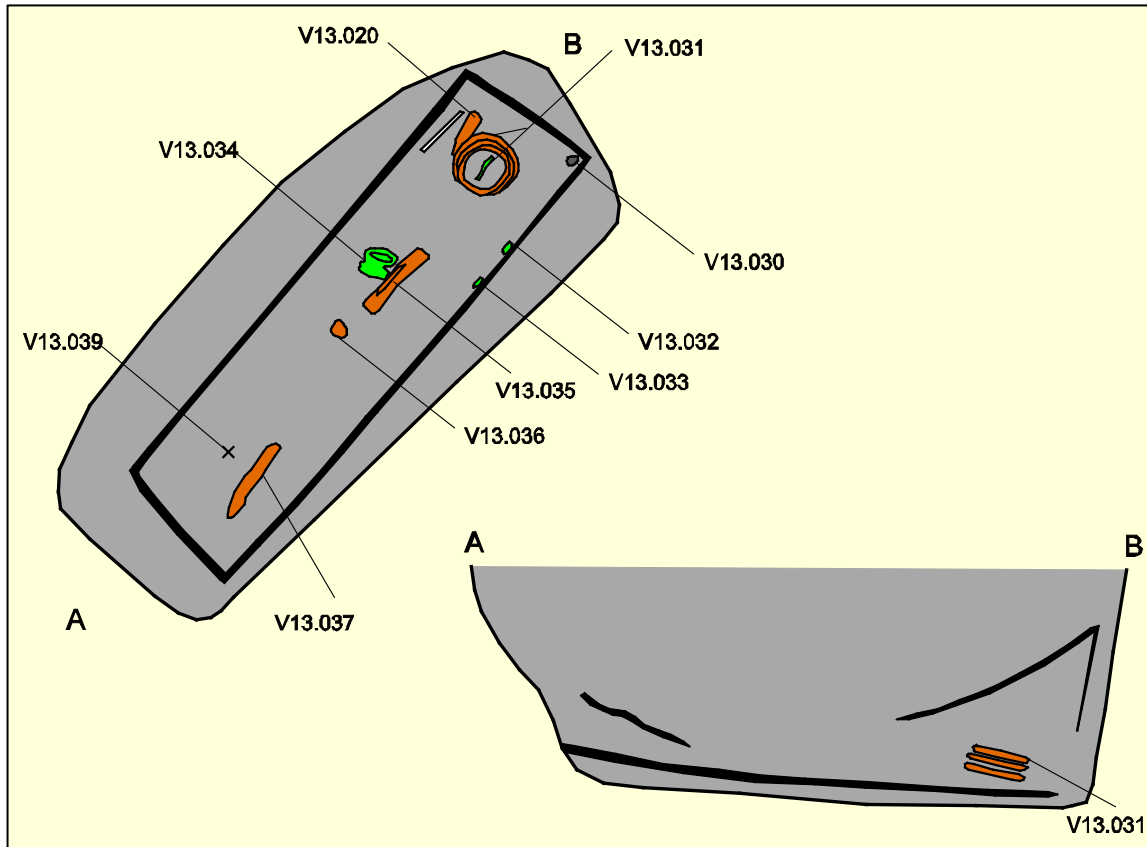


Figure 3.7.2 Grave 185. The belt fittings 13.032 and 13.033 were found at a distance from the buckle 13.034. The section drawing AB revealed a hole in the coffin lid. From Heeren & Hazenberg (2010: 444).

tend beyond the confines of the coffin, reaching either into the head end, foot end or sides of the grave pit. Only a few graves seem to have been accessed over the entire length from head end to foot end (132, 152, 283). Two of these were probably reopened by intercutting younger graves. In six graves the entire coffin area had been accessed.

There is very little difference between the reopening pits in graves containing typical men's and women's grave goods. In both grave types, the reopening pits seem to have focused most often on the thorax/pelvis region. However, the reopening pits in graves that contained objects associated with women seem to have been larger, reaching more often into the

head/neck area and to a lesser extent also into the legs/feet area. Only the difference for the reopening of the foot end between graves with male and neutral grave goods was statistically significant ($P=0.029$, $F=-2.179$).

Reopening chronology

Six graves were reopened while the wooden container was still intact (33, 53, 74, 77, 99, 185). There was only one clear case of a reopening that took place after the container had collapsed (grave 132), but this was a reopening by an intercutting grave. For the remaining graves, it was not possible to determine the state of the container at the time of the reopening.

The inhumation graves in the excavated section of the cemetery probably date between the fifth and the first half of the seventh century. The reopened graves span this entire range, from 400 to 650. However, only a few of the reopenings that took place in graves with intact coffins could be dated precisely. Assuming container collapse occurred within 35 years after the burial, the reopenings that could be dated based on the state of the container took place in 400-485, 570-675 and 605-675.

The reopening of grave 185 between 400 and 485 is probably among the earliest in the research area. The indications that it had indeed been reopened were rather subtle (see figure 3.7.2). It is fortunate that the excavators made a section drawing of this grave, which shows that there was probably a hole in the coffin lid. This cavity could have resulted from the collapse of the coffin, but the state and location of the finds in the grave offer further indications that it had been reopened and the grave goods had been rummaged. The *kerbschnitt* belt fittings 13.032 and 13.033 were found along the side of the coffin, away from the belt buckle 13.034 in the center. The grave also contained a large sword blade fragment. Since nearly all the finds lay on the coffin's bottom, the reopening probably took place while there was still an open space inside the wooden container. The upper levels of grave 185 were cut by grave 180, but this grave dates to 605-640, long after the wooden container in grave 185 had decomposed, so it is unlikely that the reopening took place during the intercut.

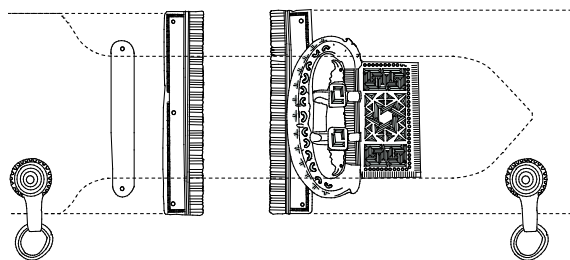


Figure 3.7.3 Reconstruction of the belt from grave 185, with the two fittings attached near the buckle. From Heeren & Hazenberg (2010: 39).

The end date of the reopenings in the Wijchen cemetery is unclear. The last dated reopening took place between 605 and 675, but reopenings after this date and even after the end of the cemetery's use period cannot be excluded. The reopening pit in grave 136 contained high and late medieval pottery, but it is unclear whether this material was deposited during the reopening or whether it consists of stray fragments that found their way into the surface indentation of the pit at a later time and were mixed into the fill by ploughing or bioturbation.

Grave goods

Because of the relatively low number of reopened graves in this cemetery, a comparison between the objects found in reopened and intact graves is of limited value. Nevertheless, a few interesting observations can be made (table 3.7.3). First of all, the average numbers of objects per grave show that most weapon types were found equally often in reopened as in intact graves. The only exception were shield bosses and lance heads, which showed higher averages in the reopened graves. On the other hand knives, simple belt buckles, belt plates, brooches, pots and beads were all found more frequently in intact graves. The differences between intact and reopened graves are significant for seaxes ($P=0.026$, $F=-2.273$), decorative pins ($P=0.045$, $F=-2.050$), knives ($P=0.013$, $F=-2.556$), belt plates/strap ends ($P=0.012$, $F=-2.589$), pots ($P=0.001$, $F=-3.406$) and beads ($P=0.001$, $F=-3.407$). This is reminiscent of the patterns observed in some other cemeteries in the research area, where typical men's grave goods were frequently left behind, while typical women's grave goods were more often removed when graves were reopened. As for most cemeteries the number of objects found in the indeterminate graves was low, reflecting the fact that the reopening status of graves with few finds is often difficult to determine.

The objects that were left behind in the reopened graves sometimes give clues about what was taken. The belt sets in the reopened graves 33 and 132 seem to be missing their buckles

or plate buckles. The seax in grave 99 and the sword in grave 185 were broken and many of the fragments were missing. Reopened grave 53 contained a shield grip, but was lacking a shield boss. However, this phenomenon was perhaps not limited to reopened and indeterminate graves. Grave 38, which appeared to be intact, was also missing a shield boss. Given the difficulty of recognizing reopened graves in this cemetery, it cannot be excluded that this grave had been reopened even though the reopening did not leave identifiable traces. The reopened graves also contained many more indeterminate fragments than the intact and indeterminate graves (the respective aver-

ages were 6.55, 0.63 and 3.47), indicating that objects were often fragmented during the reopenings.

As can be seen in table 3.7.5 the objects that remained in the reopened graves were often found inside the reopening pits. Almost no objects or even fragments of objects clearly lay outside a reopening pit, although there were many cases where it was unclear whether an object or fragment lay inside or outside the pit. Many of the objects that were left behind were quite large, especially the weapons. The diggers would probably have seen these objects in the grave and could have taken them if they wanted to.

Objects	Reopened (22 graves)		Intact (63 graves)		Unknown (217 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Swords	1	0,05	1	0,02	2	0,01
Seaxes	2	0,09	7	0,11	2	0,01
Shield bosses	4	0,18	1	0,02	4	0,02
Axes	1	0,05	3	0,05	4	0,02
Lance heads	8	0,36	8	0,13	14	0,06
Arrowheads	4	0,18	11	0,17	12	0,06
Buckets	2	0,09	0	0	0	0
Tweezers	0	0	1	0,02	3	0,01
Fire steels	2	0,09	3	0,05	4	0,02
Knives	4	0,18	25	0,40	30	0,14
Purse buckles	1	0,05	0	0	0	0
Belt buckles	3	0,14	93	1,48	38	0,18
Plate buckles	4	0,18	9	0,14	10	0,05
Belt plates/strap ends	5	0,23	42	0,67	33	0,15
Leg strap fittings	4	0,18	2	0,03	2	0,01
Belt pendants	0	0	5	0,08	0	0
Brooches	2	0,09	18	0,29	1	0
Finger rings	0	0	2	0,03	0	0
Spindle whorls	1	0,05	2	0,03	12	0,06
Ring miscellaneous	1	0,05	2	0,03	10	0,05
Pots	5	0,23	26	0,41	22	0,10
Glass vessels	0	0	3	0,05	1	0
Coins	1	0,05	5	0,08	5	0,02
Decorative pins	0	0	4	0,06	0	0
Necklace pendants	1	0,05	6	0,10	3	0,01
Beads	26	1,18	802	12,73	115	0,53

Table 3.7.3 Grave goods found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per type and the average per grave.

The cemeteries – analyzing the data

Objects	Reopened (22 graves)		Intact (63 graves)		Unknown (217 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Iron	50	2,27	125	1,98	165	0,76
Copper alloy	16	0,73	74	1,17	68	0,31
Iron/copper alloy	1	0,05	9	0,14	15	0,07
Silver	2	0,09	16	0,25	1	0,00
Gold	1	0,05	7	0,11	3	0,01
Pottery	6	0,27	30	0,48	33	0,15
Amber	2	0,09	178	2,83	13	0,06

Table 3.7.4 Grave good materials found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per material and average per grave. Fragments were excluded.

	In pit	Outside pit	Unknown
Swords	1	0	0
Seaxes	2	0	0
Shield bosses	3	0	1
Axes	1	0	0
Lance heads	3	1	4
Arrowheads	3	0	1
Fire steels	1	0	1
Knives	2	0	2
Purse buckle	1	0	0
Belt buckles	1	0	2
Plate buckles	4	0	0
Belt plates/strap ends	4	0	0
Leg straps	0	0	4
Brooches	2	0	0
Spindle whorls	1	0	0
Rings, miscellaneous	0	0	1
Pots	1	0	4
Coins	0	0	1
Necklace pendants	0	0	1
Beads	8	0	18
Bucket	0	0	2
Fragments iron	21	0	12
Fragments copper alloy	1	0	1
Fragments pottery	14	0	90

Table 3.7.5 Objects found inside and outside reopening pits in reopened graves

	Reopened (n=22)	Intact (n=63)	Indet (n=217)
Grave pit width	114 cm	98 cm	100 cm
Grave pit length	244 cm	214 cm	210 cm
Coffin width	71 cm	72 cm	69 cm
Coffin length	211 cm	170 cm	194 cm

Table 3.7.6 Average width and length of grave pits and wooden containers in reopened, intact and indeterminate graves.

Table 3.7.4 shows which materials were found in reopened and intact graves. The table only takes into account recognizable objects, indeterminate fragments were excluded because their origin is unclear. The data in this table largely reflects and confirms the results of the analysis of the grave good types. Relatively few precious metal objects were found, but most of them came from intact graves. Copper alloy and hybrid iron/copper alloy objects, pottery and amber were also found in higher numbers in the intact than in the reopened graves. Iron on the other hand, was slightly more prevalent in the reopened graves. The differences between intact and reopened graves are statistically significant for iron ($P=0.003$, $F=-3.117$), copper alloy ($P=0.009$, $F=-2.668$), silver ($P=0.023$, $F=-2.330$), glass ($P=0.004$, $F=-3.004$) and amber ($P=0.015$, $F=-2.513$).

Grave constructions

As can be seen in table 3.7.6, the reopened graves were slightly larger than the intact graves. On average, the grave pits of the reopened graves were 16 cm wider and 30 cm longer than the intact ones. The coffins in reopened graves were actually slightly more narrow than the coffins in intact graves, but they were 41 cm longer. Significance testing was done on the differences in grave pit length which were overall significant ($P=0.014$, $F=4.324$). With the post-hoc Tuckey test, significant differences were found between reopened and intact graves ($P=0.046$) and between reopened and indeterminate graves ($P=0.010$). The difference between intact and indeterminate graves was not significant. It is

unclear whether this difference in size between the reopened and intact graves is a result of conscious choices on the part of the diggers or whether it is caused by the changes in preferred grave pit and coffin size throughout the cemetery's use period. The size difference in the coffins suggests that reopenings may have been prevalent in the cemetery's early phase, which was characterized by long narrow coffins.

3.8 Lent-Lentseveld

The cemetery of Lent-Lentseveld (The Netherlands, province of Gelderland, municipality of Nijmegen) was excavated in the fall of 2011 by the archaeology department of the municipality of Nijmegen (BAMN), in cooperation with specialists from Leiden University, the University of Amsterdam and the VU University. Despite the fact that it was a rescue excavation, nearly all graves were carefully excavated and documented in detail. The upper levels of the inhumation graves were uncovered with a mechanical excavator. The lower levels were excavated by hand with trowels, following an adapted version of the protocol that was developed for the excavation of the Borgharen cemetery (Panhuysen et al. 2011). An osteologist was present at the excavation and samples were taken for a range of modern scientific research methods, including DNA and isotope analysis. Unfortunately the first five graves which were unearthed before the official start of the official excavation were less well documented. The excavations of site has not yet been fully published.

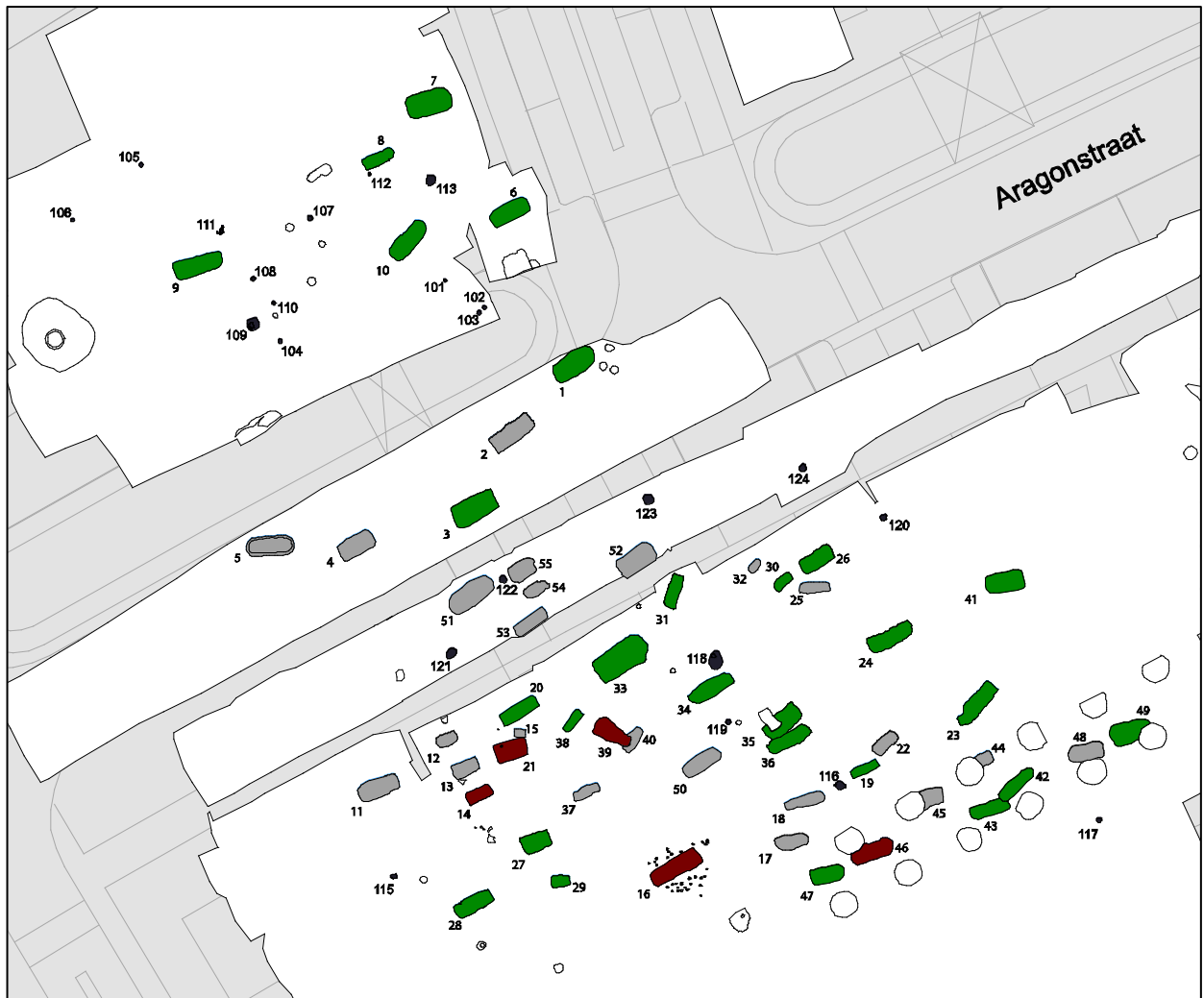


Figure 3.8.1 Map of the cemetery. Red=reopened inhumation, green=intact inhumation, light gray=indeterminate inhumation, dark gray=cremation

The present analysis of the reopened graves is based on a preliminary report (Hendriks 2013) and additional information provided by excavator Joep Hendriks and osteologist Constance van der Linde in personal communications.

The cemetery was located in the Waalsprong area, near the river Waal. The soil consisted of sediments that had been deposited during the last Ice Age. Post-glacial rivers eroded these sediments and deposited younger sediment consisting of sand, clay and silt. The cemetery site was situated between a silted up riverbed and an elevation of the gully sand. Most of the shallow cremation graves were found in the transition between the early medieval surface and later agricultural layers. The deeper inhumation graves had usually been dug into the silty clay layers and the underlying sand. The

soil conditions were quite favorable to both the visibility of archaeological features and the preservation of unburnt and cremated bone.

Inhumation graves

The excavation uncovered 50 inhumation graves and 20 cremation graves, dating to the fifth and sixth centuries. Since quite large stretches between the graves are unexcavated, it is likely that more graves remain *in situ*. A number of graves in the southern section of the cemetery were slightly disturbed by pits dug during World War II (see figure 3.8.1). An earlier excavation in 1972 and 1975 by the State Archaeology Service in the nearby Azaleastraat yielded another cemetery consisting of 120 graves, that dated to the seventh and eighth centuries (Van Es & Hulst 1991).

These graves are not included in the present analysis. At the moment of writing, the 20 cremation graves that were excavated have not yet been analyzed in detail. According to the excavators no post-depositional interventions were observed in the cremation graves. Most of the inhumation graves were oriented approximately south-west to north-east, except grave 39, which was oriented north-west to south-east. The graves were not organized in strict rows, but rather lay scattered over the cemetery. As far as could be established, nearly all the dead were buried in supine position with extended legs, except for the child in grave 15 whose remains were bundled up. Nearly all graves contained at least a few grave goods and many graves were quite richly furnished. Approximately half of the graves had wooden containers of various sizes. There were two chamber graves, 19 simple wooden containers, 27 trench graves without wooden containers and two graves where the type of construction could not be determined.



Figure 3.8.2 The bundled remains of the child from grave 15.

The combined results of osteological sexing and gender associations of grave goods could identify the burials of 15 adult women, 14 adult men, three girls, four boys and 11 children of unknown sex. There were no cases of contradiction between the osteological sex and assumed grave good gender. The child's grave 21 contained both beads and weapons, including a sword. The other graves had objects associated with one gender, or neutral grave goods.

Possible reburial

Various types of post-depositional interventions were observed in the cemetery of Lent: reopenings, intercuts between graves and possibly a reburial. There were no graves with additional burials.

Grave 15 had a rather unusual appearance compared to other graves in the cemetery. It consisted of a small amorphous pit dug above the corner of the foot end of grave 21. It did not have a wooden container. Apart from four pottery fragments and a piece of flint, it did not yield any objects. It contained the remains of a six year old child that had been curled up into a tight bundle. The child's skull was found a few centimeters above the rest of the body, separated from it by a layer of clay. Since there were no indications of a forceful *peri-mortem* decapitation, it seems likely that the soft tissues had already partially decomposed before the child was buried here. Perhaps the child was previously buried elsewhere, or the remains had been stored above ground. Alternatively, this grave was reopened after decomposition had set in to separate the skull from the rest of the body. This context is reminiscent of the disarticulated burials of the young boys at the foot end of a woman's grave in the Borgharen cemetery. It would be worthwhile to know whether the fingers and toes of the child in grave 15 were found still articulated, as



Figure 3.8.3 Bottom level of grave 46. The cranium can be seen lying on the pelvis. Photograph by municipality of Nijmegen.

this would indicate whether or not the body had started to decompose before it was deposited in the grave.

Intercuts

There were only two intercuts between graves in the Lent cemetery. The foot end of grave 39 was dug into the upper layers of the head end of grave 40. The bottom layer of grave 40 was probably not reopened. Grave 15 was dug into the upper layers of a corner of the foot end of grave 21. The pit of grave 15 was so shallow that the intercut with grave 21 only became apparent after grave 15 had been taken out and the excavators dug down to the lower levels.

Reopenings

Of the 50 inhumation graves five (10%) showed clear signs of having been reopened (graves 14, 16, 21, 39 and 46). At least 27 graves (54%) had most likely been left intact

after the funeral. For the remaining 18 graves (36%), there was insufficient evidence to determine whether they had been subjected to an intervention or had remained intact. Given the large number of indeterminate cases, the percentage of reopened graves is probably higher than 10%. If the distribution of the indeterminate group is similar to that of the other graves, we can postulate a total of eight reopened graves (16%) and 42 intact graves (84%). The reopenings seem to be confined to the cemetery's south-western section. The five reopened graves probably contained the remains of one adult man, one adult woman, one adult of whom the sex and gender could not be determined and two male children.

Reopening methods

Five graves showed indications that they had been reopened. In the four cases the graves were reopened while the wooden containers were still intact. The fifth grave may not have

been furnished with a wooden container. In the graves with wooden containers the effects of the post-depositional interventions were only visible on the graves' bottoms where the excavators found disarticulated skeletal material. Despite the relatively good visibility of archaeological features as soil discolorations, no reopening pits were observed. This suggests that the diggers may have reopened the graves by removing the grave pits' entire upper fill and the wooden containers' lids. There were significant differences between the ways the reopenings were carried out, especially in the degrees to which the skeletal remains had been rummaged.

In grave 46, the only indication that the grave had been reopened was the fact that the deceased's cranium had been placed on the pelvis. There were no cut marks on the skull and the vertebra and mandible were left *in situ*, indicating that the cranium was moved after the tissues connecting it to the mandible had decomposed. Apart from the displaced cranium, the skeleton showed no indications that it had been disturbed after the onset of decomposition. The cranium could only have been separated from the mandible and placed on the pelvis in this way if the grave was reopened after the skull had skeletonized. The fact that the reopening left no other traces indicates that the wooden container had not yet started to decompose when the procedure was carried out. It is possible that the coffin was kept above ground or only given a preliminary cover until the body had decomposed enough to allow the displacement of the skull. Curiously, this grave contained an additional *pars basilaris ossis occipitalis*, a bone from the bottom of the cranium. This bone could not be matched to any of the skeletons found in the cemetery.

The reopenings in graves 14, 16, 21 and 39 seem to have been carried out with less precision as the deceased's bones had a much more rummaged appearance. Since most of the graves were probably reopened while there was still an open space within the wooden container, it would have been relatively easy for the diggers to select any items they may have

wanted to remove without disturbing the skeleton. The fact that the bones had nonetheless been rummaged substantially, suggests that the disturbance may have been deliberate. These marked disturbances are especially interesting since the graves in question still contained many grave goods, so it seems that few objects were removed during the reopenings.



Figure 3.8.4 Reopened grave 16. The red arrows indicated the locations of the displaced articulated tibiae and fibulae.

In grave 14, which probably contained the remains of a young boy, the diggers seem to have focused on the legs, although the left arm was also displaced. Grave 16 in which an adult woman was buried, revealed a similar disturbance of the leg area and possibly the left side of the upper body. In grave 21, which probably held the remains of another boy, the entire skeleton appears to have been disturbed, except perhaps for the lower legs. One of the femora seems to have been displaced to a position on top of the sword. In grave 39, which contained an adult of unknown sex, the disturbance was limited to the upper body and the left upper leg. This grave may not have had a wooden container, so it is not possible

to determine the time frame in which it was reopened. The deceased's skull is missing. Only a fragment of a left cheekbone was left behind. Since no cut marks were found on the remaining upper vertebra, it was probably removed from the grave during a later reopening.

Reopening chronology

Four of the five reopenings took place in the open space of an intact wooden container, indicating that the reopenings were carried out within 35 years after the burial. The only exception is grave 39, which may not have had a wooden container, so it is not possible to determine the time frame in which it was reo-

pened. The reopening in grave 16 may have taken place while the body had not yet fully decomposed, since the tibiae and fibulae were displaced while they were still articulated (see figure 3.8.4). This corresponds to Aspöck's phase B (2005: 251-252; 2011: 302-306), meaning that the reopening was probably carried out within approximately 10 years of the burial. Since the restoration and analysis of the finds has not yet been completed, the graves have not received precise dates. Graves 14 and 16 could be dated between 500 and 600, so the reopenings probably took place between 535 and 635.

Objects	Reopened (5 graves)		Intact (27 graves)		Unknown (18 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Swords	2	0,40	4	0,15	2	0,11
Seaxes	1	0,20	1	0,04	0	0
Shields	2	0,40	3	0,11	2	0,11
Axes	0	0	1	0,04	0	0
Lance heads	2	0,40	8	0,30	2	0,11
Arrowheads	1	0,20	1	0,04	1	0,06
Shears	0	0	2	0,07	0	0
Knives	7	1,40	22	0,81	7	0,39
Fire steels	2	0,40	3	0,11	1	0,06
Belt buckles	4	0,80	18	0,67	6	0,33
Plate buckles	1	0,20	0	0,00	0	0
Belt plates/strap end	2	0,40	4	0,15	0	0
Belt pendants	2	0,40	7	0,26	2	0,11
Comb	0	0	4	0,15	2	0,11
Coins	0	0	1	0,04	0	0
Brooches	6	1,20	17	0,63	10	0,56
Bracelets	0	0	1	0,04	0	0
Spindle whorls	0	0	8	0,30	2	0,11
Ring misc	2	0,40	3	0,11	5	0,28
Pottery vessels	8	1,60	19	0,70	13	0,72
Glassware	0	0	2	0,07	2	0,11
Bowls, copper alloy	1	0,20	0	0	0	0
Beads	39	7,80	661	24,48	439	24,39

Table 3.8.1 Grave goods found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per type and the average per grave.

Objects	Reopened (5 graves)		Intact (27 graves)		Unknown (18 graves)	
	Total	Average per grave	Total	Average per grave	Total	Average per grave
Iron	23	4,60	80	2,96	22	1,22
Copper alloy	14	2,80	19	0,70	12	0,67
Silver	6	1,20	6	0,22	5	0,28
Gold	0	0	1	0,04	0	0
Amber	0	0	1	0,04	2	0,11
Animal bone	1	0,20	9	0,33	5	0,28

Table 3.8.2. Grave good materials found in reopened, intact and indeterminate graves. For each category of graves, the table lists the total number per material and average per grave.

Grave goods

Although the number of graves was too small to allow significance testing, the comparison between the objects found in reopened and intact graves reveals an interesting pattern. As can be seen in table 3.8.1, on average, the reopened graves contained more objects than the intact graves. The one exception were the beads, of which far more were found in intact than in reopened graves. This is partly due to the fact that bead-containing graves are underrepresented in the reopened group because three of the reopened graves contained grave goods associated with men, and only one contained grave goods associated with women. However, even when we directly compare the numbers of beads found in intact and reopened women's graves, the numbers found in the reopened graves are still relatively low. It seems that the diggers removed very few objects during the reopenings. The fact that more objects were found in the reopened graves than the intact graves suggests that the diggers may have targeted graves containing objects of these types, even though they did not remove these objects. Alternatively, the diggers may have deposited objects in the graves during the reopenings. The graves of indeterminate status contained relatively few objects, reflecting the fact that the reopening status of graves with few finds is often difficult to determine.

Table 3.8.2 shows which materials were found in reopened and intact graves. The table only takes into account recognizable objects, fragments were excluded. The data in this table

reflects and confirms the results in table 3.8.1. Iron, copper alloy and silver objects were all found in higher average numbers in reopened than in intact graves. No golden objects were found.

3.9 Solleveld

The cemetery of Solleveld (The Netherlands, province of Zuid-Holland, municipality of The Hague) was originally discovered by an amateur archaeologist police officer searching for archaeological objects in the dunes. In 1954, he found a number of cremation urns at a sand mining site and informed the State Archaeology Service. In 1955, the Leiden Museum of Antiquities started an excavation on the site. Another excavation by the archaeology department of the municipality of The Hague followed in 1987. These investigations uncovered only cremation graves. In 2004 the provincial water agency was planning to expand its infiltration pits in the area of the site, so the archaeology department of the municipality of The Hague performed another excavation which uncovered both cremations and a small number of inhumations. The policeman's finds and the material from the three excavations were published by archaeologists of the municipality in 2008 (Waasdorp & Eimermann 2008). Perhaps more graves remain *in situ*. It is unclear whether the lack of inhumation graves in the first campaigns reflects the predominance of cremations on the site, or whether inhumations were overlooked due to poor visibility of the traces of grave constructions. The excavators also found



Figure 3.9.1 Map showing the inhumation graves surrounded by cremation graves and post holes. From Waasdorp & Eimermann (2008: 42).

many post holes on the cemetery. They speculated that these may have been part of grave markers or cremation pyres.

An early medieval settlement (Ockenburgh) was found only 300 meters away from the cemetery. Unfortunately, very little is known about this settlement, so it is unclear whether it was contemporaneous with the cemetery and whether its population was large enough to account for all the excavated graves. The cemetery was located on a rather flat dune landscape along the coast of the Southern North Sea, on a beach ridge next to a low-lying area layered with peat and sand. Originally, the site was probably one of the highest lying man-made features in the area. The low calcium content and porous texture of the sandy soil resulted in a very poor preservation

of uncalcined bone. Almost no skeletal material from the inhumation graves was preserved. Traces of the graves' construction were reasonably well preserved. The site has been subjected to aeolian sand transport, so the cemetery's topsoil was eroded.

Inhumation graves

The excavation in 2004 uncovered three inhumation graves. One coffin grave (483), one possible trench grave which was only visible as a skeletal silhouette (305), and one boat shaped grave (479). The coffin grave and possible trench grave were cut by ditches, so they were both missing the leg section (see figure 3.9.1). The boat shaped grave is a unique find for the Netherlands. It was almost 5 meters

long and 1.5 meters wide. It did not contain a true boat, but rather a boat shaped chamber of which the sides were probably lined with re-used ship's wood that was held together with large iron nails. No rivets were found on the grave's bottom, so that was probably not lined with ship's wood. The excavators speculate that the grave may originally have been covered with a mound that was later levelled by wind erosion and ploughing. The grave was cut by a smaller elongated pit (1020, see below for details) which may either be a child's grave or a reopening pit. The boat shaped grave dated to 600-675 and together with the intercutting pit, it contained seven glass beads, a copper alloy fibula, two pieces of a copper alloy belt plate, two small knives and a possible awl. The beads suggest that a woman may have been buried in this grave. The coffin grave dated to the sixth century and contained grave goods usually associated with men, including a sword, seax, lance head, shield, belt buckle, knife and fire steel. The possible trench grave yielded only a small knife and could not be dated.

Cremation graves

The publication lists at least 32 cremation graves from the various excavations. Of these, 28 were deposited in pottery vessels, the remainder were buried in shallow pits. Most contained relatively small amounts of bone compared to the volume expected from the cremation of a human adult. It seems likely that only part of the bone was selected for deposition after the body had been cremated. In some features, the amount of bone was so small that the excavators were reluctant to call them graves at all. Since there were many post holes and other pits on the cemetery, some of these may have accidentally or purposely received a small amount of skeletal material in their fills.

The cremation graves were dated on the basis of the pottery vessels in which they were buried. The majority of the pots dated to the sixth century. A smaller number dated to the seventh century. Fifth and eighth century materi-

al was entirely absent. Apart from the pots, most cremation graves did not yield any grave goods. The only exception was grave 494, which contained the remains of a few beads which had melted onto the cremated bone. Perhaps grave goods were not used in the cremation ritual, or these objects were not selected for deposition in the grave. Only eight cremation graves yielded enough well preserved bone to merit examination by an osteologist. Of these graves, six belonged to adults and two to children aged between 2 and 4. The adults of which the age could be determined were between 20 and 40 years old. Two could be sexed as female and one as male.

Post-depositional interventions

Graves 483 and 305 showed no signs of near-contemporary post-depositional interventions. However, the leg and foot section of both graves were dug away by a later ditch, so any traces of interventions in those regions of the graves would have been erased. The boat shaped grave 479 however, revealed traces of an elongated pit that was dug from the side into the middle of the grave (see figure 3.9.2). The excavators interpreted this feature as an intercutting grave, given its length of 1.4 meters probably a crouched burial. This interpretation is somewhat problematic. The pit did yield a number of possible grave goods and the remains of a human jaw, but these lay scattered in the pit and were not found in the locations expected from a Merovingian burial. Crouched burials are rare in the Netherlands, although they are not unheard of in the coastal regions. The objects and the jaw could equally well have originated from the boat shaped grave. Since there are no real indications for an additional burial in the pit and the disturbances in the boat shaped grave seem to reach beyond its confines, I am inclined to interpret it as a reopening pit, rather than an intercutting grave. This alternative interpretation as a reopening pit was also suggested by Menno Dijkstra in his synthesis of the early medieval period in South-Holland (2011: 248-252). The reopening seems to have been dug

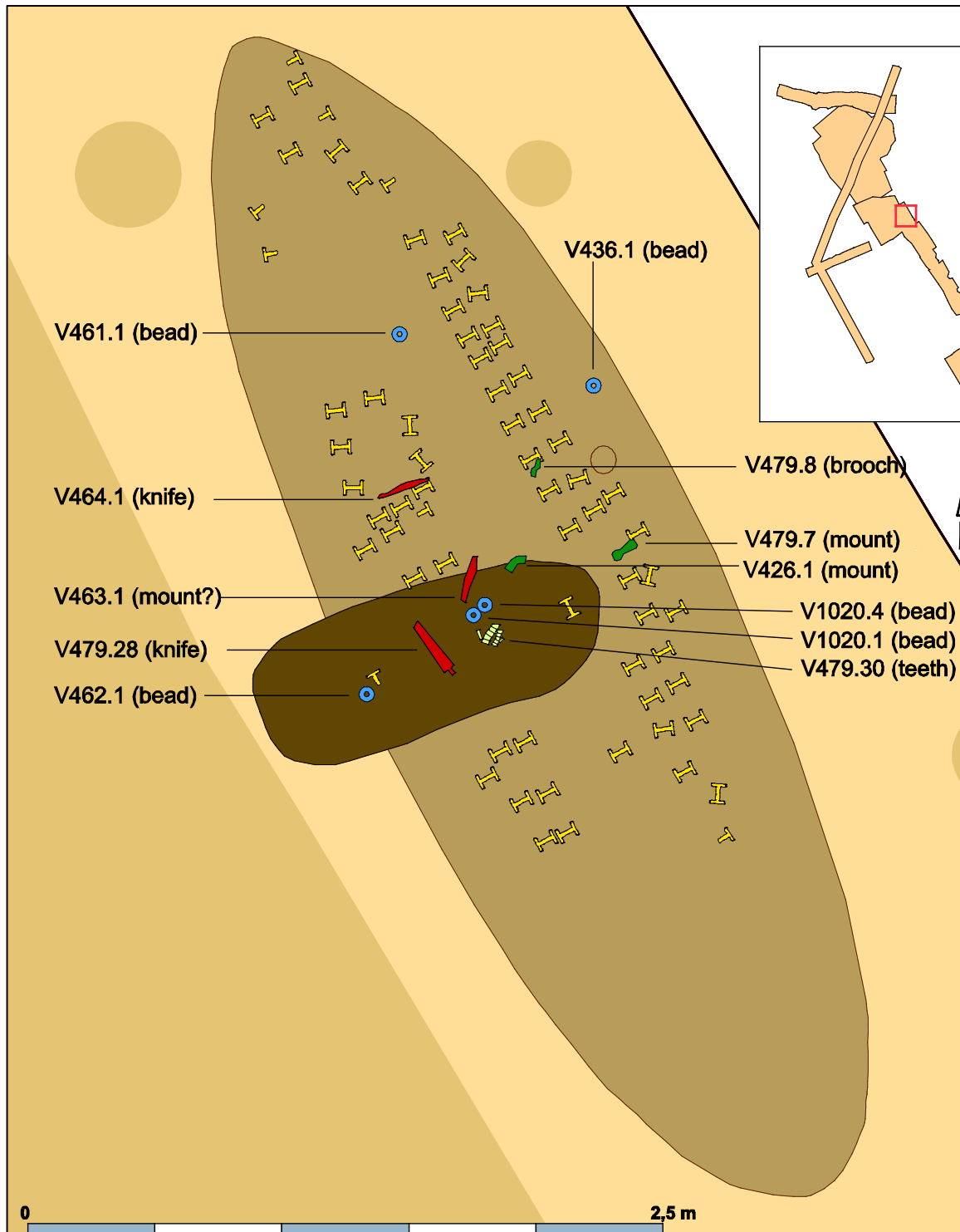


Figure 3.9.2 Schematic drawing of the boat shaped grave 479 in relation to the reopening pit/child's grave. The finds depicted are rivets (yellow), human teeth (white), beads (blue), iron objects (red) and copper alloy objects (green) . From Waasdorp & Eimermann (2008: 100).

through the boat shaped wooden walls, so the grave was probably reopened after the wood had started to decay. However, since the rivets outside the pit also appeared disturbed and the deceased's skull was found in the reopening pit, there may to some extent have been an

open space in the container that allowed the participants to rummage around and reach the skull and grave goods. Alternatively, the wood may have been intact, in which case the diggers would have had to force their way in. The grave dated to 600-675. Since the reopening

probably took place while the wooden walls were half decayed, the reopening probably dates at the end of the 35 year period it probably took the thick ship's wood to decompose, placing the reopening in the seventh century. The question arises what the diggers may have removed from this grave. The excavation uncovered seven glass beads (the exact location of two beads is unknown), a copper alloy fibula, two pieces of a copper alloy belt plate, two knives and a possible awl. The low number of beads suggests that other beads may have been taken. The copper alloy belt plate was probably originally part of a set that may have included a buckle or plate buckle and possibly another plate and strap end. The grave's exceptional construction suggests that it may also have contained exceptional grave goods. There is no way to verify this hypothesis, but it is certainly possible that many objects were removed from the grave during the reopening. It is tempting to draw a comparison with the elaborately furnished grave 483, but that would not be realistic, since it may date an entire century earlier.

It is unclear whether the cremation graves had also been subjected to post-depositional interventions. One cremation was cut by the boat shaped inhumation grave. The remains of a second cremation, consisting of burned bone and pottery fragments, were scattered in the boat shaped grave. Perhaps the cremation graves were not subjected to regular reopenings. However, traces of potential post-depositional interventions would have been more difficult to recognize, since the cremation graves were often more shallow, had been damaged by ploughing and had a simpler construction than the inhumations. Absence of evidence need not be evidence of absence in this case.

3.10 Oegstgeest

Between 2004 and 2014, the excavation company ARCHOL and the Archaeology Faculty at Leiden University excavated an early medieval port and trade settlement at Oegstgeest-Rhijngest in the Dutch west coastal area (The

Netherlands, province of Zuid-Holland, municipality of Oegstgeest). Among the harbor and settlement remains they found a number of contexts containing human bone which are of great interest to this thesis. The finds are currently still being analyzed, but the excavation leader Jasper de Bruin and master student in osteo-archaeology Frank van Spelde allowed me to use the preliminary data (Van Spelde 2014).

Only a few scattered graves and other contexts containing human remains were found on the site. There is no evidence for a cemetery in the traditional sense of the word. As we will see below, some graves and other contexts were quite different than what we are accustomed to find in an early medieval graveyard. Most of the community's deceased were probably buried somewhere outside the settlement, in an area that has not yet been found and may not have been preserved.

The settlement was located on clay soils that are typical of the Dutch coastal area, along a branch of the river Rhine. The graves and other contexts containing human remains were found in the peripheral areas of the settlement, possibly adjacent to an old gully or creek that may have functioned as one of the settlement's boundaries. The soil conditions were very favorable to the preservation of bone. Despite the fact that many objects of wood and other organic materials were preserved on the site, especially in the waterlogged areas, no traces of wood or textile were found in the graves.

Inhumation and cremation graves

Eight inhumation graves were found during the excavations in Oegstgeest. They contained the remains of four men, two women and two children. Most of the inhumations are rather unusual compared to other graves from this period. Three men were buried in prone position, two in pits (contexts 2004-02 and 2013-01), one at the bottom of a ditch (2011-02). The man at the bottom of the ditch appeared to have been 'dumped in', indications for a formal burial were lacking. Another man lay on his side (2010-01). An older woman lay on

her back with her legs bent in an open position (2012-02). The prone man in grave 2013-01 was buried in a rather small pit and his front side including the arm and leg bones showed signs of burning. Perhaps the body was partially cremated while in a crouched position. Only children's graves 2011-01 and 2014-02 and woman's grave 2012-02 appeared normal for the period and region. Apart from human inhumations, the site also yielded three dog burials and three horse burials. One of the horse burials was dug near grave 2010-01. The remainder of the animal graves lay isolated from other burials (Buhrs 2013).

None of the inhumation graves yielded traces of a wooden container. However, the taphonomical analyses of the skeletons indicate that at least some of the burials decomposed in an open space, suggesting the presence of a wooden container. It is unclear what type of containers were used.

Only grave 2012-02 showed indications of a possible post-depositional intervention. This will be discussed further below.

In addition to the partially cremated individual in 2013-01, two possible cremation graves were found. Context 2004-01 may have been a regular cremation buried in a small pit. Context 2014-01 probably consisted of the cremation remains of one individual that were deposited at the bottom of a well.

Bone deposits

Not all human remains were found in graves or grave-like contexts such as those described above. A large number of disarticulated human bones were found in various contexts across the site, mainly in the fills of gullies and ditches. Interestingly, the majority of these scattered finds were long bones and skull fragments. This could be an artefact of selective find gathering during the excavation, but this is unlikely, since no similar patterns were found for the animal bone from the site. It therefore seems that people on the site selectively possessed and deposited human bones from the extremities and skull.

The most striking example of this preference for long bones is context 2011-03. At the bottom of this pit the excavators found a star-shaped configuration of at least 5 and perhaps six femora and tibia belonging to a minimum of two individuals (see figure 3.10.1).



Figure 3.10.1 Context 2011-03, a pit containing a star-shaped formation of human long bones. Courtesy of the Archaeology Faculty at Leiden University. Photographer: Frank van Spelde.



Figure 3.10.2 Context 2012-01, skeleton of a young woman with a disturbed abdominal region. Courtesy of the Archaeology Faculty at Leiden University. Photographer: Frank van Spelde.

Adjacent to this pit lay a second pit with selected human bone fragments of at least six individuals, mostly long bones and skull fragments; no ribs, vertebrae, finger or toe bones. All bones of which the sex could be determined, belonged to men. Since no skeletal material was missing from the graves found in

the settlement, the scattered bones found in these deposits must have been brought to the site from elsewhere. Perhaps they were taken from reopened graves in nearby (or more distant) cemeteries.

Post-depositional interventions

Only one grave from Oegstgeest showed indications of having been reopened. Grave 2012-01 held the remains of a young woman in supine position. No traces of a wooden container were found, but the layout of the bones indicated that the body had decomposed in an open space. The bones of the abdomen and chest had been disturbed but all lay on the grave's bottom, suggesting that the grave was reopened after the body had skeletonized but before the wooden container had collapsed. Since no traces of a reopening pit were found, a disturbance by animal burrowing cannot entirely be excluded.

Reopening chronology

Since very few artefacts were found with the human remains, the contexts are difficult to date. As the whole site dates to the Merovingian period and all human remains were closely associated with other Merovingian features, we can be fairly certain that all the human remains were Merovingian in date or were at least deposited on the site in the Merovingian period. The two women's graves that contained grave goods could be dated to the sixth and seventh century. Since the woman's grave 2012-01 was reopened while the wooden container was still intact, the reopening also took place in the sixth or seventh century.

Grave goods

Only two burials yielded preserved grave goods. Grave 2012-02 was furnished with numerous beads, including a large crystal bead, two fibulae, a knife, a bowl and several small metal artefacts. The reopened grave 2012-01 contained two copper alloy rings, a fibula, a bead and possibly a knife, all of which were found within reach of the disturbed area. Two other graves contained objects of which it

is unclear whether they were part of the grave furnishings. In grave 2011-01 a lead fragment was found near the skull. In grave 2010-01 a rust stain was observed near the skeleton's legs.

3.11 Oosterbeintum

The cemetery of Oosterbeintum (the Netherlands, province of Friesland, municipality of Ferwerderadeel) was discovered in 1987 when a ditch on the site was deepened in the course of land re-allotment. Since the cemetery's preservation was threatened by the calving off of the ditch and the lowered water table, the government granted permission to excavate the section of the site that was adjacent to the ditch. The excavations were carried out in 1988 and 1989 under the direction of Egge Knol by the archaeology department of Groningen University in cooperation with the VU University in Amsterdam and the Fries Museum in Leeuwarden. A detailed analysis of the excavation results appeared in *Palaeohistoria* (Knol et al. 1995/1996) and the research results were summarized for the general public in a Dutch publication by the Vereniging voor Terpenonderzoek (Knol et al. 1996).

The cemetery was located on a *terp* (also called *wierde*) in the Dutch northern coastal area. It was one of many similar anthropogenic dwelling mounds that had been built in the region's salt marshes from the Iron Age onwards. These mounds served to protect the habitation against flooding as they were located in open salt marshes, not shielded from the sea by dikes.

Before the excavation, the cemetery had been subjected to several disturbances. The site was cut by several later medieval ditches and a large part of the *terp* was destroyed by soil quarrying in the early twentieth century. Part of the cemetery's upper layer was also removed in this process, but the lower levels were left intact, possibly because the diggers were hesitant to disturb the bones in the graves. The soil of the *terp* offered good conditions for the preservation of human bone. Since the *terp* consisted of raised material the features grave constructions and potential reopening pits

were less legible than is often the case in natural soils. Due to the poor legibility of the soil and high degree of post-medieval disturbance on the site, it was not possible to identify any reopened graves on this site with certainty. The discussion of this cemetery will therefore be brief.

Inhumation graves

The excavated section of the cemetery yielded the unburnt remains of 48 humans, distributed over 42 inhumation graves and two possible inhumation graves. The excavated section of the cemetery also yielded six dog inhumations and one horse inhumation. The graves contained relatively few grave goods compared to Merovingian cemeteries from the central and southern Netherlands. As a result, the graves were difficult to date. Nine graves dated to 400-550, five to 500-625, four to 600-725 and one to 675-750.

The cemetery's layout was almost the opposite of the typical row grave cemetery. The graves had every possible orientation and the deceased were buried in diverse positions, supine and crouched with many variations in the placement of the arms and legs. Relatively few wooden containers were found. The excavators observed the remains of eight tree trunk coffins and a small number of possible indeterminate wooden containers. The positioning of the skeletal material in the graves nevertheless suggests that many bodies decomposed in an open space, presumably a wooden container. The low number of wooden container traces is probably at least partially due to the poor legibility of the terp soil.

The graves yielded skeletal remains of 48 individuals. Eight skeletons belonged to children between 4 and 10 years of age and four belonged to adolescents under 20. There were 33 adult individuals, most of whom had died before the age of 50. Of the adults, 12 individuals could be sexed as male and 14 as female. In 3 cases the age of the deceased could not be determined. In nearly all cases the gender associations of the grave goods corresponded with expectations based on the deceased's osteological sex. Grave 398 was an

exception, containing a skeleton sexed as male and grave goods that are usually associated with woman, such as two brooches, 40 beads and a bracelet. One of the skeletons belonged to an adult achondroplastic dwarf.

Cremation graves

The excavation uncovered a large number of contexts containing cremated human bone, but not all of these were cremation graves in the traditional sense of the word. At least 21 urn cremations, five pit cremations and 71 small concentrations of cremated material were found. One cremation grave consisted of a large pit over which a pyre had probably been constructed. The other cremation pits were much smaller deposition sites for bone that had been cremated elsewhere. On average the urns and pits respectively contained 286 and 386 grams of cremated human bone, indicating that only part of the deceased's bones were deposited in the graves. The 71 small concentrations of cremation remains contained between 49 and 0 gram of human bone, with 40 concentrations yielding less than two grams. Some of these concentrations may have been pyre sites or small pit cremations. Others may have been post holes of elevated pyres. Additional human cremated bone was found scattered in 17 inhumation graves. These may have been the remains of disturbed cremation graves. One pit contained only cremated animal remains, of which most belonged to one sheep/goat, but remains of various other species were also present.

The cremation graves contained even fewer objects than the inhumation graves. The combined evidence of the grave goods and carbon dating indicated that the cremation graves date between the fifth century and start of the eighth century and are thus contemporary with the inhumation graves.

From the combined contexts containing cremated human bone, the remains of 11 to 23 children and 24 to 28 adults could be identified. Of the adults, one individual could be identified as male and six as female. Eight additional cremations contained grave goods that are usually associated with women. No

grave goods associated with men were found in the cremation deposits.

Post-depositional interventions

As mentioned above, no straightforward reopenings could be identified with certainty in this cemetery, due to the many post-medieval disturbances that took place on the site. There are nevertheless a few interesting cases of potential contemporary post-depositional interventions. At least nine graves were cut by a later burial. Some intercuts touched only the peripheral areas of the older grave and were not invasive, but others cut into the area where the body lay, thereby effectively reopening the older grave.

Grave 374 may have contained an additional burial. The grave held the remains of two individuals, but it is unclear whether they were deposited at the same time or consecutively. The skull of the bottom skeleton was missing and may have been cut away by a later ditch, but it could also have been removed during the deposition of the second burial. The lower left arm of this individual is also missing. In total, five human burials (270, 273, 299, 374b, 461) and one dog burial (408) were lacking skulls. There were no indications for *peri-mortem* decapitation, so the skulls were most likely removed after the bodies had skeletonized. Similarly, a number of skeletons were missing arm or leg bones. The remaining bones were usually in a relatively good condition, so it seems unlikely the missing bones had simply decayed. The bones may have been removed during later disturbances on the site, but early medieval interventions cannot be excluded. Grave 474 on the other hand, consisted only of a skull which had been deposited facing north in an upright position, standing on the jaw. Unfortunately, the skull has not been dated, so it may belong to an older period.

The cremation graves had also been subjected to many disturbances of unknown date. Of the 21 cremation urns, only six were intact. The remainder were broken and had probably been disturbed. The excavators believe that most of these disturbances took place during

the early medieval period, by intercutting graves. Such intercuts would also account for the cremated bone found scattered in the inhumation graves. Since the upper layer of graves had been dug away by the soil quarrying, this hypothesis could not be confirmed in all cases.

3.12 Finds from the Meuse at Kessel and Roermond

The finds from the Meuse at Kessel (The Netherlands, province of Noord-Brabant, municipality of Oss) is one of best documented river complexes of its kind in the Netherlands, containing human remains associated with other types of material. The material from Kessel was recovered by amateur archaeologists working on a dredger between 1991 and 1993. The finds include large quantities of pottery, some weapons, brooches, bronze cauldrons, harvest implements, and both burnt and unburnt bones of humans and other animals. The carbon dates of the human bones show a range of 360 cal BC to 1260 cal AD, with a climax in the Late Iron Age and possibly a less pronounced peak in the Early Middle Ages. Sixteen bones were dated of which eight originated from the Late Iron Age and three from the Merovingian period. These dates are not exceptional as generally finds of human bone from river deposits in the Netherlands have been shown to range from the Neolithic to the Early Medieval period (Ter Schegget 1999: 202, 210).

The representativeness of dredge finds such as these is problematic. It is unclear to what extent the documented finds reflect the original complex. In the case of Kessel, the reliability is somewhat improved by the fact that the material was gathered by amateur archaeologists using a 16 mm sieve, rather than by dredge workers picking interesting looking objects from the gravel. The material was not eroded, indicating that it had probably remained more or less *in situ* after its original deposit and had not flushed down and accumulated on the find spot from upstream. The bones and objects must have been deposited in a bank zone

or slow-flowing arm of the river, because they seem to have been surrounded by fine clay sediment.

Ter Schegget analysed approximately 650 human bones from the Kessel complex. The material consisted mostly of long bones and skull fragments. The fragmentation of the material is mostly due to breaks that occurred during dredging. Small and fragile bones such as those of the hands and feet, vertebra and shoulder blades are severely underrepresented. The minimal number of individuals calculated on the basis of the number of right parietal skull bones was 55. In reality, the number was probably much higher. Approximately 80 to 90% of the bones belonged to adult individuals. Of the tooth and jaw fragments, 18% belonged to individuals younger than 20 years. However the majority of did not exceed the age of 30. Approximately 1/5 of the skull bones were from people over age 40. A few bones belonged to children under age 12, including one newborn. In total bones of six infants aged up to ten were found and one juvenile of about 15. Only a third of the adult remains could be sexed. Of the sexed bones, 75% were male and 25% were female (Ter Schegget 1999: 213-214). It is important to keep in mind that these are the results of the ensemble as a whole and it is unclear which portion of the bones dates to the early medieval period.

In an attempt to answer the question whether whole bodies or only certain body parts were deposited, Ter Schegget analysed the division between cranial and post-cranial skeletal elements as well as the distribution of skeletal elements over the left and right sides of the body. Since the minimal number of individuals is 55 on the basis of skull remains and 45 on the basis of femora, there were probably very few or no depositions of individual skulls. However, for the postcranial skeleton, more bones from the right side of the body were found than from the left. Statistical analysis showed that the difference was just below significance level, so it is unclear whether this was just chance or whether there was a preference or other selective process that caused

more bones from the right side of the body to be deposited (Ter Schegget 1999: 214-215).

Two bones dating to the early medieval period revealed evidence of injuries. The skull of an adult younger than 40 showed two deep cuts that were inflicted by the same weapon, either an axe or a sword. Both gashes show no signs of healing and were therefore most likely fatal. A right humerus of an adult had a number of incisions and dents with no signs of healing. According to Ter Schegget (1999: 216, 221-222) they were caused by a sharp-bladed weapon, probably a sword.

Since the complex found at Kessel contained mostly non-eroded material and showed no signs of animal damage, Ter Schegget argues that it was a genuine river deposit which could be interpreted as a multi-period cult site. This is confirmed by other typical 'cult site' finds such as bent weapons and large quantities of animal bone. In Celto-Germanic and Gallo-Roman times, the function of the cult place was probably linked with the cosmological significance of rivers in contemporary religion. Ter Schegget (1999: 223-224) wonders to what extent such cult sites were still used in the same way in the early medieval period. She offers two hypotheses to account for the presence of human remains in the complex. According to classical authors, the Celts and Germans sometimes practiced human sacrifice *in situations of crisis*. The victims were often prisoners of war. The weaponry, the predominance of young adult males and the weapon injuries on some of the bones suggest an association with warfare. Alternatively, the deposition of human remains in rivers may have been a form deviant mortuary ritual. The possibility that some of the remains in the river deposit originated from reopened graves is not considered.

From a similar but smaller complex found in the Meuse at Roermond, 75 human bones and bone fragments were recovered (mainly skulls and femora), in addition to metal finds ranging in date from the Bronze Age to the Early Middle Ages. The remains mainly belonged to young men, but bones of women and juveniles were also present. It is unclear to what extent

the metal finds and skeletal remains are associated, since most of the bone material has not been dated (Erdbrink et al. 1975; Ter Schegget 199: 206).

3.13 Comparison between cemeteries

This section summarizes the findings from all the cemeteries in the dataset. It also contains a comparison of the results from the research area with studies about grave reopenings from other regions of early medieval Europe. For these comparisons I will use a variety of sources that offer information on reopened graves, but I will rely most on the studies from English Kent and German Bavaria by Klevnäs (2013) and Zintl (2012). These are the only ones that are comparable to the present study with regards to both the size of the dataset and the level of detail with which the material is examined. Such comparisons are not unproblematic, because the research areas are quite distant from one another, both in kilometers and socio-political context. However, as we shall see, there are remarkable similarities between the practices of grave reopeners in these regions.

I gathered data from eleven cemeteries excavated across the modern Netherlands and Belgian Flanders (see figure 3.13.1). These cemeteries yielded a total of 1169 inhumation graves and 201 cremation graves. Unfortunately, most of the cemeteries were not completely excavated, so their true size is unknown. There is considerable variation in the numbers of inhumations and cremations found at these sites (table 3.13.1). The largest cemetery is that of Broechem, which consisted of 431 inhumation graves and 65 cremation graves. The smallest number of graves was found in Oegstgeest, which yielded only eight inhumations and two cremations. On all sites except Solleveld, considerably more inhumations than cremations were found. Interestingly, the cremation graves usually contained far less bone than what normally remains after an adult human body is cremated, indicating that only part of the bone was deposited in the

graves. In Dommelen and Borgharen cremations were completely absent.

The size of the cemeteries is to some extent related to the contexts in which they were found. The relatively small numbers of graves from Dommelen and Oegstgeest lay in settlement areas. The larger cemeteries were not located in settlements, but may nonetheless have been positioned adjacent to inhabited areas. In the cases of Wijchen, Lent-Lentseveld and Solleveld, the cemeteries were found in the vicinity of settlements that were at least partially contemporary.

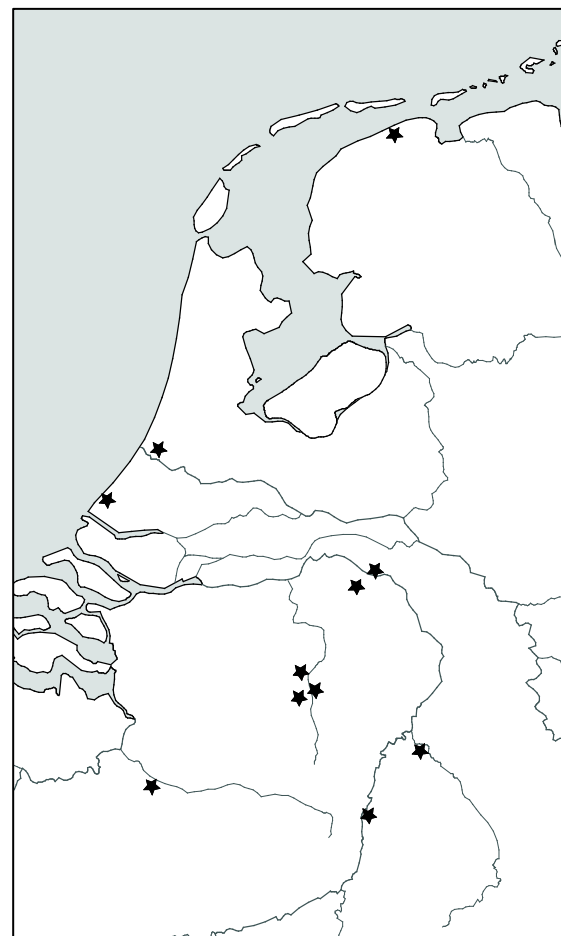


Figure 3.13.1 Map showing the locations of the cemeteries discussed in this study. Drawing by Frans Theuws.

	Inhumations	Cremations
Broechem	431	65
Meerveldhoven	54	9
Dommelen	24	0
Bergeijk	117	7
Posterholt	123	3
Borgharen	15	0
Wijchen	302	36
Lent-Lentseveld	50	20
Solleveld	3	32
Oegstgeest	8	2
Oosterbeintum	42	27
Total	1169	201

Table 3.13.1 Total numbers of inhumation and cremation graves from the cemeteries included in this study.

Cemetery	Male	Female	Neutral
Broechem	15%	25%	59%
Bergeijk	15%	24%	62%
Posterholt	10%	23%	67%
Wijchen	18%	16%	65%

Table 3.13.2 Percentages of graves with typical men's, women's and neutral grave goods in the largest cemeteries from the research area.

There was some variation in the percentages of presumed men's and women's graves found in the cemeteries. Unfortunately, the preservation of bone on most sites was rather poor, so the differentiation of men's and women's graves had to be based largely on the grave goods. When both grave goods and skeletal material were available, there was usually a good match between artefact based gender and osteological sex. As can be seen in table 3.13.2, the cemeteries of Broechem, Bergeijk and Posterholt had relatively few graves containing typical men's objects compared to graves containing objects associated with women. In the Wijchen cemetery, the percentages of graves with men's and women's grave goods were more even. The differences in the numbers of presumed men's and women's graves may have been caused by variations in the frequency with which men and women were buried with gender specific grave goods. For instance, young children of both sexes may have been

buried with beads and other items that are usually associated with women (Halsall 1995: 149, 162). However, similar differences between numbers of men's and women's graves were also noted by Panhuysen (2005: 282–283) in his osteological study of skeletal material from the early medieval cemeteries in Maastricht, which was not influenced by gender specific grave goods. These differences led him to hypothesize that cemeteries may have been considered complementary to one another, allowing people from a single community or family to bury their dead at preferred sites according to perceived social categories such as gender (Panhuysen 2005: 282–283).

Additional burials

Inhumation in inhumation

There were relatively few graves in which an additional inhumation had been deposited at a later time. However, given the poor preservation of skeletal remains in many cemeteries in the research area, it is unclear to what extent the low number of additional burials reflects historical reality. In the large cemetery of Broechem, only one grave with an additional burial was found. No indications for additional burials were observed in the cemeteries of Meerveldhoven, Wijchen, Lent-Lentseveld, and Solleveld. In the farmyard cemetery of Dommelen, the number of graves with multiple burials was relatively high compared to the other cemeteries in this study. Of the 24 inhumation graves on this site, between four and six graves contained multiple burials. In only one case the second burial had definitely been added to the grave at a later time. In another case it was unclear whether the two burials were deposited simultaneously or consecutively. The other graves contained burials that had been deposited at the same time. In the Borgharen cemetery there were two graves with additional burials. One was the grave of an adult man, to which the remains of a child had been added. The other belonged to an adult woman, at whose feet a bundle with the disarticulated remains of two young boys had been deposited at a later time. DNA analysis

showed that at least one of the children was the woman's son. In both cases, the additional remains were probably deposited during post-depositional interventions. In Posterholt five or possibly six graves revealed indications that they have been reopened for the deposition of additional burials. In most cases the excavators at this cemetery observed outlines of multiple superimposed wooden containers, and sometimes skeletal material of multiple individuals was found. Given the relatively poor preservation of bone in this cemetery, more additional burials may have gone unnoticed. In Bergeijk one grave contained both typical men's and women's grave goods, suggesting that the grave may have contained two burials, but this could not be confirmed as no bone was preserved. The grave goods' distribution in another grave also indicated that the grave may have contained two burials. It is unclear whether these were deposited simultaneously or consecutively.

In some cases, it was difficult to distinguish between additional burials and intercutting graves which had so much overlap that they were very similar to an additional burial, as for instance in Broechem graves 65, 55 and 54 and Dommelen graves 13/14 and 17/18. This suggests that early medieval people may not necessarily have distinguished between the various types of post-depositional interventions defined in this study, but instead considered them more as different sides of a range of practices. This also fits with the reopenings that took place during intercuts, which will be discussed below. Similar cases where an additional burial or intercut may have been combined with the reopening and displacement of an older burial were found in Germany and Kent. In the German cemetery of Aubing several graves were reopened before or when they were cut by an overlying burial (Dannheimer 1998: 26-29). In Bavaria the cemetery of Harting-Katzenbühl yielded two mound graves which were reopened and rummaged during the deposition of a new burial (Zintl 2012: 334-337). The Anglo-Saxon cemeteries of Polhill and Mill Hill each yielded one case of a grave that was reopened before or during

the construction of an intercutting grave (Klevnäs 2013: 75-76).

Cremation in inhumation

In a few cases concentrations of human cremation remains were deposited in inhumation graves. It is not always clear whether the cremation remains were added to the inhumation graves during the funeral, or whether the deposition was part of a post-depositional intervention. It seems that both options were possible. Even if the cremated bone was found in a reopening pit, it could have been deposited in the grave during the original funeral. In Broechem, five reopened graves contained additional cremations, but in three cases the cremation remains were found outside the reopening pit. These were probably not deposited during post-depositional interventions. In Meerveldhoven one cremation was found in a reopened inhumation. In Bergeijk one reopened inhumation grave and two graves of indeterminate status contained cremated bone. Unfortunately, the remains are lost, so we cannot verify whether the bone was human.

Intercuts

Intercuts between graves were a very common type of post-depositional intervention in the research area. The percentage of graves cut by another grave varied from cemetery to cemetery. The highest percentages of intercuts were found in the large cemeteries of Wijchen and Broechem, where respectively 35% and 24% of graves had been cut by a later grave. In the smaller cemeteries, the percentages of intercuts were much lower (Meerveldhoven 15%, Bergeijk 10%, Posterholt 9%) or almost absent such as in Borgharen, Lent-Lentveld, Oegstgeest and Solleveld. The reason for these differences is probably that the cemeteries with fewer intercuts had shorter use periods, so the locations of the older graves were still visible and there was more space left to dig new graves without superimposing them on old burials. Intercuts occurred both in reopened and in otherwise intact graves. There were a few cases where the grave pit diggers seem to have expanded the grave pit in order to gain

access to the contents of the cut grave (for instance in Broechem grave 969, Meerveldhoven grave 43 and Posterholt grave 33). But usually intercuts and reopenings seem to have been separate events.

Some intercuts accessed the contents of the cut grave and could perhaps be considered a type of reopening. It is often unclear whether the diggers deliberately aimed to rummage through the contents of the older grave. Such invasive intercuts usually seem to have taken place after the coffin of the cut grave had decomposed. As is also argued by Zintl and Klevnäs, some invasive intercuts may have been unintentional and may have come about because the surface marking of the older grave had faded so it was no longer recognizable to the grave diggers who were looking for an empty spot in the cemetery (Zintl 2012: 333; Klevnäs 2013: 37). In many other cases, the intercuts were non-invasive, cutting only the edges of the older grave's pit or a small section of the wooden container. Interestingly, there was quite a lot of variation between the intercuts in different cemeteries. For instance in Bergeijk, Meerveldhoven and Dommelen, nearly all intercuts were non-invasive, while in Broechem and Wijchen many intercuts were invasive and accessed the older graves' contents. Similar to the higher overall percentages of intercuts, invasive intercuts seem to have been more common in the large cemeteries with a longer use period, most likely because after one or two hundred years of use these cemeteries had fewer empty spaces and the decomposed wooden containers of older graves made it easier to dig a new grave pit into them. In some cases the older graves may no longer have been recognizable above ground, so the grave diggers did not know their pit cut an old grave, at least until they encountered bones and grave goods.

Reopenings

All the cemeteries in the research area held at least a few reopened graves. Of all the inhumation graves included in this study, at least 208 were reopened after burial. There is no evidence for the reopening of cremation graves other than a small number of cremation graves that were cut by later burials. As in Anglo-Saxon Kent (Klevnäs 2013: 32), the lack of evidence for reopenings in cremation graves may be due to taphonomic factors rather than a real absence of reopened cremations. Table 3.13.3 shows the absolute numbers of reopened, intact and indeterminate inhumation graves per cemetery. Due to differences in preservation, it was more difficult in some cemeteries than in others to distinguish between reopened and intact graves, which is reflected in the varying the numbers of indeterminate graves. For the cemetery of Oosterbeintum, it was not possible to identify any reopened or intact graves with certainty. The varying percentages of indeterminate graves complicate the comparison of reopened and intact graves between the cemeteries. This problem can be overcome by excluding the indeterminate group from the calculation and only taking into account the reopened and intact graves, as is done in table 3.13.4. These are the percentages I will use to compare reopening rates in the Low Countries with those in other the regions discussed below, as the authors working on these regions also calculated their percentages that way. The cemeteries of Borgharen, Solleveld, Oegstgeest and Oosterbeintum were left out of this table because they had too few graves to calculate meaningful percentages. The cemeteries in the table are ordered according to the percentages of reopened graves, with the highest percentage at the top. The reopening percentages vary between 59% (Posterholt) and 16% (Lent), with an average of 41%. Graves from certain chronological phases had much higher reopening rates than others, as will be discussed below.

Comparison between cemeteries

Cemetery	Reopened	Intact	Indet
Broechem	104 (24%)	125 (25%)	203 (47%)
Meerveldhoven	9 (17%)	18 (33%)	27 (50%)
Dommelen	2 (8%)	9 (38%)	13 (54%)
Bergeijk	28 (24%)	31 (27%)	58 (50%)
Posterholt	33 (42%)	23 (29%)	24 (28%)
Borgharen	3 (-)	0 (-)	12 (-)
Wijchen	22 (7%)	63 (21%)	217 (72%)
Lent	5 (10%)	27 (54%)	18 (36%)
Solleveld	1 (-)	2 (-)	0 (-)
Oegstgeest	1 (-)	7 (-)	0 (-)
Oosterbeintum	0 (-)	0 (-)	42 (-)
Total	208	305	573

Table 3.13.3 Total numbers and percentages of reopened, intact and indeterminate inhumation graves from the cemeteries in this study.

Cemetery	Reopened	Intact	Use period
Posterholt	59%	41%	(500) 600-750
Bergeijk	47%	53%	580-750
Broechem	45%	55%	400-750
Meerveldhoven	33%	67%	575-700
Wijchen	26%	74%	400-700 (600-700)
Dommelen	18%	82%	670-750
Lent	16%	84%	535-635

Table 3.13.4 Percentages of reopened and intact graves, indeterminate graves excluded for purposes of comparison.

There is no clear pattern that accounts for the differences in reopening percentages between the cemeteries. Similar seemingly erratic differences between reopening rates of neighboring cemeteries have also been noted in other regions of the early medieval world (Fingerlin 1971: 16-54; Roth 1978: 60; Klevnäs 2013: 35-36; Zintl 2012: 306). The three cemeteries with the highest percentages (Posterholt, Bergijk and Broechem) are all located in the southern Netherlands and Belgian Flanders, but so is Dommelen, which has one of the lowest reopening percentages. Bergeijk, Meerveldhoven and Dommelen are in fact situated within a rather short distance of one another and have quite varied reopening percentages (47%, 33% and 18% respectively), so regional distribution alone cannot explain the differences in reopening intensity. However, the graves in Dommelen do mostly date rather late compared to those in the other cemeteries, so the low number of reopenings may be relat-

ed to a decline of reopenings in late graves, which is also seen in the late phases of some of the other cemeteries. This suggests that the variation in grave reopening percentages between the cemeteries may be related to differences in the cemeteries' use periods. The cemeteries with the lowest reopening percentages have graves that date comparatively early (Lent and to some extent Wijchen) and late (Dommelen). However, the cemeteries with relatively high numbers of reopened graves also have many early (Broechem) and/or late (Bergeijk, Posterholt) graves. In Bergeijk and Posterholt, very few graves from the last phase were reopened, but the graves from the phases before the end of the seventh century were opened in such numbers that these cemeteries nevertheless have the highest reopening percentages. In most cases, the reopened graves were distributed relatively evenly over the cemeteries, without forming clearly defined concentrations. However, the cemeteries of Bergeijk and

Posterholt both had a section with almost no reopened graves. The graves in these sections probably nearly all date to the cemeteries' end phase in the late seventh and first half of the eighth century, when fewer graves were being reopened. Similar changes in grave reopening behavior over time may be the cause of the less pronounced patches with few reopened graves in the cemeteries of Broechem and Meerveldhoven.

In the adjacent German Rhineland, Siegmund found similar widely varying reopening percentages, from about 5% at Walsum to over 80% at Junkersdorf, with an average of at least 32% (Siegmund 1998: 237-238). Here, the variations in reopening percentages may also relate to changes in reopening intensity between chronological phases. The reopening rates in the Low Countries and the Rhineland hover neatly between those found in Bavaria and Anglo-Saxon Kent. In the Bavarian cemeteries studied by Zintl (2012: 306), the reopening rates were relatively high. More than 50% of the graves in this study were reopened, with an exceptional percentage of at least 90% in Burgweinting-Schule and 72% in Geisling. However, there were also a few cemeteries where almost no graves had been reopened, such as Burgweinting Kirchfeld, where the western group did not yield any reopened graves and only 9% of the graves in the eastern group had been reopened. Noterman (2016: 169) states that the reopening percentages of the cemeteries she studies in northern France vary between 15% and 50%. In Kent, Klevnäs (2013: 35) found that in the most heavily affected cemeteries between 8% and 44% of the graves per cemetery had been reopened, with an average of 21%. On the less heavily affected sites, the numbers of reopened graves were often limited to one or two per cemetery. For the row grave area in general, Roth calculated an average reopening rate of 39% on the basis of evidence from 60 sites. He too however, observed significant regional variations and local differences between cemeteries (Roth 1977: 287-288, 1978: 60-61, 73).

It is unfortunate that we have no data about grave reopenings from the northern Nether-

lands. The cemetery of Oosterbeintum was too badly disturbed to assess whether early medieval grave reopenings had taken place there. Other cemeteries from the region were not excavated or published with the level of detail needed for the study of grave reopenings. There are a few unpublished cemeteries in the province of Drenthe that could potentially yield information about reopened graves in the southern Netherlands (Wijster, Zweeloo, Aalden and Hijken). According to Van Es (personal communication) there is little evidence for grave reopenings in Drenthe, except perhaps for the chamber graves in the cemetery of Hijken.

Grave reopenings rates according to gender and age

There are some interesting differences between the percentages of reopened graves with men's, women's and neutral grave goods. In all four cemeteries where the number of reopened graves was large enough to calculate meaningful percentages, graves with men's objects had higher reopening percentages than graves with women's and neutral objects (see table 3.13.5). The graves with so called neutral, non-gender specific grave goods had the lowest reopening percentages. This is especially interesting since there were considerably more graves with neutral and women's grave goods than graves with men's grave goods in these cemeteries (see table 3.13.2). It is tempting to see a causal relationship here. If men's graves were preferentially reopened to remove gender specific grave goods, that could be the reason why there are relatively few graves with typical men's objects in them. However, as will be discussed below in the section on grave goods, the diggers often seem to have left many gender specific objects behind in men's graves, making it less likely that graves with men's objects are underrepresented due to grave good removal.

Cemetery	Male	Female	Neu- tral
Broechem	42%	22%	19%
Bergeijk	59%	39%	9%
Posterholt	100%	61%	27%
Wijchen	16%	12%	3%

Table 3.13.5 Reopening percentages of graves with men's women's and neutral grave goods.

It is not possible to know whether a grave with typical men's or women's grave goods actually contained the remains of a man (Effros 2000, 2006: 212-214) but that is not an insurmountable prohibition in this case. The important point to note is that the diggers seem to have purposely targeted graves with gendered objects over graves with non-gendered objects and graves with typical men's grave goods over graves with women's objects. The question whether actual biological males or females were buried in these graves will largely have to remain unanswered. We should keep in mind that one of the reasons why there are so many reopened neutral graves, could be that the diggers removed gender specific objects during the reopening, thus turning originally gendered graves into neutral ones. However, I am inclined to think that this effect was small, as at least some small gender specific objects or fragments thereof usually seem to have been left behind in the reopened graves, as we shall see below.

In theory, the higher numbers of reopened graves with men's grave goods could at least partially be due to differences in above ground marking of these graves. If the male gendered graves were more clearly or durably marked, that could account for the fact that they were reopened more often than women's graves. However, there is virtually no physical archaeological evidence for grave markers. It is therefore unclear in what way the graves may have been marked. The targeting of specific grave types does suggest that they were recognizable above ground in some way.

A similar distribution of reopened men's and women's graves was observed in Anglo-Saxon Kent, although the difference was less pronounced than in the Low Countries. In the 8

sites with the highest reopening rates, the graves of 74 men, 54 women and 63 unsexed individuals were reopened. Because men were overrepresented in two of the cemeteries, this amounts to 22% of men's graves, 19% of women's graves and 15% of unsexed graves (Klevnäs 2013: 42). Also in German Bavaria, a slightly higher percentage of men's graves was reopened versus women's graves, but the difference was small, 60% of men's graves were reopened versus 51% of women's graves (Zintl 2012: 313-314). Both Klevnäs' and Zintl's analyses are based on osteological data. Although there was a high degree of correspondence between skeletal sex and the gendering of grave goods in these areas, it would be interesting to see if the difference in reopening rates between graves containing gendered grave goods associated with men and women is more pronounced than that between graves with individuals of male and female osteological sex. Unfortunately, neither Zintl nor Klevnäs tested for such patterns.

Only a small number of children's graves could be identified in the research area, some on the basis of the skeletal remains found in them, others only on the basis of the fact that they were too small to accommodate the remains of an adult. See Panhuysen (2012: 138-140) for an explanation of age determinations based on grave length. Of the 53 children's burials (under 13 years old) in the dataset, 7 had been reopened while 16 had remained intact. The status of the other 30 graves could not be determined. Of the combined graves of children and adolescents under 21 years, 11 had been reopened and 42 were intact. It seems that the graves of children, and especially those of adolescents were opened relatively infrequently compared to those of the population as a whole. However, children's graves were not completely avoided by the grave reopeners either. A similar pattern was observed in Anglo-Saxon Kent. Klevnäs (2013: 41) found that children's graves seem to have been reopened less often than those of adults, and that the children's graves which had been reopened were usually adult sized. These differences may partially result from the fact that

it is more difficult to identify reopenings in children's graves because their skeletons are more susceptible to decomposition and they were provided with fewer grave goods. However, it is possible that the diggers simply preferred to reopen larger graves over smaller ones. They may also actively have avoided the graves of children, identifying them on the basis of their size which could be estimated from surface markers. Apart from the possible avoidance of children's graves no other age-related patterns were found. Reopening seems to have affected adults' graves of all categories equally. In Bavaria, the graves of children and adults were opened equally often. However, the graves of older adults were reopened more often than those of younger adults (Zintl 2012: 312-313). The low amount of skeletal material from the Netherlands and Belgian Flanders is insufficient for a similar analysis.

The chronology of grave reopenings

In the methodology section, I discussed the method of dating grave reopenings on the basis of the state of the body and the wooden container, as it was developed by Edeltraud Aspöck (2005: 251-252; 2011: 302-306). She proposes that an average wooden grave container may take approximately 35 years to decompose, so there are potentially 35 years during which there is an open space inside the grave. In this open space, objects and bones can be moved and deposited on the grave's bottom. After this period, the grave will have collapsed and filled with soil, so any post-depositional interventions that take place at this point will result in the mixing of grave goods and bones with the container's fill. This period of 35 years is only an estimate, as the actual time it may take a wooden container to decompose depends on many factors, such as the type, thickness and treatment of the wood and environmental circumstances such as the acidity, moisture and porosity of the surrounding soil. This dating method is further complicated by the observations from the Meerveldhoven cemetery, which show that the open space inside the containers was often at least partially filled with sediment long before

the wood had decomposed. It is unclear whether analogous processes took place at the other cemeteries in the research area, but it seems likely that they did, at least on sites with a similar sandy or loamy soil. This information somewhat clouds the clarity of Aspöck's dating method. Already before the container had collapsed, grave goods and bones could be mixed with the sediment that had accumulated on the container's bottom. I tried to work around this issue by using a broad definition of the grave's bottom. Any object found within a height of about 15 cm from the grave's actual bottom was entered into the database as being 'on the bottom' of the grave. Nevertheless, these considerations need to be taken into account when we attempt to date grave reopenings with indications of an open space inside the container. Reopenings that took place in an intact container may not always be recognizable both because of the accumulation of sediment, and because the diggers may deliberately have mixed objects and bones into the soil with which they backfilled the grave.

A second problem arises when we try to compare absolute dates of cemeteries, graves and reopenings. Nearly all graves in this study were dated solely on the basis of grave goods and occasionally coins. Only a few contexts are dated with absolute methods such as radiocarbon dating. Despite the rather short phases defined by some authors (for instance Siegmund 1998 and Müssemeier et al. 2003), typo-chronological seriation-based dating is not always reliable, especially since we do not know how long certain objects may have circulated among the living before they were deposited with the dead (Kars 2011: 16-32). This is further complicated by the fact that none of the cemeteries in the research area have their own local typo-chronology. As a result, all the graves in this study were dated with typo-chronologies developed for cemeteries in the German area. In addition, the cemetery of Meerveldhoven was published in 1978 and has not yet been re-analyzed with modern typo-chronologies. The dates used in this chapter were taken from the publication and

may therefore differ from the way these graves would be dated if the cemetery's chronology was reevaluated with the modern typochronologies that were used for the other cemeteries in this study.

Only in approximately half of the reopened graves was it possible to assess the state of the wooden container at the time of the reopening. In 50 cases, it could be shown that the reopening took place while the wooden container was still intact. Another 56 were probably reopened after the container had collapsed (see table 3.13.6). According to Aspöck's scale, this corresponds to 50 graves that were reopened within approximately 35 years of the burial and 56 graves reopened more than 35 years after the burial. The percentage of graves that were reopened with intact or collapsed containers varies quite a lot between the cemeteries. In Broechem, only about one third of the graves was reopened while the wooden container was intact, while in Bergeijk the numbers of graves with intact and collapsed containers were almost equal and in Lent no graves could be shown to have been reopened after the container had collapsed. For the most part, the numbers are too small to draw any conclusions about the practices in particular cemeteries.

There was only one case where the state of the skeletal material offered indications for the reopening time. In Lent grave 16, the deceased's tibiae and fibulae were displaced while they were still articulated, indicating that the reopening was carried out while the body had not yet fully decomposed. This corresponds to Aspöck's phase B, meaning that the reopening probably took place within approximately 10 years after burial. In Bavaria, Zintl found at least 37 cases of reopenings that took place in Aspöck's phase A or B, when the body was still fully or partially articulated. These reopenings are a minority group in the Bavarian dataset, but quite a substantial one nonetheless (Zintl 2012: 326-327). Such early reopenings may also have been relatively common in the Netherlands and Belgian Flanders, but the lack of preserved skeletal remains inhibits us from detecting them. Zintl also found many graves

that had been reopened while there was still an open space inside the wooden container, even though not all of the Bavarian graves were documented with enough detail to allow observations on the state of the container and the vertical distribution of the grave goods. In the cemeteries that were excavated to modern standards, at least one third of the reopenings seems to have taken place in an intact container (Zintl 2012: 328). In Kent, most graves were reopened after the body had skeletonized, but before the open space inside the wooden containers had filled with soil. However, a small number were reopened while the bodies were still partially articulated. There is also some evidence that graves were reopened while the organic components of grave goods, such as the string on a bead necklace, were still intact (Klevnas 2013: 43-47).

Assigning absolute dates to the grave reopenings turned out to be quite difficult. Not all reopened graves could be dated, and for the dated graves, it was often not possible to determine the state of the wooden container at the time of the reopening. In those cases, the dates of the graves are only an approximate terminus post quem for the date of the reopening. In many cases, the dates of the reopened graves spanned most of the cemeteries' use periods, so these dates were not very helpful in dating the reopenings. None of the reopenings could be dated on the basis of objects that had beyond doubt been deposited in the grave during the reopening.

Together, the cemeteries in the dataset span the entire Merovingian period. However, there is considerable variation in the use periods of the individual cemeteries. The large Belgian cemetery of Broechem was the only one with graves dating to all phases of the Merovingian period. Wijchen in the central Netherlands also had graves from nearly all periods, but burials at this cemetery probably ceased slightly earlier than in Broechem. The cemeteries of Meerveldhoven, Bergeijk and Posterholt in the southern Netherlands were probably almost exclusively used in the seventh and the beginning of the eighth century.

Cemetery	Use period	Reopening dates
Broechem	400-750	560-685/735 (475-800)
Meerveldhoven	575-700	700-735?
Dommelen	670-750	700-735
Bergeijk	580-750	580-750 (800)
Posterholt	580/610-750	580/610-785 (800)
Borgharen	550-700	550-725
Wijchen	400-700 (600-700)	400-675 (750/800)
Lent	500-600? (most graves not dated yet)	535-635
Solleveld	500-700	630-700
Oegstgeest	500-700	500-735

Table 3.13.7 Use periods and reopening dates of the cemeteries in this study. For details, see the chronology discussions in each of the cemetery sections in this chapter.

Cemetery	Intact	Collapsed
Broechem	20	41
Meerveldhoven	1	5
Dommelen	2	0
Bergeijk	7	6
Posterholt	5	2
Borgharen	3	1
Wijchen	6	1
Lent	4	0
Solleveld	(1)	0
Oegstgeest	1	0

Table 3.13.6 Numbers of reopenings that took place in intact and decomposed wooden containers.

In the settlement of Dommelen, which is also in the southern Netherlands, burials did not start before the end of the seventh century. In Borgharen on the other hand, which is located on the southernmost edge of the research area, burials started in the second half of the sixth century and continued only until the end of the seventh century, as they did in Wijchen. For the cemeteries of Solleveld and Oegstgeest on the coast and Lent in the central Netherlands, there is currently insufficient dating evidence to be certain of their use periods. It is also important to keep in mind that many of the cemeteries were not excavated completely, so they may still hold graves that date to other periods than those represented in the current dataset.

The earliest datable grave reopening in the research area took place in Wijchen grave 185 and can be dated to 400-485. This may be an exceptional case, since other datable grave reopenings from this cemetery and the others all dated after 500/550. This near absence of early reopenings could be due to the general lack of early graves in examined cemeteries. As seen above, some of the sites with the most reopened graves only come into use around 600. If the study had included more cemeteries with fifth century graves, perhaps we would also have found more fifth century grave reopenings. On the other hand, it is also possible that the data accurately reflect historical reality and grave reopenings really were mostly a sixth and seventh century phenomenon.

The end date of the grave reopenings is even more problematic than the starting date. All reopenings that took place in graves with a collapsed wooden container can only be dated with a *terminus post quem*, which inherently means that they have no end date. Generally speaking, the years 750 to 800 are thought to be the time at which the Merovingian cemeteries were definitively abandoned. By association it is also taken as the hypothetical end date of the grave reopenings that took place there. However, the real end date of the reopenings is unclear and could lie some years before or many years after 750/800. In theory, the grave reopenings may have continued well into the Carolingian period, at least until the graves were no longer recognizable. There are

only a few cases with indications for a post-medieval reopening, specifically the graves from Borgharen that were probably searched by metal detector pilots.

The duration of the graves' visibility above ground depended on the presence and nature of grave markers, if there were any. No grave stones and very few other traces of permanent or semi-permanent markers were found, but the graves may have been marked by depressions or protuberances of the soil or by variations in the vegetation growing on or around the grave. Even though we have no traces of markers, it seems likely that the graves were marked, given the fact that the diggers were able to target specific grave types and specific areas within the graves. This is also suggested by written sources such as the *Lex Salica* title 55, which mentions various types of grave markers, including mounds, honorary columns and wooden huts for the dead, depending on which version of the text is read (Fischer Drew 1991: 118; Schmidt-Wiegand 1994: 257). If these structures were superficial, they need not have left archaeological traces. Klevnäs (2013: 37-38, 46) likewise argues that all or most graves in Kent were marked because intercuts between graves were rare and the grave reopeners were usually able to dig their pits in the center of the targeted graves. The marking could simply have consisted of soil heaped on the grave, although there is also evidence for more elaborate markers. If intercuts are indeed an indication that the older grave was no longer visible, grave markers in Kent may have become unrecognizable within a century. Zintl (2012: 310-311) suggests that the diggers in her research area may have been able to localize graves on the basis of slight variations in the landscape such as small depressions in the soil and deviations in the vegetation on and around the grave. Such small natural markers may indeed have been sufficient, especially when combined with knowledge the diggers may have had about the deceased's identity and the grave's construction.

It is also possible that the grave reopenings stopped before the burials on the cemeteries

came to an end. This may for instance have been the case in Posterholt and Bergeijk, where few to none of the graves from the last phase were affected by post-depositional interventions. In Posterholt however, it is also possible that all the reopenings took place around the end of the seventh and in the eighth century, which would mean that they could have been carried out by the generation whose own intact graves form the cemetery's end phase. The same could be true for Meerveldhoven. This illustrates a point also made by Zintl that we do not know whether graves were being opened more or less continuously, or whether there were periods of higher and lower reopening intensity (Zintl 2012: 330). On the other hand, there are few indications that graves were opened simultaneously, except perhaps for the small number of graves from Bergeijk and Posterholt, which contained the distributed fragments of single pots. Similar cases of objects or bones distributed over multiple graves were also found by Neugebauer (1991: 115), Aspöck (2005: 252-253, 2011: 308, 315) and Klevnäs (2013: 57). Generally speaking we can conclude that most of the reopenings in the research area took place in the later sixth and seventh century, with a few early cases in the fifth and a number of late cases in the eighth century.

These findings correspond to some extent with the traditional estimates of Roth that grave reopenings started in the sixth century, grew in intensity in the seventh and then stopped, even though he based his conclusions on the dates of reopened graves, rather than on the dates of the reopenings themselves (Roth 1978: 64, 73). Later studies from Germany often argue for a concentration of grave reopenings in the middle and third quarter of the seventh century, largely based on the dates of reopened graves (summarized by Klevnäs 2013: 15). This could also be true for some of the cemeteries in the Low Countries, but certainly not all of them.

The pattern found by Zintl in Bavaria is comparable to that in the Low Countries. Grave reopenings probably took place during all phases of the Merovingian period, but they

seem to have occurred most frequently from the end of the sixth into the seventh century (*jüngere Merovingerzeit*), and to a lesser extent the first half of the eighth century (*späte Merovingerzeit*). As in the Netherlands and Belgian Flanders, not all phases were equally well represented in Zintl's dataset and many cemeteries did not span the entire Merovingian period, so it is sometimes unclear to what extent the differences in reopening rates between the phases are influenced by variations in the total number of graves from these phases (Zintl 2012: 301-304). Perhaps the more concentrated dates of the reopenings in some of the German cemeteries result from the relatively small size of the datasets. When more reopened graves are examined, the dates of the reopenings have a larger chance of being more diverse.

In Anglo-Saxon Kent grave reopenings may have started in the early sixth century and become more frequent in the seventh. Reopenings may have peaked in the middle of the seventh century, but they could also have occurred spread over a longer period of time. The graves all seem to have been reopened while the cemeteries were in use. The reopenings may have ceased in the last quarter of the seventh century, as there are no reopened graves that must date to that period and most of the heavily affected cemeteries seem to have an end phase without reopened graves (Klevnäs 2013: 47-49).

Unfortunately, there was insufficient dating evidence from the research area to define distinct phases of grave reopenings. We can assume that most if not all the reopenings in the dataset date to the Merovingian period, but there were not enough datable reopenings to divide them into meaningful subcategories. The following analyses will therefore treat all the reopened graves as one group. The reader should be aware that some of the differences between graves and cemeteries could be related to changes in reopening practices over time.

Reopening methods

Apart from a few exceptions, the graves in the research area were usually opened in quite

similar ways. The diggers made a pit, usually starting somewhere on top of the wooden container, and dug their way down into the grave. If the container was still intact, they would have needed to break into it. For some graves there are indications that the diggers removed the whole container lid (for instance Broechem 94, Bergeijk 27, and four graves from Lent), but in other cases they may have just made a hole in it. In grave 35 from Bergeijk, the diggers may even have taken the whole coffin from the grave pit.

In many cases the reopening pit was clearly visible during the excavation as a distinctly colored fill within the features of the grave construction. In other cases, however, no traces of a reopening pit were observed, and the post-depositional intervention was only noticeable from the disturbance of the objects and bones on the grave's bottom. Not all soil types were equally legible and not all excavators were equally attentive to the details of the grave constructions and the disturbances that may have affected them. Nevertheless, there are quite a number of cases where it is surprising that no traces of a reopening pit were found (see for instance the graves from Lent discussed below). In these graves, the reopening pits may have been backfilled with their original fills. Perhaps the diggers also removed the graves' entire fill to lift the coffin's lid. For Lent the excavators were adamant that their careful excavation methods would have revealed even the most subtle traces of a reopening if there had been any. Since no such traces were observed we concluded the graves may not have been fully closed in the time between the burial and the reopening, allowing for easy reopenings that left no traces in the graves' fills.

Disturbances of the graves' contents sometimes indicated that the actual interventions reached beyond the documented edges of the reopening pits. Similar observations were made by Zintl (2012: 39) for the reopened graves in Bavaria. Nevertheless, the diggers may have used hooks or sticks to rummage the contents of the graves, especially when there was an open space inside the wooden contain-

er. In these cases, the diggers may sometimes have made only relatively a small opening in the container, through which they could insert an arm or a tool, thus extending their reach beyond the confines of the pit. Most reopening pits reached down to the graves' bottoms, but in the Broechem cemetery there were a few cases of shallow pits, which were limited to the grave fill's upper levels (graves 15, 987, 1030). It is possible that these were not really reopening pits at all. They may have resulted from slumping fill when the graves' wooden containers decomposed. However, given the fact that most graves in the research area were furnished with such containers, one would expect such depressions to have been much more common if they were the result of collapsing containers. Since these shallow pits' positions in the graves were similar to those of regular reopening pits, they may indeed reflect an early-medieval grave related practice. Similar shallow reopening pits were observed by Zintl (2012: 337-338) in four graves in her research area.

Most graves seem to have been reopened only once and with a single pit, but there are a few exceptions. Broechem grave 84 had an unusually large wooden container which showed traces of at least three separate reopening pits in its fill. Grave 186 revealed two separate reopening pits, a small one in the region of the head, and a larger one in the area of the pelvis and legs. Grave 989 also had separate reopening pits in the areas of the head and feet. Grave 141 showed two intercutting reopening pits with distinctly different colored fills. It is unclear whether these pits were dug simultaneously or whether they represent consecutive reopening events. The intercutting pits in grave 141 suggest at least some time passed between the digging of the pits, since one must have been filled with earth before the other was dug. Meerveldhoven grave 50 also contained two possible reopening pits, although the excavators did not interpret them as such. No traces of reopening pits were found in the Borgharen cemetery, but it could nevertheless be established that grave XII had been reopened at least twice, based on the distribu-

tion of grave goods and skeletal material in the fill. The number of cases where multiple reopenings can be shown to have taken place is relatively small, but given the difficulties involved in recognizing multiple interventions that took place in one grave, it is possible that additional cases are hidden in the dataset. There are more graves like grave VII from Borgharen, where grave goods were found both in the fill and on the grave's bottom. It would be interesting to subject these to detailed analysis as was done for the Borgharen case, to see whether they may also have been subjected multiple reopenings.

There were a few cases where multiple graves were reopened with a single pit (Broechem 414/445 and 296/288, Dommelen 3/4, Posterholt 80/82 and 89/90). There was no evidence for the use of true search trenches to locate graves. In Bavaria, Zintl also found a few sets of two graves that seemed to have been reopened with a single pit, but these were very rare (Zintl 2012: 338; also Neuffer-Müller & Ament 1973: 18-19). In the cemeteries of Bergeijk and Posterholt, a number of graves shared fragments of single pots. Since these graves were positioned closely together, the distribution of these pottery fragments could be an indication that the graves were opened simultaneously and backfilled with soil from the same pile, which was mixed with the pottery fragments.

As in Bavaria (Zintl 2012: 332-333, 338-339), in nearly all cases the reopening pits seem to have been dug directly over the area containing the coffin, indicating that the diggers probably knew the graves' locations and were familiar with their general layout. Some reservations are appropriate here, because the old topsoil in these cemeteries is usually not preserved, so we can't verify whether the reopening pits were also this well directed in the upper layers of the grave's fills. The reopening pits usually focused on the interior of the wooden container, especially on the area of the deceased's thorax/pelvis (or presumed area, in cases where no skeletal remains were preserved). The region around the deceased's head and legs/feet was less frequently affected

by reopenings. A number of reopening pits extended beyond the confines of the wooden container into the head end, foot end and sides of the grave pit. This happened more frequently in graves where the coffin had decomposed and no longer formed a physical barrier that constrained the digger's activities. The reopening pits were often wider in the upper levels of the grave, becoming more narrow and focusing on a specific area as they went down.

In a few cemeteries, there may have been small differences between the ways men's and women's graves were reopened, but these were barely statistically significant. In addition, the differences that were observed did not correspond with the traditional hypothesis that men's graves were usually opened in the leg region and women's graves were opened in the head and chest area (for instance Stoll 1939: 8; Steuer 1998: 519; Stork 2001: 428; Effros 2006: 199; Bofinger & Przemyslaw 2008: 51). In Broechem, there may have been a heavier focus on the region around the head in men's graves. The Meerveldhoven cemetery yielded too few graves for a proper analysis, but interestingly one grave that was reopened only in the leg region contained grave goods associated with women. In the cemeteries of Bergeijk, Posterholt and Wijchen, the head regions in women's graves may have been reopened slightly more often than in men's graves, but there were also many women's graves where the entire wooden container or even the whole grave was reopened. The situation in Kent was very similar, with small differences between the reopening pits in the graves of men and women in some cemeteries, but no strong patterns across the whole dataset (Klevnäs 2013: 52). In Bavaria, there were no significant variations in the placement of reopening pits in the graves of men and women, but Zintl did note a difference in which parts of the grave's bottoms were usually affected. In women's graves, the diggers more often rummaged the entire western and/or middle part of the grave, where the deceased's head, chest and pelvis were located. In men's graves the diggers more often focused on the pelvis area.

She suggests that this pattern reflects the common distribution of especially metal, but also other grave goods in men's and women's graves (Zintl 2012: 338-341).

In many cases, it was unclear whether the intervention pits were backfilled after the reopenings. However in Broechem the excavators noted that the reopening pits' fills were usually rather homogenous, suggesting that they had been filled with a single load of soil. In Posterholt on the other hand, at least one reopening pit had a layered fill, suggesting that it had been filled in stages over a longer period of time, as would happen with natural sedimentation. However, another grave from Posterholt did have a homogeneously filled reopening pit. This suggests that various practices concerning the backfilling of reopened graves may have existed side by side. Many reopening pits also yielded objects that had been mixed with the fill, at least in the lower levels, indicating that these pits were probably at least partially backfilled. For Kent, Klevnäs concluded that the reopening pits were often backfilled, sometimes with the same material as the original fill, sometimes with a different material. A few graves were not backfilled at all. Klevnäs (2013: 57-58) suggests that filling with a different material than the original fill could indicate delayed backfilling, possibly by other people than those who reopened the grave. In Bavaria, Zintl (2012: 355) notes that in at least in the one cemetery where sections were occasionally documented, the reopening pits seem to have been backfilled. For future cemetery excavations in legible soils, it would be worthwhile to document more sections as opposed to only excavating in levels. Sections offer much more insight into the vertical stratigraphic composition of grave and reopening pit fills. Aspöck (2005: 255, 2011: 309) notes that the reopening pits in the Langobard-era cemetery of Brunn am Gebirge in modern day Austria were probably not completely backfilled after the reopenings, as the fills contained the shells of snails who are unable to dig themselves into the soil. These snails could only have crawled into the pits if they had remained mostly open after the intervention.

Future cemetery excavations should sample the graves' various fills, to look for such evidence.

Special cases

It is unfortunate that so little skeletal material is preserved for the cemeteries in the research area, especially because many of the cases where skeletal material is available reveal very interesting practices. In the woman's grave XII from Borgharen, the disarticulated remains of two young boys were deposited at the foot end. At least one of the boys was the woman's son. This find potentially represents three post-depositional interventions. First each of the boys' graves were probably reopened to retrieve their remains, although they may also have been stored above ground. Second, the woman's grave was reopened to deposit the boy's bones at the foot end. The Bergeijk cemetery also yielded one presumed woman's grave which was reopened only at the foot end. Unfortunately, almost no bone was preserved here, so we cannot verify whether the intervention pit may have contained a child's burial.

In grave 46 from Lent-Lentseveld the deceased's cranium had been placed on the pelvis. There were no cut marks on the skull or vertebra. The mandible was left *in situ*, indicating that the cranium was moved after the tissues connecting it to the mandible and spinal column had decomposed, probably during a grave reopening. Apart from the displaced cranium, the skeleton showed no indications that it had been disturbed after the onset of decomposition. The grave did contain an additional skull bone from a second individual. In grave 39 from Lent the deceased's skull was missing entirely. Once again no cut marks were found on the remaining upper vertebra, so it was probably removed during a reopening. Despite very careful excavation and a legible soil, the excavators observed no traces of reopening pits in these graves. Lent grave 15 contained the remains of a six year old child that had been curled up into a bundle. The child's skull was found a few centimeters above the rest of the body, separated from it

by a layer of clay. The body was deposited in small amorphous pit dug above the corner of the foot end of another child's grave. As in the other cases, there were no indications of a forceful *peri-mortem* decapitation. The child's grave may have been reopened to separate the skull from the body. Alternatively the soft tissues had already partially decomposed before the child was buried or the child was previously buried elsewhere. This context is reminiscent of the disarticulated burials of the young boys at the foot end of the woman's grave in the Borgharen cemetery. Most reopened graves in the Lent cemetery (14, 16, 21 and 39) had a rather rummaged appearance. Since most of the graves were probably reopened while there was still an open space inside the wooden container, it would have been relatively easy for the diggers to select any items they may have wanted, without disturbing the skeleton. The fact that the bones had nonetheless been rummaged substantially, suggests that the disturbances may have been deliberate. This marked rummaging is especially interesting since the graves in question still contained many grave goods, so it seems that few objects were removed during the reopenings.

Similar cases of graves with skulls that were moved or removed post-decomposition without any signs that the grave had been reopened, were described by Simmer (1982: 40-41) for western France. In some cases, the body was placed in the grave in such a way that there was no room for a skull, indicating that the skull was most likely removed before burial. These were usually not cases of *ante* or *peri mortem* decapitation, because the spinal columns of these burials were intact, including the two upper vertebrae. Simmer suggests that these graves may contain reburied remains, of which the bone positions were reconstructed by the burying group. Alternatively, it is possible that the remains were kept above ground or given a preliminary cover in the grave until the skull could be removed and the grave pit backfilled. Post-depositional skull manipulations are also found in early medieval graves from other parts of Europe. In some cases the

cranium and/or mandible are missing, in other cases the cranium was intentionally placed in an unusual position or location. Aspöck analyzed a large number of graves with missing skulls in the Langobard period cemetery of Brunn am Gebirge in modern day Austria and the Anglo-Saxon cemetery of Winnal II in England. In Brunn am Gebirge, skulls were missing most often, but other bones especially ribs and arms were also often missing. Leg bones were still present in most cases. Bone preservation in this cemetery was not very good, so especially fragile bones such as ribs may also be missing because of natural disintegration. In a number of graves, certain bones may have been intentionally broken by the diggers. The graves where the skull was missing had usually been reopened after the bones had skeletonized, but often while there was still an open space inside the wooden container. In two reopened graves additional skulls were found on the bottom. In one burial, the original skull and an additional female skull were both placed on the male deceased's pelvis. In another, the skull had been moved to the chest area. Two graves contained additional femora, but these were found in the reopening pits' upper fills, and may not have been deposited during the reopenings. In Winnal II the bodies in a number of graves showed unusual body positions and dislocated, missing and damaged bones. As in the other cemeteries discussed here, some of the abnormalities in these 'deviant burials' may not result from primary burial practices, but from actions carried out during the reopening of the graves. For instance, bodies with 'amputated' hands or skulls, may simply have been moved after the onset of decomposition, as the joints connecting them to the body are the first to disarticulate. At least 25 graves in this cemetery were reopened relatively soon after burial, before the body had fully skeletonized (Aspöck 2011: 307-309, 315-316). Klevnäs also found substantial evidence for post-depositional skeletal manipulations in the Anglo-Saxon area. There were several graves with additional burials where the skull of the original burial was moved, often to be placed between the

legs of the new body. In the majority of regular reopened graves the skeletal remains had simply been rummaged, but in eleven cases there was evidence for more deliberate manipulations. Most of these were found in cemeteries outside Kent. Ten cases involved displacement and occasionally removal of the skull. In one grave the only recognizable manipulation was a curiously reversed femur. More cases of skeletal displacement were found, but they may have resulted from natural taphonomic processes rather than deliberate manipulations (Klevnäs 2013: 76-78). Zintl found eleven graves with post-depositional skull manipulations in the Bavarian cemeteries. In these cases, the skull had been turned around and deliberately placed upside down or on the opening in the bottom. These skull manipulations affected both the graves of men and women, and one child. Most cases seem to have taken place while the wooden grave containers were still intact, and some even before the body had fully skeletonized (Zintl 2012: 354-355).

At the Oegstgeest settlement a large number of disarticulated human bones were found in various contexts across the site, mainly in the fills of gullies and ditches. The majority of these scattered finds were long bones and skull fragments. The inhabitants may have selectively gathered and deposited bones from the extremities and the skull. The most striking example is the pit containing a star-shaped formation comprising the long bones of at least two individuals. Adjacent to this pit lay a second pit with selected bone fragments belonging to a minimum of six individuals. All bones of which the sex could be determined, belonged to men. Since no skeletal material was missing from the graves found in the settlement, the scattered bones found in these deposits must have been brought to the site from elsewhere. They may have been taken from reopened graves in nearby (or more distant) cemeteries. Very little research has been done so far on which bones are usually missing from reopened graves. This is a difficult subject because bones may also disappear through natural decomposition. Klevnäs notes that there are no indications that the diggers in her

research area targeted specific types of bones. She suggests that where bones are absent, the diggers may simply not have made an effort to backfill with the same material as was dug out (Klevnäs 2013: 52). Similar sentiments are expressed by Zintl for Bavaria (2012: 352-253). It is unfortunate that the poor bone preservation in most of the Low Countries does not support this type of research, as the data from Oegstgeest do point in the direction of selective collecting of bone, either from graves or from other sources. The finds from the Meuse river near the town of Kessel are another example of early medieval human bones found outside a typical funerary context. The bones were not eroded, so this was probably an original deposition site. The site had a long multi-period use, from the Late Iron Age to the High Middle Ages. Of the large amount of bones found, sixteen were carbon dated and three of these originated from the Merovingian period. Of the sexed bones, 75% were male and 25% were female. However, it is important to keep in mind that these are the results of the ensemble as a whole and it is unclear which portion of the bones dates to the early medieval period. The finds did not show a preference for bones from particular parts of the body, suggesting that whole bodies may have been deposited here. A similar site may have been located near Roermond. The bones from this site have not been dated yet, but a percentage of the retrieved objects are Merovingian. Such river deposits may have been one of the places where objects and bones from reopened graves were taken to.

Grave goods

‘Bei Männerbestattungen ist das Ziel der Be-
raubung meist Spatha, Sax oder beide Waffen,
sowie der Gürtel. Die Lanze ist hingegen stets tabu;
den Frauen wird meist der Metallschmuck geraubt,
wogegen die Perlen (Glas, Amethyst, Goldblech-
scheiben) ebenfalls tabu zu sein scheinen [...].’
(Roth 1978: 73-74)

‘With the men’s graves, the aim of the robbery was
most often the spatha, seax or both weapons, as
was the belt. The lance on the other hand, was

always taboo; from women the metal jewelry was
usually robbed, while the beads (glass, amethyst,
gold foil discs) also seem to have been taboo [...].’
(My translation)

The comparison between the objects found in reopened and intact graves revealed much variability, making it difficult to establish which objects may have been taken from, or added to the reopened graves. To some extent, the observed patterns corresponded with the observations of Roth from 1978, but there were marked differences. First and foremost, it was interesting to see that the reopened graves usually yielded many objects that had apparently been left behind by the diggers, usually within reach of the reopening pits. In fact, in most of the cemeteries, certain object categories were found more often in reopened than in intact graves. This was most pronounced in Posterholt, where the reopened graves contained more objects of nearly all categories than the intact graves. This could be an indication that the diggers sometimes added grave goods to the graves when they reopened them. However, this pattern is probably at least partially caused by the fact that in most of the cemeteries, the graves of the last phase were furnished with fewer grave goods and were reopened less often than the graves of earlier phases, thus lowering the average number of objects found in intact graves. In addition, the people involved in grave reopenings may have selected graves with large numbers of objects and particular grave good types. If graves with certain object categories were reopened more often than others, without the objects in question being removed, that would also help account for the higher numbers of objects in the reopened graves. The diggers’ preferences for certain grave types or grave good assemblages seem to have varied between the cemeteries. The majority of the objects from the reopened graves in the research area lay within the reach of the reopening pits, which makes it less likely that they were simply left behind because they were overlooked. The diggers may have however have missed some items, particularly if the reopening took place after the wooden container had collapsed and filled with soil, as

was the case for about half the grave reopenings in the research area. There are no indications that there were general taboos on certain object types, which led these objects to be consistently left behind as was suggested by Roth. Nor are there any indications that objects with a Christian or other religious symbolic associations were regularly left behind, as suggested by Roth and Koch (Koch 1974; Roth 1978: 68-69). In Bavaria, Zintl (2012: 342-344) also did not find any indications for such taboos.

A similar systematic comparison of the objects from reopened and intact graves has not yet been done for other regions, so the opportunities to contrast my analyses with those of others are limited. However, Klevnäs and Zintl did make notes on which objects seem to have been present and absent in the reopened graves from Kent and Bavaria, so I will compare my results with theirs. It is important to keep in mind that the objects discussed here are only those which survive on an archaeological timescale. The graves originally probably contained many materials such as textile and wood which decomposed long before the graves were excavated. Depending on the local soil conditions, bone, shell and ivory also did not survive. Some of these materials would have started to decay almost immediately after they were deposited in the grave and may therefore not have been available or have appeared attractive to the grave reopeners. We do not know whether textiles stained with the liquids of the decomposing corpse or wooden bowls which had partially rotted away would have been of interest to them. Perhaps they did take such items, as they also seem to have removed severely corroded metal objects. There is some evidence that the diggers may have preferred graves containing larger numbers of objects. This issue is complicated because we do not know what the original contents of the reopened graves was. Nevertheless, experience has shown that the diggers usually left behind enough fragments of the grave goods to allow us to make an estimate whether the grave in question was originally on the 'rich' or 'poor' side. The preference of graves

with gendered objects over neutral objects which was discussed above, could be related to the fact that neutral gendered graves generally contained fewer objects than graves with typical men's and women's objects. The late graves with few grave goods in the cemeteries of Bergeijk and Posterholt were mostly left untouched, but this could be due to a decrease in the occurrence of reopenings towards the end of the Merovingian period, rather than active avoidance of these graves by the diggers.

For Kent, Klevnäs (2013: 65-67) found indications that the diggers probably targeted well-furnished graves over less well-furnished or unfurnished graves, possibly based on their size. In German Bavaria, Zintl did not note a clear preference for 'rich' graves on the part of the diggers. In most cases, they reopened nearly all the graves in a particular cemetery, and left most of the graves in other cemeteries intact, irrespective of the number or quality of objects they contained. Only in the cemeteries of Harting-Ost and Burgweinting-Villa, comparatively well-furnished graves seem to have been reopened slightly more often than graves with fewer or no grave goods. As in the Low Countries, this may partially be related to the fact that late graves both contained fewer objects and were reopened less often than graves that date earlier (Zintl 2012: 321-323).

Relatively few seaxes and especially swords were found in the graves in the research area, the cemeteries of Wijchen and Lent excepted. Perhaps swords were systematically targeted by the diggers so few to no graves containing these objects were left intact. The removal of swords and seaxes by grave reopeners is likewise attested in the sword fragments and sword belt and scabbard fittings that were found in a number of reopened graves. However, there were also a few reopened graves in the research area that did contain swords and seaxes. Some of these were fragmented, but not all. These objects usually lay within the reach of reopening pits, suggesting they were left behind on purpose. The preferential removal of spathas and seaxes by grave reopeners is also suggested by Klevnäs (2013: 70-71) and Zintl (2012: 347-348) for Anglo-Saxon Kent

and Bavaria. The early medieval cemetery of Brunn am Gebirge in Austria also yielded few weapons, especially swords (Aspöck 2005: 256). The removal of shields and shield elements from reopened graves is demonstrated by the finds of rivets and sheet metal with wood remains attached from the reopened graves in some of the cemeteries, especially Bergeijk and Posterholt. Arrow and lance heads on the other hand were often left behind, as they were found in much higher numbers in reopened than in intact graves. Interestingly, they often lay within reach of the reopening pit. The lance heads would have been difficult to overlook because of their size, so they may have been left behind intentionally. This was not the case in Bavaria, where lance heads were rarely found in reopened graves, and usually lay outside the reach of the reopening pit. Zintl also has indications for the removal of shields. Arrowheads on the other hand, were often left behind by the Bavarian diggers, as they were in the Netherlands and Belgian Flanders (Zintl 2012: 348-350). Klevnäs did not find evidence for the targeted removal of shields in Kent. Like in the Low Countries lance heads were often left behind, but this may in part be due to their usually inconspicuous location in the peripheral areas of the grave, where they could easily be overlooked. No arrowheads or axes were found in the Kentish reopened graves, but these objects are generally rare in Kent, so it is unclear whether or not they were removed during reopenings (Klevnäs 2013: 70-71). Belt fittings were also quite numerous in reopened graves, but the diggers may sometimes have removed some of them, as is attested by incomplete sets of belt plates that were found in a number of reopened graves. For example graves 82 and 69 from the Bergeijk cemetery yielded single belt plates with silver-inlay that are normally part of a set of multiple belt fittings that include at least a decorated plate buckle and often also a counter plate and back plate, which were not found in these graves. Zintl (2012: 350) makes similar observations for the Bavarian cemeteries. Belt plates and other fittings were frequently taken from the

graves, but they were also often left behind, even when they were in the reopened section of the grave. Klevnäs (2013: 68-69) found no indications for the removal of belt fittings in Kent, although she does not exclude that they may occasionally have been taken. Of the typical women's grave goods, it is less clear which objects may have been targeted. The diggers may have removed a wide range of objects. They almost certainly took many beads, since the average numbers of beads in reopened graves are in nearly all cases much lower than in the intact graves. Nevertheless, substantial numbers of beads were left behind, so the diggers were not systematically removing all of them. The removal of beads was not seen by Klevnäs in her research area (Klevnäs 2013: 68). However, because she only had a relatively small number of bead-containing reopened graves, she was mostly limited to comparing the presence and absence of beads between reopened and intact graves, and not the actual numbers of beads found in them. A similar methodology may also be the origin of Roth's (1977: 289, 1978: 69-70, 73) hypothesis that beads were taboo to grave robbers. Zintl's (2012: 345) observations for Bavaria are similar to mine. Reopened graves often still contained beads, but they were far fewer in number than those found in intact graves. Klevnäs (2013: 68) suggests that the grave reopeners in Kent probably preferentially removed brooches. Zintl (2012: 346-347) also sees indications for the targeted removal of brooches and other types of personal adornments such as bracelets and earrings from the reopened women's graves in Bavaria. In some reopened graves, small fragments of brooches were found. She suggests that the general lack of such objects in her research area may indicate that grave reopeners systematically targeted graves containing these items. Brooches and other women's jewelry were also a relatively rare find in the Dutch cemeteries, especially in the reopened graves. The lack of brooches is probably at least partially due to the fact that many graves date to the seventh century, when brooches were deposited in graves less often than in the previous centuries. However, in

the few cemeteries where brooches were found, they were largely lacking from the reopened graves (except for Lent, where the average number is higher for the reopened graves), indicating that they may indeed have been taken during reopenings. Other typical women's grave goods are also rarely found, especially bracelets, finger rings, earrings, belt pendants and keys. As with the swords, it is unclear whether their absence is an indication that these objects were taken, or whether they were just never deposited in graves to begin with.

In the Low Countries, gender neutral grave goods, such as knives and pottery vessels, were usually found in higher numbers in the intact graves. This indicates that they were probably often removed during reopenings, but there are a few notable exceptions. These may reflect the preferences of local grave reopening participants, but could also have resulted from changes in the grave good deposition custom and grave reopening rates over time. Zintl (2012: 350-351) found relatively large numbers of pots and fragmented knives in the Bavarian graves. She could not show conclusively whether they were often taken by the diggers. In Anglo-Saxon Kent, knives were present in reopened graves in disproportionately large numbers, leading Kleynäs (2013: 67) to argue that they may have been left behind systematically because of their cultural associations. Pottery vessels on the other hand, were underrepresented in reopened graves, indicating that they were taken by the diggers. When looking at the materials recovered from intact and reopened graves, there is so much variation between the cemeteries that it is almost impossible to discern a pattern. The materials most often found in both reopened and intact graves were iron, copper alloy, pottery and glass. Relatively few precious metals were found in the cemeteries from the research area. This may be because precious metal objects were not often deposited as grave goods, especially in the seventh century to which many of the reopened graves date. Alternatively these objects may have been systematically targeted by the diggers, and are therefore lack-

ing from the graves. In some cemeteries the average numbers of pottery, iron and copper alloy were higher in intact graves, in others they were higher in reopened graves. There were even cemeteries where the numbers of pottery were higher in intact graves, while the numbers of iron and copper alloy objects were higher in reopened graves, but not vice versa. It seems that objects of all materials were eligible to be taken from the grave or left behind. The variations in the numbers may be related more to the changes in grave good customs and reopening rates over time and between locations, than to the preferences of the local grave reopening participants. In all cemeteries, the numbers of glass objects were higher in intact graves, because this category consists mostly of beads and thus reflects the fact that there were fewer beads in the reopened graves. The possible deposition of objects during reopenings is exceedingly difficult to trace. In the research area, no clear cases of intentional deposition of objects in reopened graves was found, except perhaps for the dog's jawbone found in the reopening pit of grave 58 from Posterholt. A few graves also contained additional burials that may have been deposited during a reopening, as was the case in Dom-melen grave 3. However, if objects were added to graves, they would often have been relatively close in date to the grave's original furnishings, and thus have been indistinguishable from them. The fact that reopened graves quite often contained higher average numbers of certain object types than intact graves certainly allows for the possibility that objects were sometimes deposited during reopenings. In Bavaria, Zintl (2012: 325) was also unable to identify objects that had been added to the grave, other than a number of additional burials and the remains of a dog in Obertraubling-Köstlmeierfeld.

The objects found in reopened graves were often broken, with part of the fragments missing. When a reopened grave contains partial fragmented objects, these could have been broken as a result of actions that took place during the reopening, but they may already have been broken as part of the original funer-

al rites (Ament 1976: 309-310), or because of the force exacted by the collapse of wooden grave containers. It is also possible that they were not intentionally deposited in the grave at all, but were just accidentally mixed with its fill. However, the comparison of reopened and intact graves showed that the reopened graves in the research area contained many more indeterminate fragments than the intact graves. In addition, recognizable objects from the reopened graves generally showed lower percentages of completeness. This damage and fragmentation may to some extent have been accidental, resulting from actions that were necessary to reopen the graves. However, there are several examples of objects that seem to show signs of intentional damage, such as the distributed fragmented pottery vessels from Bergeijk and Posterholt that were mentioned above. The Posterholt cemetery also yielded a broken belt plate with an impact fracture. In the Bergeijk cemetery several fragmented weapons were found, including a lance head and two possible swords. In Bavaria and Kent, Zintl and Klevnäs also found many objects that had probably been fragmented during grave reopenings. Including a few cases of possible intentional damage, such as a shield boss with gold foil decoration from Burgweinting-Villa that was badly damaged, probably during a grave reopening which took place soon after burial, before the deceased's remains had skeletonized (Zintl 2012: 342, 354; Klevnäs 2013: 67;).

Grave constructions

For all sites where there were sufficient data to do a comparison of the size of reopened and intact graves, the grave pits and containers of the reopened graves were generally larger than those of the intact graves. For instance, in the Broechem cemetery the grave pits of the reopened graves were on average 26 cm wider and 37 cm longer than those of the intact graves. As Klevnäs (2013: 36) notes, reopenings themselves could have enlarged the grave cuts, causing some of the size difference between intact and reopened graves. This could have been a factor in the Low Countries, were it

not that the coffins in the reopened graves were also 15 cm wider and 31 cm longer than those in the intact ones. The cemeteries of Meerveldhoven, Bergeijk, Posterholt and Wijchen presented similar patterns. Because all the cemeteries lacked their original surface and were missing part or all of their topsoil, the depth of the grave pits could not be measured reliably in most of the cemeteries and was therefore excluded from this analysis.

It is unclear whether these differences in size between the reopened and intact graves are a result of conscious choices on the part of the diggers or whether they are caused by parallel changes in reopening frequency and preferred grave pit and coffin size throughout the cemeteries' use periods. Since the graves in the research area tend to be smaller towards the end of the Merovingian period and grave reopenings also seem to have become rarer in the final phases, it is possible that the difference in size between reopened and intact graves resulted from more large early graves being reopened than smaller late graves. However, the decrease in size over time is not equally clear in all cemeteries. In Broechem especially, there may not be a correlation between smaller grave size and late date of the graves. This suggests that the diggers may indeed have had a preference for larger graves. The difference in size between reopened and intact graves could also be caused by the fact that children's graves were often relatively small and were reopened less frequently than the larger graves of adults. However, since the distinction between children's and adults' graves was largely made based on grave size, we could also turn this around and say that it seems like children's graves were reopened less frequently because the diggers selected larger graves, regardless of whether they contained the remains of adults or children. Because so few graves in the research area yielded skeletal material, these hypotheses cannot be tested. The apparent preference for larger graves could also be related to better and prolonged visibility of larger graves on the surface, for instance because they had more soil heaped on top of them, created deeper slumping impressions, or were marked

with more robust structures.

The grave reopeners may also have had a preference for more elaborate or less common grave types. In the Broechem cemetery, there were only seven graves with unusual or elaborate grave constructions such as chambers, two part coffins and tree trunk coffins. Of these seven, six had been reopened. In Meerveldhoven, which also yielded a number of elaborate grave constructions, the pattern was less clear. The chamber graves were slightly overrepresented among the reopened graves, while the intact graves more often had partitioned and simple coffins.

The preference for reopening larger graves and elaborate grave constructions has also been noted in other regions of the early medieval world. In Bavaria, the reopened graves were on average deeper and in some cases also larger than the intact graves, even though Zintl (2012: 309-310) was able to exclude children's graves from her analyses. She did not have

sufficient data on grave constructions to detect any patterns in this regard. In Anglo-Saxon Kent, reopened adults' graves were on average both deeper, longer and wider than the intact ones. Klevnäs (2013: 36-37) suggests that the diggers may have selectively targeted bigger graves because these were usually also more elaborately furnished with grave goods. Additionally, she takes into account the possibility that larger graves may have been more easily visible to the diggers.

4. Interpretation

4.1 The basics

At the start of this PhD research, I asked myself these three questions:

1. What were the social roles of and relations between the persons participating in grave reopenings, including the diggers, the deceased and possible onlookers?

2. What were the participants' motives for having grave reopenings?

3. What was the wider socio-cultural context of the interventions?

I would very much like to have a time machine and be able to travel back to the early medieval Low Countries to do ethnographic participating observation on the Merovingian cemeteries and see what the burial practice was actually like and ask the people about their perceptions of grave reopenings. Or maybe I wouldn't like to do that at all, because my modern cultural background means I am quite estranged from the dead and would be disgusted by the life and mortuary practices of early medieval people. In any case, such a time machine does not exist, so as ethnographers of the past we will have to make do with interpretations of the archaeological material discussed in the previous chapters and additional information from early medieval written sources.

The reasons for reopening graves may have been multiple and complex. In this chapter, I will delve into a few of the possible interpretations. Some of these may be true for at least some of the grave reopening cases. They may have overlapped or excluded one another. We will investigate and explore the possibilities. What follows will be an interpretive adventure. It will be grounded in the data as much as possible, but to some extent, it will also be a construct of imagination, as archaeological

interpretations usually are. First, I will give a short summary of the data and show how it ties in with the various possible interpretations, working from the themes addressed in the research questions: the identity of the diggers, the identity of the deceased, the participant's motives and the wider socio-cultural context. Then, I will select a few promising interpretations to elaborate on and explore in detail. The interpretations in this chapter are mostly oriented towards the material from the Low Countries, but since the grave reopenings in other areas of early medieval North-West Europe such as Anglo-Saxon Kent and German Bavaria are so similar, they may to some extent also apply there.

The identity of the diggers

From the early beginnings of the research into reopened graves, the grave reopeners' identities and social positions have been an important theme. It is also one of the more elusive aspects, as they did not leave any form of calling cards for us curious archaeologists to find. Fortunately, there are indications in the treatment of the graves that allow us to exclude a few possibilities.

All the sites in the research area held at least a few reopened graves, with an average of 41% reopened graves per cemetery. Similar numbers were found in the adjacent German Rhineland (Siegmund 1998: 237-238) and Bavaria (Zintl 2012: 306). The percentages found in Kent were lower, but still substantial with an average of 21% at the more heavily affected sites (Klevnäs 2013: 35). The fact that almost half of the Merovingian graves in the Low Countries were reopened, indicates that this was not an anomalous or exceptional practice. There is quite a lot of variation in the numbers of reopened graves between the cemeteries. In addition to changes in grave reopening customs over time, the variations in reopening percentages between cemeteries may be due to local preferences and manifestations of agency on the part of the participants, which are not evident from the archaeological material. Some of the reopenings took place inside or very close to settlements (Dommelen,

Oegstgeest, Wijchen, Lent-Lentseveld, Solleveld) and the burial communities usually do not seem to have taken any measures to protect graves from being reopened, such as covering them with a mound or a layer of stones. Reopenings may therefore have been a socially accepted practice that could very well have been carried out by members of the burial communities themselves. In any case proximity to a settlement, which would increase the chances of getting caught, does not seem to have been a deterrent for the grave reopeners. Another factor that is important for both the identities of the diggers and that of the deceased is the time that passed between the burial and reopening. In the Low Countries, approximately half of the reopenings seem to have taken place at a time when the wooden container was still intact. The other half was reopened after the container had collapsed and filled up with soil. According to Aspöck's scale (2005: 251-252; 2011: 302-306), this corresponds to half the graves being reopened within approximately one generation after burial and the other half being reopened more than a generation after the burial. In one case (Lent grave 16) it could even be demonstrated that the reopening was carried out while the body had not yet fully decomposed. As discussed in the previous chapter, such early reopenings have also been identified in other Merovingian cemeteries in North-West Europe, although they seem to have been comparatively rare. There may also have been more cases like this in the Netherlands and Belgian Flanders, but the lack of preserved skeletal remains prohibits us from detecting them. If the reopening took place within a few decades after burial, the diggers could probably still remember the deceased and the way he or she was buried, especially if they were part of the deceased's community or had attended the funeral in another capacity. On the other hand, if the reopening took place more than a generation after the funeral, it is less likely that the diggers had an active memory of the deceased and the way they were buried.

The identity of the deceased

Who were the people whose graves were reopened? Did the diggers simply open graves at random, or did they target particular types of graves and people? In all four cemeteries that were large enough to allow statistical analysis, graves with men's objects had significantly higher reopening percentages than graves with women's objects. The lowest reopening percentages were found in graves with neutral, non-gendered grave goods. Unfortunately, it was usually not possible to check whether graves with typical men's or women's grave goods actually contained the remains of biological men or women. This is problematic (Effros 2000; 2006: 212-214), but cannot be remedied due to the lack of skeletal material. The best we can do is assume that graves with weapons usually contained the remains of persons gendered as men (regardless of their biological sex) or at least meant to express aspects of male identity, while graves containing jewelry contained persons gendered as women, or at least meant to express aspects of female identity. Graves in which only 'neutral' objects were found, could have contained persons gendered as male, female or one or more additional genders, such as children who had not reached the age when they were identified as men or women. In any case, the diggers seem to have purposely targeted graves with gendered objects over graves with non-gendered objects and graves with typical men's objects over graves with women's objects. It seems that the graves of children, especially those of adolescents, were opened relatively infrequently, but they were not completely shunned by the reopeners. It is important to keep in mind that the selection of these graves does not necessarily indicate foreknowledge on the part of the diggers. They may have been able to identify men's, women's and children's graves with the help of grave markers or differences in the size of the graves' surface features. Even though almost no traces of grave markers were found in the research area, it seems likely that the burials were marked given the relatively low numbers of intercuts between graves, the ability of the diggers to select

graves with gender specific objects, and the precision with which reopening pits were dug. If the graves were indeed marked with detailed identifying features, the diggers may have been able to locate the graves of specific persons even if their foreknowledge was limited. Given the relatively low average numbers of grave goods found in intact graves compared to reopened graves, it seems likely that the diggers preferred to reopen more elaborately furnished graves over less well furnished ones. They may also have targeted graves with specific types of grave good sets, mainly weapons and jewelry. Simultaneously, the high numbers of objects found in reopened graves indicate that the diggers were not very systematic in collecting all the grave goods, which will be discussed in detail below. However, the differences in the average numbers of grave goods between intact and reopened graves are probably at least partially due to parallel changes in reopening frequency and the quantities of grave goods deposited over time. The diggers also seem to have preferred to reopen larger graves, which were usually more elaborately furnished, over smaller less well furnished ones. However, it is unclear whether the differences in size between the reopened and intact graves are a result of conscious choices on the part of the diggers or whether they are caused by parallel changes in reopening frequency and preferred grave pit and coffin size throughout the cemeteries' use periods. Nevertheless, the diggers may have had a preference for larger graves, which they may have been able to identify with the help of surface markers.

There is a lot of debate about the extent to which elements such as particular grave furnishings and a large or elaborately built grave can be used as indications of the ever-elusive 'identity' of deceased. I am hesitant to make elaborate interpretations in this respect. As will be discussed below, the reasons why an early medieval people were buried in particular ways could have had many different reasons, not all of which were probably related to their personal identity. The only thing we can say with some amount of certainty is that some de-

ceased were apparently seen as worthy or suitable to be buried in more materialistically elaborate ways than others. When it was time to select graves for reopenings, these elaborate graves and possibly the deceased buried in them seem to have been the most eligible. Gender also seems to have been an important factor for selecting particular graves. Ostensibly gendered graves were preferred over more neutrally furnished burials, and the diggers selected graves with typical men's objects over those containing typical women's objects.

The grave reopeners' motivations

The practice of reopening a grave

Some authors writing about reopened graves make observations about whether or not the affected graves were treated 'with respect' (Adler 1970: 138-147; Neugebauer 1991: 115; Codreanu-Windauer 1997: 28-34; Klevnäs 2013: 83-90). In the Low Countries there are a number of cases where the diggers caused seemingly disproportionate disturbances of a grave's contents. For instance in the Lent cemetery, most of the graves were probably reopened while there was still an open space inside the wooden container, so it would have been relatively easy for the diggers to select any items they may have wanted without disturbing the skeleton. The fact that the bones had nonetheless been rummaged substantially, suggests that the disturbances may have been deliberate. These marked disturbances are especially interesting since the graves in question still contained many grave goods, so it seems that few objects were removed during the reopenings. Some authors would argue that this was evidence of a disrespectful attitude on the part of the diggers. This is problematic because we do not know what constituted a respectful treatment of graves in the Merovingian period. Behaviors that appear disturbing or violent to us could have been both respectful or disrespectful depending on the intentions of the participants and the context in which they took place (Duncan 2005; Weiss-Krejci 2001: 775-778; Zintl 2012: 388; Gardela 2013: 107-108).

The experiences of the diggers as they dug down into the graves that were in varying states of decomposition are difficult to imagine. We have seen above that about half of the graves were reopened while the wooden containers were intact, and some even while the corpses were still partially articulated. In our society, only professional grave diggers are exposed to the sights, smells and sensations that accompany the reopening of such graves, and their experiences are far less sterile than that of an archaeological cemetery excavation, where most organic materials have usually been reduced to dust and only dry bones and metals remain. Most modern western people - including myself - are conditioned to feel that such experiences would be quite horrifying and should be avoided at all cost, especially where the graves of family and community members are concerned. Cross-culturally however, there is no evidence that this sentiment is universal (Huntington & Metcalf 1978; Bloch & Parry 1982; Kümmel 2009). In fact, even in modern Dutch society it has become customary for professional grave diggers to open and empty graves as soon as the rent for the spot is no longer paid, with a minimum period of only ten years. We will have to keep an open mind and not make assumptions about how early medieval grave reopeners felt when they dug their way into a burial (also see Tarlow 2000: 718-719).

Apart from a few exceptions, the graves in the research area were all opened in quite similar ways. The diggers made a pit, usually starting somewhere on top of the wooden container, and dug their way down into the grave. If the container was still intact, they would have needed to break into it or dig around it in order to remove its lid. In nearly all cases the reopening pits seem to have been dug directly over the area containing the coffin, indicating that the diggers probably knew the graves' locations and could estimate their general layout, probably because the graves were marked above ground or perhaps because they used probing tools. The reopening pits were often wider in the upper levels of the graves, becoming more narrow and focusing on a

specific area as they went down. There were no significant differences between the ways men's and women's graves were reopened. Most reopening pits reached down to the graves' bottoms, but there were a few cases of shallow pits that were limited to the grave fill's upper levels. Similar features were found by Zintl (2012: 337-338) in German Bavaria. Most graves seem to have been reopened only once with a single pit, but there are a few exceptions where multiple pits were documented. It was often unclear whether invention pits were backfilled after reopenings. Various practices concerning the backfilling of reopened graves may have existed side by side. The backfilling may have been done by the grave reopeners themselves, or by other people at a later time.

In a small number of reopened graves there was evidence for unusual practices. In grave 46 from the Lent cemetery, the deceased's cranium had been placed on the pelvis. In grave 39 the deceased's skull was missing entirely. Since no cut marks were found on the skulls or vertebrae, these skulls were probably moved during a reopening or by another series of events that gave people access to the decaying corpse. It is possible that the remains were kept above ground or given a preliminary cover in the grave until the skull could be removed and the grave pit backfilled. These graves fall in the range of what is often called 'deviant' (Thäte 2007: 267-272; Aspöck 2008; Reynolds 2009; Gardela 2013: 109-110, 120-121), except that in these cases the deviancy was created during a post-depositional intervention, rather than during the original burial. Similar practices have been observed across early medieval Europe and are often interpreted as the treatment of revenants or criminals (Lecouteux 1987: 180-181; Reynolds 2009; Gardela 2013; Gardela & Kajkowski 2013; Klevnäs 2016a). These interpretations will be discussed in detail later in this chapter.

Regular grave reopenings were not the only type of post-depositional intervention that took place at the cemeteries in the research area, although they were the most common one. There were also a substantial number of

intercuts between graves, and some additional burials added to existing graves. Additional burials did not only involve inhumations, but also cremations. Intercuts between graves were more common. In some cases, it was difficult to distinguish between additional burials and intercutting graves which had so much overlap that they were very similar to an additional burial. This suggests that early medieval people may not necessarily have drawn strict lines between the various types of post-depositional interventions defined in this study, but instead considered them more as different points in a continuum of practices. Some intercuts accessed the contents of the cut grave and could perhaps be considered a type of reopenings. In the case of two combined burial/reopenings in mound graves from the Bavarian cemetery of Harting-Katzenbühl, Zintl (2012: 334-337) wonders whether the diggers' most important motivation was the deposition of a new burial, or the reopening of the old one. Since all other similar graves in this cemetery had also been reopened, she argues that the reopening was the primary aim, and the additional burial was more like an afterthought. According to Zintl, the effort involved in reopening these mound graves may have been an additional stimulus for the diggers to combine the reopening with the deposition of a new burial.

Other surprising finds from the research area were the concentrations of human bones found outside typical grave contexts. In the area of the Oegstgeest settlement a large number of disarticulated human bones was found in various contexts across the site, mainly in the fills of gullies and ditches. The majority of these scattered finds were long bones and skull fragments. It seems that the inhabitants may have selectively gathered and deposited bones from the extremities and the skull. The most striking example is the pit containing a star-shaped formation comprising the long bones of at least two individuals. Adjacent to this pit lay a second pit with selected bone fragments belonging to a minimum of six individuals. All bones of which the sex could be determined, belonged to men. These finds are an indication for selective collecting and depositing of

human bone, either from graves or from other sources. The finds from the Meuse river near the town of Kessel are another example of early medieval human bones found outside a typical funerary context. The bones were not eroded, so this was probably an original deposition site. The site had a long multi-period use, from the Late Iron Age to the High Middle Ages. Of the sexed bones, 75% were male and 25% were female. The finds did not show a preference for bones from particular parts of the body, suggesting that whole bodies may have been deposited here. A similar site may have been located near Roermond. Such river deposits may also have been one of the locations where objects and bones from reopened graves were taken to. These human bone deposits and the reopened graves share a few noteworthy corresponding features. The most striking is their apparent focus on the remains of men. Grave reopenings took place more often in graves containing typical men's objects, and men's bones formed the majority of the bones found in the deposits. This could be an indication that the bones found in the deposits did indeed originate from reopened graves, or that the bone deposits and grave reopenings were influenced by the same or a similar worldviews and social practices.

The handling of objects

Much of the discussion about reopened graves focusses on which objects may have been removed, as this is often taken as one of the best indicators of the diggers' aims (Roth 1978: 69-70, 73; Zintl 2012: 339-355; Kleynäs 2013: 72-74). Given the information about bone deposits above, it would also be worthwhile to do a detailed study of which bones are usually missing from reopened graves. Unfortunately the poor bone preservation in most cemeteries included in this thesis did not allow for such an analysis.

The reopened graves in the research area contained relatively large numbers of objects compared to the graves that had remained intact. This is surprising, especially in the light of the hypothesis that removing objects was one of the main reasons for reopening graves.

There are various possible explanations for phenomenon. It may have resulted from preferences on the part of the diggers to reopen more elaborately furnished graves, as was also hypothesized for Bavaria and Kent. Alternatively, the diggers may in some cases have added objects to the graves when they reopened them. Interestingly, despite their apparent focus on the 'richer' graves, the diggers were not very systematic in removing all the grave goods, even though most of them lay within reach of the reopening pits, often in the open space of an intact wooden container. This suggests that materialistic motivations were not the diggers' primary concern. However, objects could also have been left behind accidentally because they were overlooked, especially if the wooden container had collapsed, or if the diggers had to work in the secrecy of night as is traditionally assumed (Werner 1953: 7; Fremersdorf 1955: 29; Roth 1977: 289; Klevnäs 2013: 144). Despite the elaborate statistical comparison between the objects found in reopened and intact graves, it was difficult to reconstruct which types of grave goods may have been removed by the diggers. Klevnäs (2013: 70-71) and Zintl (2012: 347-348) argue that the grave reopeners in Kent and Bavaria targeted *spathas* and *seaxes* in men's graves and brooches in women's graves. This may also have been the case in the Low Countries, as these object types are relatively rare in the research area. The few brooches found largely originate from intact graves, indicating that the diggers tended to remove them from reopened graves when they had the opportunity. Shields, or at least shield bosses, were probably also often taken as is attested by the finds of rivets and sheet metal with mineralized wood in reopened graves. Arrowheads and lance heads on the other hand, were often left behind even though many lay within reach of the reopening pits. The grave reopeners may have been more interested in weapons of war such as swords and shields than in weapons typically used for hunting, such as lance heads and arrowheads. Theuws (2009) has argued that lances and other hunting equipment as

grave goods symbolized claims on land and the victory over death. This may have been a reason why these objects were more often left behind in the grave, as opposed to swords which rather seem to have been associated with positions of authority in the community. The larger amounts of metal present in the swords may also have made them more attractive. Belt fittings were often left behind in reopened graves, but the diggers probably also removed some, as can be seen from the incomplete belt sets found in a number of reopened graves. The people reopening graves most likely knew that these fittings were part of sets and usually lay in close proximity to one another. When parts of these sets are left behind, it is suggestive of a deliberate choice on the part of the diggers.

In addition to brooches, the diggers seem to have removed a wide range of objects from women's graves. Various typical women's grave goods were rarely found in the research area, especially bracelets, finger rings, earrings, belt pendants and keys. As with the swords, it is unclear whether their absence is an indication that these objects were targeted, or whether they were just never deposited in graves to begin with. The diggers certainly took many beads, as is indicated by the fact that in nearly all cemeteries the average numbers of beads in reopened graves are much lower than those in the intact graves. However, substantial numbers of beads were still left behind, so they were not systematically removing all of them. The so called 'gender neutral' grave goods, such as knives and pottery vessels were usually found in higher numbers in the intact graves, indicating that they may also have been removed during reopenings. There is some variation between the cemeteries which may reflect the preferences of local grave reopening participants, but the differences could also have resulted from changes in the grave good deposition custom and the grave reopening rates over time.

When looking at which *materials* were taken from reopened graves, there is so much variation between the cemeteries that it is almost impossible to discern a pattern. The materials

most often found were iron, copper alloy, pottery and glass. They occurred in varying amounts in both intact and reopened graves. Relatively few precious metals were found in the cemeteries from the research area. Perhaps these materials were not often deposited as grave goods, but they may also have been systematically targeted by the diggers. It seems that objects of all substances were probably eligible to be taken from the grave or left behind. The graves originally probably also contained many materials such as textile and wood that started to decompose soon after deposition. In unfavorable soil conditions, bone, shell and ivory also did not survive for a long time. However, depending on the time that passed between burials and grave reopenings, some of these materials could still have been available to the grave reopeners. Apart from glass, gold and gemstones, most materials would have emerged from the grave in various stages of corrosion or decomposition, which meant that the objects could not be used for their original purposes. At most, they could have served as memorabilia or in some cases as a source of raw material to be re-used in another object.

The objects found in reopened graves were often broken, with part of the fragments missing. Reopened graves contained many more indeterminate fragments than the intact graves and recognizable objects from the reopened graves generally showed lower percentages of completeness, indicating that the objects were indeed often broken during the reopenings rather than during the funeral. This damage and fragmentation may to some extent have been accidental, resulting from actions that were necessary to reopen the graves. However, since several examples of objects show signs of what was probably intentional damage, it seems likely that at least some of the fragmented objects were broken on purpose, suggesting that fragmentation may have played a role in the reopening practice. The missing fragments may simply have been scattered on the cemetery's surface, but it is also possible that the diggers took them away from the site.

Wider socio-cultural context

To place the grave reopenings in their socio-cultural context, we need to know when they took place. Together, the cemeteries in the dataset span the entire Merovingian period. The earliest datable grave reopening in the research area took place in Wijchen grave 185 and can be dated to 400-485. This may be an exceptional case, since other datable grave reopenings from this cemetery and others all dated after 500/550. This near absence of early reopenings could be due to the general lack of early graves in the research area. On the other hand, it is also possible that the data accurately reflect historical reality and grave reopenings really were mostly a late sixth and seventh century phenomenon.

Some regions in the research area were probably inhabited continuously from the beginning of the Merovingian period or even before, through to the end of the period and into the Carolingian era. This is also reflected in the long use periods of some of the cemeteries, especially Wijchen in the central Netherlands and Broechem in modern day Flanders. The southern Netherlands were re-inhabited only in the sixth century, after having been abandoned in the late Roman period. The cemeteries in this region have corresponding later starting dates (Verwers 1978; Theuws 2008; Theuws & Van Haperen 2012: 163; De Haas & Theuws 2013: 166).

Most cemeteries in the research area seem to have been definitively abandoned before the second half of the eighth century, with some perhaps continuing until the end of that century. By association the years 750-800 are taken as the hypothetical end date of the grave reopenings that took place there. However, the real end date of the reopenings is unclear and could lie some years before or many years after 800. In theory, they may have continued well into the Carolingian period, at least until the graves were no longer recognizable. It is also possible that the grave reopenings stopped before the burials on the cemeteries came to an end. This may for instance have been the case in Posterholt and Bergeijk, where few to none of the graves from the last phase were

affected by post-depositional interventions. In Posterholt however, it is also possible that all the reopenings took place around the end of the seventh and in the eighth century, which would mean that they could have been carried out by the generation whose own intact graves form the cemetery's end phase. The same could be true for Meerveldhoven. As in other regions, there was unfortunately insufficient dating evidence from the research area to define distinct phases of grave reopenings. Most, if not all, reopenings in the dataset date to the Merovingian period, but there were not enough datable reopenings to divide them into meaningful subcategories. The majority of the reopenings in the research area probably took place in the sixth and especially seventh century, with a few early cases in the fifth and a number of late cases in the eighth century. During the Merovingian period, most people in the Low Countries lived in small settlements comprising a low number of farmhouses surrounded by yards and outbuildings. Most communities were probably organized around kinship relations. For instance the Dommelen settlement consisted of four farmyards, while the nearby settlement of Geldrop had eight (Theuws 2008). There were a few larger centers such as Maastricht, but all the cemeteries in the dataset were located in rural areas. The settlements were bound together by the loose socio-political structure of Merovingian-period kingdoms (Wood 1994: 60-62). The effects of royal juridical power were probably limited, especially on sites that were not near important political and economic centers. It is for instance unclear whether the Frankish laws on grave robbery were known in these communities and if they were known, to what extent they were enforced.

Economy, conflict or peace

The views on the role of grave reopenings in early medieval society vary greatly. Many scholars see grave reopenings simply as a means to regain some of the wealth invested in the lavish and costly burial practices. This interpretation is to some extent contradicted by the ideological and symbolic aspects of

these practices that have begun to become apparent in the recent research, such as the preferential targeting of certain types of graves and grave goods while other graves and grave goods seem to have been deliberately left untouched, despite including valuable materials. The apparent inadequacies of the materialistic interpretations have led some specialists to argue for a more socio-culturally driven context for grave reopenings. Some scholars argued that grave reopenings could have been carried out *in situations* of war or conflict. Grave reopenings conducted by war bands have for instance been suggested by Müller (1976: 125), Pauli (1981: 475) and Kümmel (2009: 128, 212-213). This particular scenario does not seem to apply to the cemeteries studied here, as the graves were usually not opened simultaneously as would happen during large raids. The hypothesis suggested by Steuer (2001: 285–286), that grave reopenings were carried out by aristocrats on the cemeteries of their relocated dependents also does not apply to the material from the Low Countries, as most graves were reopened while the cemeteries were still in use. Nevertheless, grave reopenings could have been used as a socio-political weapon in smaller scale conflicts in and between burial communities, as is for instance suggested by Klevnäs (2013: 83) who hypothesized that grave reopenings are a type of inter-community violence, expressing festering conflicts within the local society. Alternatively, grave reopenings could have played a part in the formation of social cohesion. I have for instance previously suggested that grave reopenings could have served to bring together members of the burial community and the deceased's kin group in celebrations of ancestral power and fractal personhood (Van Haperen 2013). The motives for having grave reopenings may have been similar to those for having lavish burials in the first place. Here we could think of options such as relieving of stress created by the death (Halsall 1995: 253-261), strategies for remembering and forgetting the dead (Williams 2003, 2005, 2006), a rhetorical strategy of the burying group to create and recreate central norms,

ideas and values; and to present themselves and their dead to an audience of outsiders (Theuws 2009), emotional responses of the survivors (Tarlow 2000, 2012), etc. These considerations may also help to explain the local variations in grave reopening intensity. Factors such as lack or superfluity of wealth, differing levels of social stress, local traditions and the agency of the community could all have contributed to a lower or higher frequency of reopenings. Reopenings may have offered an opportunity to focus on the grave one more time, expose its contents, bring back memories, create new ones and gather memorabilia or relics. All these interpretations will be elaborated on in the following paragraphs.

Christianization

It has been suggested that grave reopenings may have been carried out with Christian religious motivations in mind because the traditional Merovingian grave furnishings lost their meaning after Christianization and thus became available for removal (Roth 1977: 290; Koch 1996: 737). This was countered by Young (1977) and Effros (2002: 47, 61; 2003: 86–88) who showed that grave good deposition was also practised by Christians. Alternatively, grave reopeners may have attempted retroactive Christianization of their pagan ancestors (Geary 1994: 36–39; Theuws 1999: 346–347; Marti 2000: 44–45; Van Haperen 2010: 26). There is little to no evidence for either of these hypotheses in the material from the Low Countries. This is in part because religious convictions and motivations are notoriously difficult to trace archaeologically. We do not know whether or to what extent the people from the burial communities considered themselves or were considered by others as Christians. Nor do we know how the beginnings of Christianization manifested itself in their behavior. Apart from a few coins with crosses on them, which may in some cases have been deposited in the deceased's mouth as a Charon's obol (Härke 2014: 49–50), overt religious symbols seem to be largely lacking from the cemeteries in the research area. If the funerary practices incorporated religious ele-

ments – Christian or otherwise – these did not leave many archaeological traces, or at least, these are not easily recognized by archaeologists. Similarly, grave reopenings also did not have any clearly recognizable religious characteristics. There is no evidence that the diggers preferentially left behind, removed, or deposited objects with Christian symbolism. There are also no indications for *translatio* of grave contents from rural cemeteries to churchyards, but given the bad preservation of bone and the lack of well-preserved churchyard cemeteries in the research area, absence of evidence is not necessarily evidence of absence in this case.

Grave reopenings could have been a means of 'retroactive Christianization'. An example of this could be the deposition of Christian symbols, such as gold-foil crosses or coins, in reopened graves (Van Haperen 2010: 26). These practices are a potential example of the performative power of grave reopenings: by artefactually representing the deceased as Christians, they were posthumously converted. The concept of retroactive Christianization was introduced by Geary, who used it to account for eighth-century churches that were built on top of the richly furnished graves of fifth-century (and therefore probably pagan) dead, who were thereby made into Christians (Geary 1994: 36–39). It is not difficult to see how these churches may have served as performative material representations of the pagan ancestors' conversion to Christianity. Building a church on top of the graves of the dead was not the only way of making them into Christians: one could also reopen their graves and transfer their relics to a church elsewhere, as the Danish king Harald Bluetooth did with the remains of his pagan parents after he had converted to Christianity. He dug up the bones of his mother and father from their grave mound and reburied them in a church that he had built in the vicinity (Geary 1994: 38; also see Eckhardt & Williams 2003: 144). Theuws (1999: 346–347) argues that similar concerns may have motivated grave reopenings in rural Merovingian cemeteries. The remains taken from the graves involved would then have been reburied in newly founded nearby

churchyards. Some grave reopenings in the Low Countries may indeed have aimed at retro-actively converting pagan ancestors. However, as has been shown above these practices could have had many other possible meanings and purposes, so it would be unjustified to assume Christianization was always a relevant factor.

4.2 Ancestors and relics

In my master thesis which was later published in the journal *Medieval and Modern Matters* (Van Haperen 2010), I developed the interpretation that early medieval grave reopenings were a form of relic cult for ancestors, similar to the cult of saints' relics which also developed in this period. This chapter will be based on that interpretation and my ideas about its implications for early medieval personhood that were published in the proceedings of the *Internationales Sachsensymposium 2011* (Van Haperen 2013). This interpretive scenario assumes that grave reopenings were carried out by people from the burial community itself, if not the deceased's immediate kin, and served an important role in social life and people's relationship with the ancestors.

Saints and ancestors

The elevations or translations of saints' relics are some of the more common types of grave reopenings described in the early medieval written sources. Krüger was the first author to connect the accounts in these sources to the post-depositional interventions observed by archaeologists. He argued that the moving of saints' relics were an exceptional category of reopenings which should not be confused with 'normal' reopenings which he interpreted as materialistic grave robbery, even though the two were probably similar in practice (Krüger 1978: 178-184). The gathering of saints' relics and regular grave reopenings indeed have some noteworthy similarities. Saints' relics fall into two rough categories: primary relics, which are saints' corpses or parts thereof; and contact relics, which are objects that came into contact with the saints' bodies, either while

they were still alive or after their death (Bonser 1962: 234). In addition to saints' relics, there is also another subset of relics consisting of items associated with stories from the bible, such as twigs from the tree under which the shepherds were resting when the angel appeared to them to inform them of Jesus' birth (Smith 2012: 148-149). In the early period of relic veneration, contact relics were the most prevalent. Primary corporeal relics became popular later, when the Roman and Jewish taboos on touching the remains of the dead had lost their power (Brown 1981: 6-11; Smith 2012: 149-150). In the Low Countries we have solid evidence for the removal of grave goods from reopened graves. The reopening pits focused mostly on the space around the deceased's body and the objects that were in contact with it. Due to the lack of well-preserved bone material, it is unclear whether the diggers also took bones. The possible removal of bones has not been given much systematic attention in other studies either, because it is often assumed that missing bones were simply discarded by the diggers (Zintl 2012: 352-253; Klevnäs 2013: 52). However, the finds of bones in non-funerary contexts such as the pits and ditches in Oegstgeest and the river deposits near Kessel indicate that early medieval people did indeed collect and transport human bones, either from reopened graves or from other sources. It is nevertheless possible that grave reopenings - similar to early saints' relic cults - often focused on the objects associated with the deceased, rather than on their bones.

What are the origins of the grave reopening phenomenon? Geary (1994: 41-44) notes that although saints' cults could be found throughout the Christian world, it was only in the West that the worship centered largely on the physical remains of the holy. He accentuates several similarities between Merovingian funerary customs and later relic cults, including the articulation of the deceased's personality through artefacts and the continued attention to the dead, which centered on their graves. He also notes that the eighth century - the period in which the transfer and relocation of

corporeal relics became common in the West – was also the time when many traditional Merovingian cemeteries were finally abandoned. He therefore suggests that the elaborate concern for the physical remains of the saints was partly inspired by preoccupations with the bodies of important dead people in Merovingian society. This was not so much a continuation of old beliefs about death as a formalized acknowledgement of the place of the dead in society and their influence on the fate of the living. However, Geary has some reservations about his own hypothesis:

‘Granted, the explicit meaning of these saints’ tombs and of the intermediary role of saints in Christian tradition was certainly not the same in the eighth century as it had been for important burials in the fifth. Many practices of the later period, such as the division and transfer of relics and the particular form taken by their cult, had greatly evolved under the influence of Romano-Christian traditions. Unlike early Franks, whose tombs were intended to be inviolate, bishops might well be exhumed at the time of an official elevation and establishment of a cult, and their insignia could attest their status for future generations.’ (Geary 1994: 43-44)

No doubt Romano-Christian traditions contributed substantially to medieval relic cults. However, it should by now be clear that early medieval graves – ‘Frankish’ or otherwise – were by no means inviolate, nor were they likely intended to be. Important tombs of the fifth-century and especially of the sixth- and seventh-century dead were often reopened. At these events the grave goods and bones they contained could become a focus of renewed attention, not unlike the remains of bishops at an elevation. This does not mean that early medieval grave reopenings in rural cemeteries were simply saints’ translations *avant la lettre*, but the evidence discussed here does show that the two may to some extent have had similar characteristics, including their physical origins in the grave and their socio-religious role as a medium by which contact with the dead could be maintained. The practice of grave reopenings and the collecting of saints’ relics may therefore have originated from a shared reser-

voir of worldviews and socio-cultural values. If so, the attention to the physical remains of the dead was not an exclusively Romano-Christian invention, nor was it necessarily reserved for religious leaders, as is for instance assumed by Schmitt (1998: 30-31). I would like to argue that the practice of grave reopenings – of both saints and non-saints – originated from the general population of early medieval North-West Europe and was not initiated by Episcopal authorities.

For later periods we have written evidence that similar practices were also performed on the bodies of the secular elite. The first references to such activities in the written sources occur in the ninth century and continue far into the post-medieval period. The embalming, evisceration, excarnation and division of high status dead people often resulted from a desire to transport their remains over long distances. Such methods also allowed the burial community to distribute parts of the deceased’s body over several desirable burial locations. In this way, like distributed saints’ relics, the remains of these worldly leaders could reach a wider audience and gain more prestige by being present and accessible at multiple locations (Weiss-Krejci 2005: 158-168). Similar mechanisms may have operated in the context of early medieval grave reopenings in rural cemeteries.

Enemy ancestors – Klevnäs’ interpretation

Klevnäs (2013: 83, 2015: 168) gives quite a different perspective on the ancestral aspect of reopened graves. She argues that the grave reopenings in her research area were performed by enemies of the deceased’s family, who aimed to deprive the dead of symbolically significant objects. These destructive reopenings could have served to damage the prestige generated by the grave furnishings, and destroy the ancestors’ perceived supernatural ability to protect their living relatives. These activities could have aimed at injuring the social standing and political power of the deceased’s family. Revenge on the burial community may have been an additional motivation. In this view, grave reopenings are an

expression of festering conflicts in the community or between communities. Klevnäs suggests that these disputes could be seen as part of the bigger picture of seventh century consolidation of elite and royal power by a limited number of decent groups. It is certainly possible that graves were not only reopened by family members of the deceased, but also by hostile groups aiming to damage their enemies' prestige or relation to their ancestors. In my opinion, it is unlikely that all grave reopenings in the Low Countries can be accounted for with this interpretation. The sheer number of them (more than 40% of the graves in the dataset were probably affected), seems to negate the possibility that these were all hostile attacks on graves, especially since they usually seem to have occurred spread over a long span of time, rather than in single events. In Kent, where fewer graves were affected, this interpretation may have a little more foothold. However, given the general similarities of grave reopenings in Kent and the remainder of Europe, they may have originated from similar, rather than from different intentions and were thus probably non-hostile. The apparent violent or disorderly nature of most reopenings is not a contradiction here, as ethnographic, historical and archaeological examples show that violent types of behavior are compatible both with veneration and desecration (Duncan 2005; Weiss-Krejci 2001: 775-778; Zintl 2012: 388; Gardela 2013: 107-108). Also, the emotional connotations of such practices are culturally constituted rather than universal (Tarlow 2000: 718-719). Klevnäs herself (2016b: 468) has recently argued for Viking Age burials in Scandinavia, that the violence involved in reopenings may have served to emphasise the difficulty of bringing the grave occupant's ownership of the grave goods to an end and passing them on to a new owner. In my opinion, this could also have been the case for the violently reopened Merovingian burials in this study. These alternative interpretations leave open the possibility that hostile and non-hostile grave reopenings were carried out in similar ways, and are thus indistinguishable in the archaeological material. If that was the

case, there may be a percentage of hostile reopenings hidden in the dataset.

The transformation of the deceased

In many societies the funeral customs are not centered on a single event, but entail a long sequence of what I have chosen to call consecutive mortuary practices (Van Haperen 2010: 7). The extended nature of these death-related activities reveals that, from a social perspective, death does not occur at a single moment and is not the 'passage of a line without thickness' (Bloch 1988: 11), but is in fact a gradual transformative process that may be perceived to start before, after or upon biological death and can continue for years after the corpse has been disposed of. This principle is especially evident in societies that are accustomed to giving their dead an entire second funeral. During such ceremonies, the grave is reopened and the deceased's remains are retrieved and subsequently redeposited at a new location. Such series of consecutive mortuary practices usually conform to van Gennep's (1960) tripartite structure of rites of passage – separation, liminality, incorporation – which transform a person's social status. When a person is perceived to die, they enter a liminal state. They are no longer alive, but until the end of the mortuary cycle, they are not yet socially dead either. Many peoples who perform a second funeral for their dead symbolically equate the deceased's liminal status with the putrefaction of the corpse. Under such circumstances, the body's decomposition needs to have come to an end, leaving only dry bones, before the deceased can properly enter his new state as a dead ancestor. At the end of the period that is perceived necessary for putrefaction, the remains are taken from their temporary repository and a ceremony is held that formally instates the deceased among the ancestors (Huntington & Metcalf 1979: 53-67). Ceremonial elaborations such as these can be interpreted as a social strategy by which death is controlled and the community's dead are transformed into a positive, beneficial force (Bloch & Parry 1982: 13; Williams 2010: 68-72).

Like these ethnographic examples of second funerals, early medieval grave reopenings may have been instrumental to the transformation of liminal and potentially harmful dead into beneficial ancestors. This falls in line with Theuws' (1999, 2009) ideas about the symbolic construction of ancestors in early medieval society. The process of decomposition in early medieval graves was not limited to the corpse, but also involved the grave goods and the graves' structural features. The perceived transformation of the deceased may therefore also have encompassed these elements. The ways various types of objects were transformed by their stay in the grave differed depending on the materials of which they were made. The more inert items made of glass, gold or gemstones may have carried connotations of the timeless, eternal and imperishable, while those that underwent drastic changes such as wood, leather and iron were possibly more associated with the temporary, death, transformation and the life cycle.

At the moment of burial, the deceased's body and most of the grave goods were usually hidden from view in a closed coffin. Some of the smaller grave goods were often concealed in a pouch. The corrosion layer on the front side of iron dress items not infrequently contains mineralized textile, indicating that they (and possibly also the corpse) may have been wrapped in a shroud or some other type of covering (Williams 2006: 51-52; Brandenburgh 2016). Some reserve is required however, since artefacts may have tumbled over as a result of the decomposition processes in the grave, causing them to be found front-side down on textiles that did not originally cover them. Even when the corpse was buried without such wrappings, it would eventually have been hidden from sight when the grave was backfilled. It appears, however, that the burying group usually chose to emphasize this process by enveloping the body and the grave goods in one or multiple containers before burying them. This treatment calls to mind Alfred Gell's (1998: 146) suggestion that 'wrapping' can be a way of creating a body for otherwise invisible spiritual social actors. The

grave pit, coffin, shroud and other wrappings deliberately hid the putrefying corpse from view and may have been perceived to aid the construction of a new physical form – a 'body' – that suited the deceased's liminal status and anticipated their final transformation into an ancestor (also see Smal forthcoming). The artefacts enclosed in the wrappings may have been used to symbolically specify the identity and social roles that the future ancestor was expected to have, as is suggested by Theuws (2009) for fifth-century weapon graves that may have been used to create ancestors with protective powers. Early medieval written sources show that 'binding', which could be seen as a variation of wrapping, played an important part in heathen religion, and in healing practices and magic charms that persisted after the onset of Christianization (Pollington 2011: 379-384).

Most grave reopenings seem to have taken place at a time when the perishable substances in the grave had started to decompose or had fully decayed. The deceased's bones were revealed by the putrefaction of the corpse and the artefacts associated with it were laid bare by the decomposition of the various perishable containers in the grave. This process may have had added significance for early medieval people, who had little knowledge of the chemical and biological processes involved in the decay and 'disappearance' of the wrappings in which they buried their dead. In an article on cremation rites in early medieval Britain, Williams (2004: 274) argues that such developments may have been perceived as a manifestation of the continuing agency and volition of the deceased. The final stage of this process, when the transformation of the objects was complete, may in particular instances have been emphasized by the reopening of the grave and revealing the ancestor's new 'body' of bones and artefacts their transformed state. Ethnographic studies demonstrate that in addition to second funerals, cremation is also a practice that can be used to emphasize the transformation of the dead into ancestors. In some societies, the two practices are combined so the second funeral is actually a cremation

(Huntington & Metcalf 1979: 92-83). In other cultures cremation takes place immediately after death so there is only one funeral and the transformation of the deceased takes place right away. From this perspective, cremation and grave reopenings could be seen as funerary 'twins'. It is worthy of note that nearly all the cemeteries in the research area contained both reopened inhumation graves and contemporary cremation burials.

Just as the decomposition of the grave's contents and its subsequent reopening disassemble the deceased's corpse and grave goods into dry bones, corroded materials and soil; cremation transforms the body into a series of components that include bones, melted artefact fragments, ash and smoke. Williams (2004: 274-277; 2010: 72-76) argues that these components could be used to construct a new body that was appropriate to the deceased's new transformed ancestral identity. However, while decomposition in the grave was an extremely lengthy process, cremation could bring about the transformation of the deceased's corpse in a number of hours. In addition, it would have provided an impressive, though to modern Western eyes perhaps rather gruesome spectacle. Apart from producing fumes and fluids, the corpse may have emitted various noises and displayed movement. Williams therefore proposes that burning the corpse may have been perceived as a way of bringing the deceased's remains back to life. Although both its procedures and time-scale differed considerably from grave reopening practices, cremation may have facilitated analogous transformations of the dead. It is therefore interesting to note that the cremation graves in the research area often contained only part of the deceased's remains and far fewer grave goods than are found in cremation burials. Perhaps some of these items were deliberately separated from the remainder of the cremated material, and kept above ground as mementos or 'relics' of the deceased. The possible uses for such relics will be discussed in more detail below. There was no evidence for reopenings of the cremation graves in the research area, but this may not be an accurate

reflection of past reality. Cremation graves were usually more shallow and therefore more susceptible to later disturbance than inhumation graves, so it was often impossible to tell whether they had been reopened in ancient times.

Early medieval ancestor concepts

The evidence for actual ancestor beliefs in early medieval North-West Europe is somewhat scarce, but not absent. Very little is preserved of early medieval world views from the Low Countries, so most knowledge about these practices has to be imported from the surrounding areas. The southern Netherlands and Belgium had belonged to the Roman Empire and now belonged to the Frankish kings, who had converted to Christianity. The northern and central Netherlands above the former Limes were part of the 'Frisian' area, ruled by heathen rulers. It is unclear in what way these political boundaries influenced the culture and beliefs of the inhabitants. It seems that the Low Countries were a melting pool of Roman, Frankish, Saxon, Anglo-Saxon and Scandinavian influences. In addition, people in this region probably had their own indigenous traditions, but the evidence for these is almost exclusively archaeological, as few written sources from the region have been passed down. Part of the population may have identified as Christians, but in the absence of churches or priests, the ways they practiced their Christianity was probably not very formalized. Other people probably still adhered to the elder gods and heathen religious practices. In any case, the heathen traditions were long from gone, and probably exerted their influence on the habitus of all but the most learned and dedicated Christians. As stated above, I am inclined to think that the origins of the grave reopening practice lies in these traditions.

One of the few sources telling of ancestor beliefs in the Low Countries is the *Vita Wulframni*, in which the Frisian king Radbod is on the verge of being baptized, but refuses when bishop Wulfram tells him that he will not see his pagan forefathers in the Christian

heaven because they were not baptized. When Radbod hears this, he withdraws his foot from the baptismal font and states that he will not go to heaven without the company of his predecessors (Meens 2015: 579). The historical accuracy of this anecdote is disputed among historians, but persuasive arguments have been made that it may be based on true events, or at least reflect prevalent concerns from the phase of early Christianization, which in this case were the 740's AD. Meens (2015) shows convincingly that the fate of unbaptized forefathers was indeed a subject of interest in this period, and is discussed in somewhat masked terms in a number of other sources about missionary work. Attempts at 'retroactive Christianization' by finding ways to have pagan forebears buried in consecrated churches is another indication that early medieval people under Frankish influence valued their ancestors (Geary 1994: 36–39; Meens 2015: 586, 588). These concerns may also be reflected in the desire to adhere to traditional burial practices after Christianization, as can be deduced from a letter by Pope Gregory III to the missionary Boniface which seems to deal among other things with the desire of newly converted Christians to continue burying their deceased with grave goods. Gregory condones this only if the deceased were real Christians, not pagans (Meens 2015: 583).

The evidence for heathen worldviews from the Low Countries is scarce, so here we will have to look at studies from other parts of North-West Europe. This is not ideal since beliefs probably varied considerably between regions, but studies do show some over-arching themes. Recently a lot of new work has been done on heathen religions in the Anglo-Saxon area (Carver 2010; Pollington 2011), which is what I will mostly draw on here. Apart from geographical proximity, we can assume cultural influence and exchange between the Anglo-Saxon region and the research area that makes it likely that somewhat similar worldviews were prevalent here, especially along the Dutch and Belgian coast and river areas. From ethnography we know that cross-culturally, religions that include ancestor beliefs often

feature a strong connection between the living and the dead. The ancestors are often considered more important than higher gods since they are perceived to have a stronger influence on everyday life. Relationships with the ancestral spirits usually involve a mixture of sentiments, including love, respect and fear. The ancestors demand constant attention from their descendants and depending on the circumstances, they can be both benevolent and malicious. In societies with such a worldview, the living and the dead are entwined in an ongoing cycle of mutual dependency and care (Sanmark 2010: 160; Gräslund 1994: 17). In Anglo-Saxon England, the line between gods and ancestors seems to have been somewhat blurry. A lot of importance was placed on genealogies and the role of 'men of old' in Anglo-Saxon and other early medieval historical tales, myths and legends. The god Woden appears as a mythical forbear on many early medieval genealogical kings' lists (Pollington 2011: 78–79). In his book on Anglo-Saxon heathen religion, Pollington argues that:

'Given that the *Æsir* included among their numbers persons who were not gods, and that the Goths regarded their exulted ancestors as *semideos* 'half-gods', it seems evident (as Lindow argued for the *Æsir*) that the Anglo-Saxon *ese* were not all gods, and that residence in the hall of the slain was open to human heroes. The conversion from 'hero' to 'leader' to 'ancestor' was part of the process by which new cults arose. It follows that the conversion process – the deification – was encapsulated in the funerary rites which managed the transition from this world to the Otherworld, and that the particular customs used to dispose of the body would determine the status of the deceased.' (Pollington 2011: 97)

Bazelmans (1999: 114–116) formulates a similar hypothesis in his analysis of the *Beowulf* when he argues that the funeral rituals described in the poem had in the pre-Christian era been a means of transforming dead kings into ancestors. In the *Beowulf* and other Anglo-Saxon sources, there is much more emphasis on ancestry through fathers than through mothers. If men were indeed considered to be

more important as ancestors than women, this could explain the higher numbers of reopened graves with men's objects compared to those with women's objects that were found in the research area. The relatively low percentage of reopened children's graves also fits well with the idea that grave reopenings focused on important ancestors. Children would usually not have had the social standing or life history that would predispose them to becoming a powerful ancestor. The funerals in the rural communities whose cemeteries are studied in this thesis were less lavish than those of the kings in *Beowulf*, but they could nevertheless have served in similar ways to transform local important men and women into ancestors. The belief in ancestors was probably linked to specific concepts about the 'soul', or what persisted of humans after their body died and decomposed. Here too, evidence is limited but there are a few indications in the sources that the pre-Christian religions in Scandinavia and Anglo-Saxon England included ideas about souls. The plural is deliberate here, as people seem to have thought of non-corporeal element of a person to consist of multiple components, which as Sanmark (2010: 160-161) points out is not unusual for so-called 'indigenous religions'. The evidence for a pluralistic soul is strongest in the Norse sources. A number of different 'souls' have been identified. The *hugr*, which can be translated as 'soul', 'thought' or 'mind' could be controlled by the person and could leave the body. The *hamr* was the physical form that the *hugr* took when shapeshifting and travelling outside the body. Shapeshifting into the form of a bird or other animal enabled the *hugr* to enter the other-world and visit the spirits and ancestors. Another type of soul, the *fylgja* was a kind of spirit-helper, actively following the person. After death, it could have its own independent existence. Interestingly, *fylgjur* (the plural of *fylgja*) belonged to a family line and could be inherited. They may therefore have been a type of ancestor or an aspect of ancestral presence. Lastly, the *hamingjur* was the 'soul' or non-corporeal element which represented a person's luck. Like the *fylgja*, it could be

passed on to another person after death and usually stayed within the same family. Similar pluralistic concepts of the soul were probably prevalent in the Anglo-Saxon area, but the sources are less clear on what the exact characteristics of the constituents may have been. It is usually assumed they were analogous to those found in Scandinavia (Lecouteux 1987: 203-226; Sanmark 2010: 161-163; Pollington 2011: 369). With the onset of Christianization, these ideas about the soul were converted to the Christian concept of a single soul which departed from the body at death with the last breath (Sanmark 2010: 174-175), but it seems likely that heathen notions of the soul lingered for some time in the early medieval cultural-religious melting pot.

It can be surmised that early medieval people in Scandinavia, Anglo-Saxon England and probably all over North-West Europe valued their ancestors and may have attributed to them divine powers to influence the condition of the living. Pollington (2011: 92) even draws grave reopenings into his argument by noting that they were linked by Welch (2007: 222-223) to offerings for the ancestors after a barrow's closure and may have involved 'retrieving weapons and other items with strong dynastic associations'. The potency and ancestral associations of heathen grave goods could have been part of the reason why Pope Gregory disapproved of grave good deposition in the burials of non-Christians. He may have aimed to prohibit the empowerment of heathen ancestors. Perhaps we could even see the saints as the post-Christianization successors to the heathen ancestors' social and spiritual role, or at least as partaking of the same flow of power from the dead to the living. Like the ancestors, saints were deceased humans who resided with or were part of the divine, and could serve as channels of cosmic power between the world of men and the otherworld, which in the Christian worldview was heaven. On the other hand, ancestor veneration could have been of a more secular nature. In the words of Pollington (2011: 447): 'It seems from the evidence that Anglo-Saxons revered their dead kinsmen and maintained them in the hosting and gift-

giving culture of the living by including gifts of food among the grave goods. [...] The impetus for ancestor-worship among the Anglo-Saxons may have been nothing more than a strong bond between kinsmen which could outlast and overcome death.' On the other hand, this apparent secular nature could well be a result of the secularization of heathen ancestor tales that took place after the onset of Christianization, as Bazelmans (1999: 10) has suggested for the *Beowulf*.

Varying timescales

Grave reopenings themselves were not all uniform in practice or timescale. As we have seen, approximately half of the grave reopenings took place while the wooden containers were still intact, most likely within one generation of the funeral. This meant that the people involved could potentially still remember the deceased and the way they were buried. The other half of the reopenings occurred after the wooden containers had collapsed, probably more than a generation after burial, when precise knowledge of the deceased and the funeral was probably lost. This dichotomy is most likely an oversimplification of the actual variation in grave reopening practices and similar activities. It is, however, one of the most obvious, and probably one of the most fundamental distinctions between the various types of practices concealed in the archaeological remains of reopened graves. The following sections will therefore follow two trails or scenarios that separate and reunite at distinct points in the process of interpretation. Scenario 1 is concerned with the transformation of the recent dead, whose graves were reopened shortly after burial. Reopenings of this type would have brought back powerful, emotionally charged memories of the funeral as people came into direct contact with the transformed remains of their dead relatives and fellow community members. Williams (2004: 178) develops a similar perspective for the post-cremation handling of the deceased's burned remains. Although the people reopening the grave now formed new relations with the dead, they could partially build on their previ-

ous connections with them. Scenario 2, on the other hand, deals with the reopening of the graves of potential ancestors who had died a long time ago. The people who had known them personally were themselves dead, and what they had been like in life and how they had been buried was largely forgotten. When their graves were reopened, the prime element was therefore not recognition, as in scenario 1, but discovery and surprise. The living had no previous acquaintance with these dead and may have needed to form new relationships with them, depending on whether or not they considered them to still be part of the community.

The cultural biography of relics

This section deals with the fate of the artefacts and human remains that were taken from reopened graves. This general category of things from graves will be designated as relics of the deceased, in the same way as the dead bodies of holy people and the artefacts that came into contact with them are referred to as saints' relics. The word 'relic' is used in similar ways in ethnographic literature to designate remains of the deceased that are kept by the living and receive continued attention (for instance Habermas 2001: 10800). The use of this expression does not necessarily imply that remains taken from reopened graves were treated similar to those of saints. The term merely expresses the hypothesis that objects and bones from graves were perceived as a specific category of things that were not necessarily interchangeable with those of a different provenance.

Between the moment an artefact is created and the moment it is finally discarded, it may be used in many contexts and acquire various meanings. As a result, two identical golden necklace pendants may have had different meanings because one had once been buried in a grave while the other had not. Kopytoff has shown how such processes can be studied on the basis of the cultural biographies of artefacts. Such a biography presents an object 'as a culturally constructed entity, endowed with culturally specific meanings, and classified and

reclassified into culturally constituted categories' (Kopytoff 1986: 68). Such culturally specific meanings and categories are difficult to study archaeologically, since we cannot ask early medieval people how they perceived and classified the world around them. We can however construct partially hypothetical models of specific objects' use lives that take into account the social and technological circumstances as they are attested in the archaeological record and historical sources from a particular period and region. I will use this method to investigate the contexts in which relics from reopened graves could have been used, the associations they may have had and the social roles they may have fulfilled.

When a grave was reopened, some or even most of its contents was usually left behind or even purposely redeposited when the diggers refilled their pit. A selection of relics – artefacts and possibly also bones – were taken out, presumably to be employed in later activities. The possible applications fall into two broad categories: use in a recognizable, original or slightly refurbished form, and use in a modified or even recycled, largely unrecognizable form. In their original form, these remains could have served as relics in the traditional sense of the word. They may have been enshrined in special containers that the descendants of the deceased kept in the house or in a special building, where they became the subject of cult practices. The living may also have carried fragments of them in small portable containers, for instance as apotropaic amulets, instruments for divination or mementos of the deceased. See Effros (2002: 158-160) for various types of possible relic containers found in Merovingian graves and Smith (2012: 154-157) for portable reliquaries in various forms that were used to carry saints' relics. Eckhart and Williams (2003: 150) discuss the possible use of Roman antiques from graves for apotropaic purposes and divination. Williams (2003: 111, 2004: 281-282) suggests artefacts and bones from Anglo-Saxon cremations may have served as mementos of the deceased. Conversely, relics may also have been employed in more practical ways. This is most

obvious in the case of artefacts made of precious metal, glass and pottery. Many could probably still be used as they had been before their deposition in the grave, although they may have required cleaning and refurbishing. Their known provenance may, however, have ensured that such 'practical' uses were not devoid of symbolic meaning. Hence, the employment of these objects could have had special significance in certain contexts and may have been restricted to specific functions, including ceremonial ones. Alternatively, relics could have been reused in such a way that they were no longer immediately recognizable. Artefacts, especially those made of metal, could have been recycled, either by disassembling them and reusing their parts in new items, or by melting them down and re forging the material thus obtained. Chemical analysis of early Anglo-Saxon copper alloy objects has shown that they were often made from recycled Roman artefacts (Eckhardt, Williams 2003: 155). It has been argued that such practices could have been meant to hide the objects' provenance (Grünwald 1988: 40), but they could also have been meant to deliberately and openly incorporate relics into new artefacts, which thereby also carried the physical and metaphorical presence of the ancestors. Like artefacts that were left in their original, recognizable form, objects made from recycled relics may have had symbolic associations that predisposed them for use in specific contexts, thus creating links with the past and the world of the dead (Williams 2006: 41). The deceased's bones may have been 'recycled' in similar ways. Hypothetically, they could for instance have been ground up for use in potions, ointments and other medicinal or magical concoctions. Such powders could also have been used in the manufacture of artefacts. The Scandinavian lay of *Weland* reports that the legendary smith made human remains into jewelry. Williams suggests that ash from Anglo-Saxon cremations may have been used to carbonize the iron that was used to make swords (Williams 2005: 266). Even though these activities would render the deceased's remains unrecognizable, such practices would

probably have referred explicitly to their former state, and may have endowed the new objects with a special symbolism and potency. Early medieval people deliberately created mnemonic links with the real or imagined past by for instance reusing the remains of old buildings and sites occupied in previous periods (De Haas 2010). In this way they portrayed themselves as legitimate successors to this past, strengthening their claims to power. Artefacts may similarly have evoked memories of eras gone by, either because their form and decoration recalled specific myths or because people remembered the way they had circulated within and between various communities. Particular artefacts were therefore associated with series of famed living and dead social actors, important historical events and faraway places (Williams 2005: 265-268, 2006: 40). The category of objects with 'special' biographies may also have included relics from reopened graves, which could have had an intermediary position between the physical and conceptual worlds of the living and the dead. Their continued use would then reflect a desire to construct material links between contemporary and future society and renowned people and events from the past, while their deposition in new graves could have been a way to connect the recent dead with previous generations of ancestors. These processes may however have functioned differently for ancestors in scenario 1 than for those in scenario 2. Like the former deeds of the deceased, the biographies of relics taken from reopened graves in scenario 1 would still be remembered. The time they spent in the grave added to the rest of their history, which, as we have seen above, would continue in various ways after they were taken from the grave. Their later use was probably often determined by the fact that they came from a grave. Firstly because they needed cleaning and refurbishing before they would be suitable for use (if they ever actually returned to practical use) and secondly because their residence with the dead had altered their symbolic associations. Among other things, these objects could have served as mementos of the de-

ceased, recalling memories of their deeds (Williams 2003: 111, 2004: 281-282), and facilitating the continued presence of the dead among the living. Since these ancestors had probably been part of the community for a long time, their identities and relations with the living continued to develop under the influence of events that occurred after their graves had been reopened.

In scenario 2, the relics could not serve as mementos of the dead and their deeds, since these were no longer remembered. Eckhardt and Williams have proposed that objects without a known biography may have had special meanings precisely because of their unknown provenance. Artefacts that are transported through space or time may take on new functions and meanings when they are appropriated in another social context. Their unknown origins make them especially suitable to play a role in defining relations between the society where they reside and other times and places (Eckhardt & Williams 2003: 142-144). The applicability of this hypothesis to relics from reopened graves requires some scrutiny, since their provenance was not a complete mystery: they were found in the specific and very recognizable context of a grave. These deposits would be very similar to those of the recent dead in scenario 1, so such finds would have appeared rather familiar and could easily have been appropriated as the remains of long-departed ancestors. The fact that the exact identity of these ancestors was not known need not have been a problem. These dead could simply have been regarded as part of the community's large number of long deceased and now anonymous ancestors. Alternatively, personality could have been constructed for them in the context of the reopening and the ensuing events. An analogy for the latter process can be found in the appropriation of imported saints' relics. From an archaeological perspective, it is important to realize that saints' relics were not necessarily the material remnants of actual holy people: they were human physical remains and artefacts kept in special containers in special places, around which a particular kind of story was construct-

ed. Their doubtful provenance was irrelevant to those who believed in their efficacy, because the way they were materially and conceptually framed identified them as true relics. They confirmed their working relationship with their respective saint and with God by the miracles they facilitated on a regular basis (Geary 1986: 186-187; Smith 2003: 189-201). Similarly, in scenario 2 the identities of ancestors and their relations with the living may have been constructed primarily by the way their remains were engaged in social activity after their graves had been reopened and by the way they were perceived to manifest themselves in their new capacity.

The fact that reopenings detached the relics from their original context need not have impaired their efficacy for materially expressing the deceased's continuing active existence, but may actually have strengthened it. Brown has argued that particularly the separation of saints' relics from their physical association with the grave and the corpse made them such effective vehicles for controlling the power of death. 'For how better to suppress the fact of death, than to remove part of the dead from its original context in the all too cluttered grave? How better to symbolize the abolition of time in such dead, than to add to that an indeterminacy of space?' (Brown 1982: 78). The capacity of relics to turn the dead into a beneficial force was maximized by detaching relics from their direct association with physical putrefaction. 'For what was being brought were tiny fragments around which the associations of a very special kind of death could cluster undisturbed.' (Brown 1982: 79).

Implications for early medieval personhood

As I suggested in my paper for the *Internationales Sachsensymposium 2011* (Van Haperen 2013), the interpretation presented above may have significant implications for the study of early medieval personhood. Archaeologists commonly think of early medieval persons as individuals. It has been pointed out however, that individualism is a specifically modern Western form of personhood and that

past persons need not have identified as individuals (Thomas 2004: 136-137; Fowler 2004: 8). This view has been negated somewhat by scholars who emphasized that even in cultures that do not share modern Western society's focus on individualism, persons nevertheless experience a certain amount of individuality or consciousness of being an autonomous person, and can therefore appropriately be called individuals (Knapp & Van Dommelen 2008). While there are thus no great objections to the use of this term in the general archaeological literature, in discussions on personhood it may cause confusion if 'individual' is used interchangeably with 'person', so in this section of the text the term 'individual' is used exclusively to refer to the concept of the autonomous indivisible person as it is found in modern Western culture. As in the previous section, we will start with a short introduction about saints' relics and then proceed to the reopened graves from rural cemeteries.

Saints' relics were usually not complete bodies or complete objects, but consisted of small pieces or fragments. Common types of relics were: a single bone or body part of a saint, a strand of hair, a drop of blood, a piece of the saint's clothes, an object that touched the saint's body, or even a stone or some dirt from the saint's grave. Often, there were a great number of relics of the same saint, which were distributed over many places (Brown 1982; Angenendt 1997; Smith 2012). We could therefore say that saints were not individuals, in the sense that both their spiritual presence and their physical remains were not kept whole and undivided, but on the contrary, were very much split up and distributed over multiple locations. In the words of the anthropologist Alfred Gell (1998), the saints were 'distributed persons'.

In his last book, Gell develops the concept of the distributed person. He starts with some observations about the inhabitants of Tahiti, who use images of their god Oro to bring about his presence among people. The images are usually kept carefully wrapped, since people believe that they are dangerous to behold.

Gell (1998: 109-114) argues that while the image is concealed, the god himself is kept safely away from people. His power is left in the control of the priests, to be periodically renewed when the wrapping is opened and the feathers it contains are distributed among community leaders. The distribution of the feathers is perceived as the distribution of the power and presence of the god. This example shows that the presence of a person - their personhood - does not necessarily reside in an intact, undivided and autonomous form. In fact, a person's presence or personhood can be distributed over multiple places, objects and substances.

The medieval cult of saint's relics is a prime example. The presence and power of a saint can simultaneously manifest itself through many different distributed body parts and objects, such as the mentioned clothes, utensils, stones and dirt from the grave. It therefore seems that early medieval persons were not necessarily autonomous and undivided individuals. Rather, their presence and power could be divided into objects and distributed over various places. This also resonates in the three qualities of relics listed by Smith: incompleteness, indeterminacy and portability. Relics are usually not a person's whole body, they are by definition fragmented left-overs (*reliquiae* in Latin). They are detached from their original context, and thereby deprived of a self-evident identity or individuality. Importantly, their detachment and small size also make them portable and easy to transport from one place to another (Smith 2012: 150-158). The saints had died and gone to God, but their physical remains and the artefacts they had touched remained on earth. By enshrining these relics in specially constructed containers (cloth wrappings, reliquaries, altars, churches), devotees could gain access to and control over their powers.

This new perspective can lead us to a number of interesting ideas about grave goods and grave reopenings. Theuws (2009) argues that the grave good deposition could have been a means of imparting particular qualities to an ancestor. The deposition of weapons in the

grave could for instance help to create a protecting ancestor. If this is correct, one could argue that the weapons became an element of the ancestor's personhood. Part of the ancestor's presence and protective power could now be found in the weapons, just like a saint's power could be found in a stone from the saint's grave. When the weapons (or other grave goods and human remains) were removed from the grave, these objects and thereby the presence and power of the ancestor was distributed over various places and contexts. Some remained in the grave, while others were taken out. It is obviously difficult to know what happened to the objects that were taken, but like saint's relics, they may have been divided over various places and among the descendants of the deceased. In this way deceased ancestors could be present and powerful in many different places. They became distributed persons.

This interpretation of the social function of grave reopenings can be taken one step further. Contrary to the funerals, which usually have to be performed within a few days after a death, grave reopenings can be planned long in advance, allowing people who live far away to be invited and attend the event. Ethnographically documented second funerals are often celebrated far more elaborately and are attended by a larger audience than the ceremonies that are performed immediately after death (Huntington & Metcalf 1979). Furthermore, the time that passed between the burial and the reopening would have allowed the deceased's family to accumulate resources and prepare a more elaborate feast than what could be afforded during the first funeral. Miles (1965) for instance, has documented this type of practice among the Ngadyu-Dayak of Borneo. In this way, grave reopenings may have served to bring together the members of the deceased's kin group, including those who lived in distant places. Authors writing on the archaeology of personhood have shown that such gatherings were often demonstrations of fractal personhood, where various levels or dimensions of a society's concept of the person are visible simultaneously

(Fowler 2004: 48-51, 68). In the present case, the discernible levels might be the kin group as a whole, the direct blood relatives and affines of the deceased and the dead person him- or herself. In systems of fractal personhood each level, large or small, is seen as similar or even equivalent in nature to the other levels. Thus the remains of the deceased, revealed in the reopened grave, could have been perceived to represent the whole kin group. In fact, even single grave goods or bones could have been treated as persons with a power and volition of their own. This discussion of fractal personhood resonates the hypothesis put forward by Bazelmans (1999: 114) in his discussion of the *Beowulf* that a king is constituted as an ancestor by his people, who are represented by his independent, adult warrior-followers. The *Beowulf* also strongly reflects concepts of relational personhood, as the poem's characters are usually referred to with the relation they have to other persons. They are hardly ever just themselves, but rather always someone's son or daughter, father, brother, wife or widow, follower or king (Bazelmans 1999: 123-124).

Aspects of fractal personhood can also be observed for saints' relics, which are treated both as parts of holiness linked to God, representations of Christianity, parts of the saint's body, and as singular entities that have a 'personal' power to act independently. Each element in such a fractal is both a person in itself, and a representation of the larger whole. Thus, if reopenings in rural cemeteries would have involved the redistribution of some of the materials taken from the grave among the participants in the meeting, this could in fact have been viewed as a distribution of the power of the joined kin group to each single member, subgroup or nuclear family.

Reopening graves and distributing the relics of the deceased is not the only way the presence of the community's dead could have been established in a number of places. In his study of a number of cemeteries from early medieval Maastricht, Panhuysen (2005: 282-283) found that they did not present a cross-section of the mortality in the local population, but

contained disproportionate numbers of people from particular sexes and age groups. He therefore suggests that there may have been a system of complementary cemeteries in and around Maastricht, which meant that people from a single community or family could be buried at different sites according to their perceived social category and the related preferences of the burying group. This tendency to distribute the community's dead over several burial locations may have reached a height in the seventh century, when grave reopenings probably also became more frequent. In a treatise on distinct types of burial grounds in the Meuse–Demer–Scheldt region, Theuws notes that seventh-century communities developed various types of burial grounds, which included the old cemeteries that had come into use when the area was first colonized, small farmyard cemeteries within the settlement and churchyards near newly founded episcopal buildings. In addition, they may have transported some of their dead to cemeteries outside the region, for instance to important cult centers or to other cemeteries that were related to their kin group. The author argues that these different burial locations were related to the burying communities' strategies of self-definition. Farmyard burial may have emphasized the importance of the co-resident group and supported claims on the land and farmstead. The old cemeteries stood for the local communities, whose significance was changing because they were gradually being integrated into large estates as part of the reorganization under the Pippinids, which were symbolized by the new churches and the churchyards associated with them (Theuws 1999: 345-346). Burying the bodies of community members at different locations was only one way of distributing the presence of the dead over a number of locations. Reopening graves and removing objects and possibly bones from them may have been another. In the words of Theuws (1999: 347): '[...] the robbing of graves seems to be part of a complex process of reshuffling old and new dead over different burial grounds in order to create a new encompassing order that is both social

and spiritual in character.’ Like farmyard burial, grave reopenings and the subsequent distribution and redeposition of the deceased’s relics may also have been used to substantiate claims on land and property. See Theuws (2009) for other possible early medieval strategies of claiming land in mortuary practices. The idea that the land where the ancestors are buried is their descendants’ property can be found worldwide. In the Philippines, for instance, people will sometimes attempt to solve landownership disputes by taking the remains of dead forbears from their graves and reburying them at the boundaries of the contested area (personal communication from Titia Schippers, who did ethnographic fieldwork in this region).

4.3 Value and economy

The previous section discussed the hypothesis that grave reopenings were events for celebrating the ancestors, collecting relics and emphasizing the burial community’s fractal personhood. This is a very involved interpretation that makes a quite lot of assumptions about early medieval culture and social life in the Low Countries and beyond. When presenting this interpretation at conferences, I inevitably get asked whether grave reopenings could not ‘simply’ have been materialistically motivated. I understand where these questions come from. Why make up elaborate stories about ancestors and rituals, when a simple practical interpretation seems to suffice? What’s more logical than saying the grave reopeners removed objects because they wanted to benefit from their material value. The many objects left behind in reopened graves could simply have been overlooked in the messy environment of the overturned graves, especially if the diggers were in a hurry had to conduct their business and had to work under the cover of darkness (Fremersdorf 1955: 29; Roth 1977: 289; Klevnäs 2013: 66). They do not have to mean that the diggers were not materialistically motivated. In this section I will dive deep into the economic argument, evaluating to what extent it really makes sense and coming

to terms with its potential for shedding light on the grave reopening phenomenon. In this section I will use the word value in a purely materialistic sense. The cultural and social aspects of an object’s significance will be called ‘worth’, inspired by Bazelmans’ (1999) discussion of *Beowulf*.

Material value – only half of the story

One of the first issues that arises when discussing economic or materialistic motivations for grave reopenings is the value of the goods that were taken from the grave. In the previous chapters we saw that while all types of objects were probably eligible to be taken, the diggers may have targeted swords and seaxes; various kinds of women’s dress accessories, especially beads and brooches; and possibly also a varying array of utensils, such as small knives and pottery. The materials taken from reopened graves included all those commonly retrieved by archaeologists: iron, copper alloys, silver, gold, gemstone pottery and glass.

The provenance of objects taken from graves must often have been clearly visible as such because their physical appearance changed profoundly during their stay in the grave. However, there was probably quite a lot of variation in how this influenced their material value. These transformations are summarized in table 4.3.1. Organic materials such as textile, leather, wood and also human skin and flesh were susceptible to decomposition. Their color, texture and general appearance would start to change almost as soon as they entered the grave and were subjected to the humid conditions created by the process of decay in and around the deceased’s body. Some of these materials deteriorate faster than others – leather and wood especially may hold out quite some time – but all would probably decompose within approximately 10 to 35 years (Aspöck 2005: 251–252, 2011: 302–306). Metals such as iron, copper alloys and silver would not decompose, but they would soon corrode under the influence of humidity, which would also change their color, texture and – especially in the case of iron – their

shape. Only glass, gold, stones and gems would have emerged virtually unchanged, as they still often do at archaeological excavations over a thousand years later. They would have needed only a little cleaning and perhaps minor refurbishing before they could potentially be worn, used, given away or sold in the same ways as they had been before their deposition in the grave. Pottery vessels too, if they had not been broken, could probably be cleaned and made usable again, if only for reuse in another grave. Some authors suggest that the pottery, glass and metal vessels from graves would have been perceived as too badly contaminated to be used again for everyday purposes (Grünewald 1988: 37; Klevnäs 2013: 28). This could be true, but it is important to keep in mind that early medieval people did not have modern hygiene knowledge. If they did perceive objects from graves as ‘contaminated’, this contamination may have extended not only to pottery vessels but also other object categories, limiting the ways in which they could be used. Depending on the local soil conditions, human and animal bone and shells could also be in the category of inert materials. Objects and materials whose appearance changed (decayed, corroded) in the grave were probably valued differently than those that were relatively inert, not only in the sense of their raw material monetary value, but possibly also in the symbolic sense of the a dead person becoming an ancestor, as discussed in the previous section.

Objects of various materials would have been so extensively damaged by even a relatively short stay in the moist environment of the grave, that they would be unsuitable for normal use or exchange when they were taken out. This was not only the case for organic materials such as textile and wood, but also for most of the metal. Iron especially is very susceptible to corrosion. A study by Gillard et al. (1994) has shown that within a month to a year, iron objects can rust to such an extent that textiles become embedded in the corrosion layer. As argued by Klevnäs (2013: 46), corrosion may have been kept at bay longer when objects were coated in grease, or were

kept in a greased container, such as a sword in a scabbard. If so, the relatively good preservation of spatha’s and seaxes may have been one of the reasons that grave reopeners targeted these items over other large metal objects such as lance heads. Other metals such as silver and copper alloys may have taken slightly longer to corrode, but would also sustain considerable damage from being in the grave for a few years. Corrosion would render metal objects unsuitable for normal use and thereby also influence their value as exchangeable items. They could however have been melted down and used as raw material (Zintl 2012: 58-59).

Textile, leather, wood, human flesh	Changes immediately, decomposes within a number of years
Iron, copper alloys, silver	Corrodes within a year
Glass, pottery, gold, stones and gems, (bones)	Stays unchanged (bones may decay)

Table 4.3.1 Changes in various categories of materials after they are placed in a grave

Often ‘value’ is discussed merely as an expression of objects’ raw monetary or material revenue. In my opinion however, it is unlikely that the diggers were only interested in the simple resale price or raw material value of the things they took from the graves. This is supported by the fact that specific types of graves were preferentially reopened and particular object types were selectively taken or left behind. Firstly, at least in the cases that took place within one generation of the funeral (which are approximately half of the reopenings in the research area) the diggers could probably remember the deceased and had memories and emotional connections with them. As discussed above, they may have been either family or fellow community members of the deceased or, as Klevnäs (2013: 83) suggests, they could have belonged to enemy groups. Even if the participants had no memo-

ries or emotional connections to the deceased, for instance because a long time passed between the burial and the reopening, they must still have been aware that these were objects from *graves*. If they were digging in the family plot, these were the graves of their own ancestors; or if they had no connection to the cemetery, they were reopening the graves of unknown dead. Objects from graves may have been perceived as special, powerful and even dangerous. Grünewald (1988: 40) argues that objects from graves would often have been recognizable to people from the burial community who had seen the funeral and knew with what objects the dead person had been buried. He suggests that the diggers may have needed the skill of a smith too melt the objects and reforge them into a new form before they were able to benefit from their material value. This is a possibility, especially if the objects were obtained without the deceased's family's consent or if they were perceived as dangerously contaminated. However, it is equally possible that the known provenance of former grave goods would have given them a special potential that increased their perceived worth, adding a dimension beyond the plain value of the raw material or that of a similar object that had not spent time in a grave. If so, the corroded and damaged state of some of these objects could have made them *more* economically valuable rather than less, since it made them recognizable as former grave goods. It seems likely that the meaning and value of former grave goods was also influenced – if not largely determined – by the reason the objects were deposited in the grave in the first place. Unfortunately early medieval grave good deposition has been the subject of a debate even more extensive than that on grave reopenings, and as yet, no consensus has been reached. Härke (2014) recently summarized the past and present theories about early medieval grave good deposition. The interpretations of grave goods he lists include: equipment for the deceased's journey to the afterlife and the afterlife itself; inalienable personal property of the deceased that had to be buried with them; collective inalienable possessions of the de-

ceased's family stored away in the grave; grave goods as direct reflections of the deceased's identity and social standing; objects as metaphors for the deceased's life and biography; conspicuous consumption and display (potlatch) by the deceased's family; gifts from the mourners to the deceased; gifts to a deity, like a Charon's Penny; remains of funerary feasting; disposal of spiritually polluted items; apotropaic functions such as preventing the dead from walking; and lastly, getting rid of objects that would inconveniently remind people of the deceased. Härke (2014: 54) states that these interpretations are not mutually exclusive and may all have been true for at least some grave goods in various geographical regions and social contexts during some phases of the early medieval period. These interpretations raise many issues that could be relevant for the value, meanings and uses of objects taken from reopened graves. For instance, grave goods that were deposited as equipment for the deceased's journey to the afterlife would no longer be needed after the transitory period had passed (for instance after the body had skeletonized), making it acceptable to remove them from the grave. Similarly, if the grave goods were considered the collective inalienable property of the deceased's family, relatives may have had the right to retrieve them. Kars suggests that deposition in a grave may have been a way to preserve collective inalienable family property when no suitable living caretaker was available to hold onto an object. Such objects may later have been retrieved, for instance when an appropriate caretaker had come of age (Kars 2013: 101). On the other hand, items that were the inalienable *personal* property of the deceased or that were gifts to a deity or had an apotropaic function to keep the dead from walking, may more often have been left behind when graves were reopened.

Klevnäs has recently formulated her own view on grave goods as inalienable property, related to her hypothesis that in the Anglo-Saxon territory grave reopenings were attacks on the ancestors of enemy groups. She argues for two categories of inalienable property. Firstly, a

kind of collective inalienable objects such as swords and brooches which played an important role in gift exchange and inter-generational inheritance. These were to some extent considered inalienable, but not to such a degree that they could not be taken from reopened graves. Secondly, she argues for a type 'personal' inalienable objects, such as knives and necklace beads, which were so bound up with their owners that it was not acceptable to take them away after death, even for hostile grave reopeners (Klevnäs 2015: 175-179). Klevnäs' paper raises many interesting and valid points about early medieval ownership, the meanings and functions of various types of grave goods and the distinctions she draws between various types of inalienable property. However, I am not convinced by her interpretation of the archaeological data, especially her suggestion that certain types of objects were never taken from reopened graves. In the Low Countries there certainly do not seem to have been any taboos on the removal of particular grave good types, although some objects were left behind more often than others. In Klevnäs' own research area Anglo-Saxon Kent, the practice may have been different, but as discussed above, without statistical comparisons of the numbers of objects found in reopened and intact graves, we cannot be certain; especially for beads, which occur in graves in such large numbers that some could easily be taken, while many others were left behind. On the subject of beads, Klevnäs also somewhat contradicts herself by saying that these objects were often exchanged as gifts and handed down to the next generation, but also suggesting that they were so inextricably connected to their owners that they could not be removed from graves. From a more positive point of view, if the grave goods were meant to show off the social status of the deceased and the family by means of conspicuous consumption and display, reopenings could have been a way of focusing on their wealth one more time. As was argued in the section on personhood, reopenings may have been elaborately planned events to which many people were invited. When the grave

was reopened, its lavish contents could be displayed one more time, and specific items or fragments could be distributed among the attendees as mementos. If the mourners had contributed grave goods or other resources to the funeral, the reopening could even have been an opportunity for the deceased's family to reciprocate these gifts. On the other hand, if grave goods had been deposited as a means of getting rid of objects that would inconveniently remind people of the deceased, fragmenting them during a reopening could have been a means of completing the process of forgetting. If certain grave goods were deposited in the grave because they were perceived to have been polluted by belonging to or coming into contact with the deceased, that could have given them a special kind of potency and value. Aspöck notes that in the Early Middle Ages bones of the dead, and objects that came into contact with them, were sought after as magical substances, especially if they originated from criminals (Aspöck 2005: 227-228). For instance, the star shaped formation and other bone deposits from Oegstgeest may – among other possibilities – have been the result of such magical practices. Amuletic functions could have been another potential magical use for objects taken from graves.

If the objects were perceived as ancestral relics or heirlooms, as was argued in the previous section, that may also have contributed to their value. Geary (1986) describes a lively exchange-economy for saints' relics, which included gifting, selling and stealing. Smith (2012: 156) says about Christian saints' relics that 'They turned the events of Christian history and legend into tiny movable objects that could be touched, kissed, carried around, possessed, stolen, bequeathed and counted. They might also be collected – or subdivided for sharing'. Similarly, objects from reopened graves may have been perceived as materializations of both the ancestors themselves and the burial community's past, which could be engaged in various acts of keeping and exchange. If on the other hand – as Klevnäs argues – grave reopenings were carried out by hostile groups, objects from reopened graves may

have served as a type of trophies, valuable as proof of the grave reopeners' prowess and success in attacking the graves of their enemies. Similarly, if the dead themselves were considered hostile, as is for instance the case in some of the written sources from medieval England and in the Icelandic sagas (Beck 1978; Gardela 2013: 100-107; Klevnäs 2013: 80-81), objects taken from the grave could be trophies of the heroic struggle against the deceased.

Note that the category of 'objects' in these contexts is not necessarily restricted to grave goods, but could also have included bones and even dirt or stones from the grave. In cemeteries where both grave goods and bones are found to be missing from reopened graves, the authors often assume that the grave goods were taken for their value, while the bones were discarded (For instance Zintl 2012: 252; Klevnäs 2013: 52). This was not necessarily the case in the Low Countries, as is apparent from the finds of deliberate deposits of human bone in non-funerary contexts in Oegstgeest, Kessel and possibly other sites. Bones may even had monetary value, as was also the case in for early medieval saints' relics (Geary 1986: 184-186).

Why a purely materialistic interpretation does not work

The previous section explored the potential value and worth of objects from reopened graves, and showed that these may have been much more complex than a simple resale price for well-preserved objects or the cost of raw material for damaged and corroded objects. However as was discussed above, reopened graves themselves also yield much evidence that suggests the diggers were not just aiming to maximize the monetary profit that could be gained by systematically collecting all the graves' objects. Although there is some evidence that the diggers targeted well-furnished graves over less well-furnished ones, they were not systematically removing all objects of value, nor were they exclusively targeting rich graves. This is also apparent in regions outside the Low Countries. For instance in the ceme-

tery of Burgweinting-Ost which was studied by Zintl, the majority of the graves were reopened, despite the fact that they were probably quite poorly furnished (Zintl 2012: 323). The high percentages of reopened graves in many cemeteries and the difficulties of hiding reopenings both during and after the act make it unlikely that this was a secretive practice. Therefore, the remaining objects were probably not all overlooked by hurrying diggers who had to work in the dark of night. This holds true both for the Low Countries and for German Bavaria (Zintl 2012: 337). The fact that large metal objects such as lance heads and belt plates were often left behind shows that mining for raw metal was usually not the diggers' primary aim. They may have targeted small valuable items such as precious metal jewelry, but these items seem to have been relatively rare in most cemeteries, so they could not have been the main reason for opening most graves. The idea that precious metals and gemstones were the digger's primary aim is also negated by the fact that the diggers seem to have preferred men's graves over women's graves, even though the latter usually contained more jewelry. Zintl makes the point that glass beads would have been ideal 'grave robber' loot, since they were small, easy to clean, and not very recognizable (Zintl 2012: 244-245). While it is clear that many beads were taken from the reopened graves both in Bavaria and in the Low Countries, the diggers were by no means systematic in removing all of them. Rather, they seem to have taken small numbers of specific objects and object types, indicating that they were driven by other purposes than a simple desire for material wealth. In addition, the materialistic grave robbery hypothesis seems to originate from an overly pessimistic view of the wealth available in early medieval rural society. There is no evidence for a shortage of metals and other raw materials in the Merovingian period (Roth 1978: 67; Steuer 1998: 520; Theuws 2014). Rather, there seems to have been a ready supply of new items, which makes it unlikely that there was a pressure on people to start ransacking graves, purely out of poverty.

Gifts from the ancestors

An alternative way to look at the economics of grave reopenings, is from the perspective of the deceased. This section is once again based on my previous work (Van Haperen 2010: 27-28). Grave reopenings could have been perceived as an opportunity to engage the ancestors in a gift exchange. This interpretation only makes sense if we accept that early medieval people perceived their dead ancestors as active actors who were engaged in or even constituted by exchanges of goods, as was proposed above.

In his article on the various types of early medieval weapon exchanges, Härke (2000: 390) suggests that the custom of grave good deposition was a means of taking artefacts out of circulation, after which they had to be replaced by producing new ones and looting others from neighboring communities or from graves. However, since it has been demonstrated that grave reopenings were probably more than simple cases of materialistically motivated robbery, it might be better to consider the deposition and subsequent removal of objects from graves as potential occasions for exchange, not fundamentally unlike other types of early medieval artefact circulation. The dead would often keep the items given to them during the funeral, but when their graves were reopened they could also return them or pass them on to a new owner, either willingly or unwillingly under force or coercion.

An example of such an exchange can perhaps be found in Paul the Deacon's account of how Gisilpert entered the tomb of Alboin and took his sword and some of his other grave goods. Krüger (1978: 176-177) cites this as one of the few references to grave robbery in the narrative sources. Geary (1994: 49, 64-65) proposes a different interpretation. He places this tale in a long tradition of grave reopenings from the Icelandic sagas which has parallels in ancient Greek and Roman sources. In these tales, grave reopenings are portrayed as a way of entering the world of the dead to contact the person buried in the grave and obtain some of his grave goods (by either gift or theft). Such exchanges with the dead were not

just motivated by a desire to obtain their property. The items taken from the grave were representations, or even containers, of the deceased's power. Their exchange therefore involved not only the items themselves, but also their dead owner's authority and strength. The sagas do not come from the Merovingian world and should therefore not be used uncritically to aid the interpretation of Merovingian material. However, the similarity between the Icelandic myths and the tale of Alboin does suggest some cultural continuity, or at least resemblance of meaning and social context, to justify this interpretation. Geary emphasizes that in the Early Middle Ages, exchanges of property were an important way of creating and confirming kinship ties, especially those between a predecessor and heir. We may therefore consider the exchange of artefacts as performances of power transfer and the creation of kinship ties. By opening Alboin's grave and taking/receiving his sword, Gisilpert attempted to represent himself as, and thereby to become, Alboin's successor.

The hypothesis that grave reopenings were meant to establish relations of kinship or mutual dependence with the deceased by taking or receiving some of their relics from the grave has a number of interesting consequences for the way we interpret these practices. If they were exchanges in the proper sense of the word, the deceased subsequently had the right to expect a counter-gift (Mauss 1954). These gifts could have taken various material forms – such as depositions of new artefacts in graves to replace those that were taken – or non-material forms, such as continued attention to grave sites and the relics taken from them. In fact, grave reopenings in themselves could also have been a form of service to the dead, as in the Philippines where graves are sometimes opened in order to add extra blankets if the community has reason to suspect that the deceased is uncomfortable (personal communication from Titia Schippers).

The deposition of objects into reopened graves is not something that has received a lot of attention in the debate because direct evidence for such practices is very scarce. Nevertheless,

the comparatively high numbers of objects found in reopened graves do allow for the possibility that objects were not just removed, but also deposited during reopenings. Physical property was only one of the things that could be exchanged in early medieval society, and gifts of service or mutual assistance may have been equally important, both in the interaction between the living themselves and between the living and the dead. In Christian communities, for instance, the dead (particularly the saints) were expected to contribute to the well-being of the living by aiding their dealings with God and promoting the productivity of their agricultural efforts. In return, the living offered them services in the form of prayers for their well-being, the regular pronouncement of their names and the continued memory of their deeds (Geary 1994: 90, 171). By this veneration of and service to the dead, the living community earned the right to expect the constant protection and assistance of the dead, thus completing the Maussian cycle of gift, acceptance and counter-gift.

The purpose and meaning of these exchanges between the living and the dead may have differed between grave reopenings that were performed while the deceased was still remembered (scenario 1), and those that took place after the deceased's identity was forgotten (scenario 2). In scenario 1, the living retained memories of their interaction with the ancestors when they were still alive and of the way they were buried. Exchanges conducted in the context of the reopening may therefore have been perceived to reaffirm relations that had been formed during life or during the funeral. Ties of mutual dependence and kinship were made to continue beyond death, sustaining the presence of the dead in the community of the living. It is likely, however, that these relations also gained new dimensions of meaning in the mortuary context. In scenario 2, the living had no former relationship with the dead – at least none that they explicitly remembered. Relations between the living community and these alien and possibly even hostile dead may need to have been initiated and maintained by the exchanges con-

ducted during and after their graves were reopened. Under such circumstances, establishing an exchange may have been of even greater importance than it was in scenario 1, since there may have been a need to appease them before they could be appropriated as ancestors. The exchange of gifts may therefore have been an important means of incorporating them into the community. Alternatively, grave reopenings of long departed ancestors could have been a way for the burial community to reappropriate the power contained in the now anonymized grave goods. In his analysis of the *Beowulf*, Bazelmans suggests that treasure and hoards, especially objects like swords, armor and jewelry, are connected to life and fertility and to the constitution of personal worth and image. After death, an ancestor's worth – constituted in objects and wealth – is first retained in the memories of his kin and retainers, but within a generation or two, the ancestor's identity and achievements are slowly forgotten, and the worth (wealth) becomes anonymized, and begins to constitute the worth of the following generations (Bazelmans 1999: 160-165, 190-191). If we apply this mode of thinking to grave goods and grave reopenings, the selective removal of certain types of grave goods could have been a method for regaining some of the worth that was stored away in old ancestral graves. A similar line of reasoning was recently proposed by Platenkamp (2016: 178-179). He argues that the deposition of valuable items ('money') in the ground renders them socially dead. There can be many reasons why people would choose to ritually kill money or treasure. The cases discussed by Platenkamp all involve a disturbance in the community's social structure, like conflicts and animosity or incest. Recuperating the treasure and effectively rescuing it from social oblivion by reinserting it into circulation can be perceived as a heroic deed. Platenkamp uses the example of Beowulf who rescues treasures from Grendel's mother and the dragon, but it is possible that similar motivations played a part in grave reopening in the research area.

Grave reopenings and the ritual economy

In the above I have argued that while economic and materialistic considerations were almost certainly part of the reason why early medieval people chose to reopen the graves of their dead, such motivations were probably much more varied and complex than a straightforward desire to benefit from the resale price or raw material value of the objects found. The differentiation between material value and social worth may not only be relevant to grave reopenings, but also to the early medieval economy in general. Recently, Carver (2015) has suggested that the economy in the early medieval period was not necessarily driven by a desire for trade and material gains in themselves, but rather by the need for materials and objects that could serve to fulfil symbolic or practical roles in the ritual practices of persons and communities. He argues that early medieval economies were driven by ideological needs:

‘Some required wealth to be deposited in graves, others induced gold to be thrown into lakes, others persuaded people who valued their souls to convey their wealth into the hands of spiritual consortia (for example the Christian monastery). It would not be legitimate to regard these ways of using goods as ineffective [...]. The premise here is that through most of the period 400-800, material wealth is largely the detritus of an ideological programme rather than a tale of economic evolution.’ (Carver 2015: 1-2)

We can find an example of the needs that lay at the basis of this ‘ritual economy’ in Bazelmans’ treatise on the *Beowulf*. He states that early medieval persons were dependent on relationships with other people and supernatural entities. These relationships were essential for the development of the person through the life cycle from child to youth, adult, elder and eventually ancestor. The exchange of gifts plays a determining role in this process. The successive transformations have to be effected by bringing together various constituting elements, some of which were probably objects. By exchanging gifts people were able to activate various relationships within the human

world, and with supernatural entities (Bazelmans 1999: 9). In this view, economic activities such as obtaining, keeping and exchanging objects were an indispensable part of the constitution of early medieval persons, ensuring the continuity of the social order and maintaining beneficial relations with the otherworld. Theuws (2014) has argued convincingly that this ‘ritual economy’ did not just facilitate the demands of elite persons like those in the *Beowulf*, but also – or even mostly – the needs of farmers in rural settlements. These rural inhabitants employed the objects they obtained in the performance of life cycle rituals such as coming of age ceremonies, marriage and funerals, as is evidenced by the large amounts of precious objects found in rural cemeteries.

4.4 The dangerous dead

Early medieval ideas about death and the afterlife may not only have included good powerful dead, like benevolent saints and ancestors, but also rather more ill-intentioned deceased, against whom measures needed to be taken to safeguard the living from their malevolent influence. For convenience, I will call these dangerous entities revenants or unquiet dead, without making a priori assumptions about in what ways they may have been thought to manifest themselves or affect the living. Since very little is known of concepts of the dangerous dead in the early medieval Low Countries, this chapter cites early and later medieval and even post-medieval examples from Germany, Britain and Scandinavia. Coming from such culturally and chronologically diverse and distant regions, these sources should largely be seen as inspiring analogies rather than direct bases for interpretation.

Deviant burials

The fear of revenant dead has traditionally been associated with so called ‘deviant’ or atypical, non-normative burials; graves that differ from normative burials. Their abnormalities can be diverse, from unusual grave goods and differences in the graves’ orienta-

tion to mutilations of the corpse. These variations came about through a varied range of processes and motivations, of which the fear of unquiet dead was only one. We must also take into account that there is considerable local and regional variation in what can be considered 'deviant' and in the meanings of particular forms of deviancy (Thäte 2007: 267-272; Aspöck 2008; Gardela 2013: 109-110, 120-121). In this section I will focus on forms of atypical burial that can arguably be associated with necrophobia, specifically the fear of revenants. Other circumstances in which non-normative burial in various forms might take place include sacrifice, murder, suicide, war and massacres, judicial violence, and disease epidemics such as the plague (Reynolds 2009: 40-52; Gardela & Kajkowski 2013). Deviant burials as a category are problematic because deviancy can only be established in relation to the local or regional funerary norm, and even then it is difficult to establish what does and does not fall within the normal range (Aspöck 2008; Gardela 2013; Gardela & Kajkowski 2013). Thäte was one of the first to note that 'deviants' are usually buried in regular cemeteries among the 'normative' graves. This signals that they were perceived as part of society and not seen as outcasts who had to be buried in separate cemeteries (Thäte 2007: 272). The interpretation of deviant burials is not clear-cut. Fear of the dead – especially the revenant dead – is often referred to, as is judicial violence. In the case of judicial violence, the burial's deviancy may have been considered a form of punishment, or may in some cases even be related to the cause of death, as in the case of decapitation. Actions that were presumably taken out of fear for revenants often involve some kind of fixation to prevent risky dead from rising from their graves. Both these interpretations are relatively well grounded in historical and archaeological evidence, as will be discussed in more detail below (Lecouteux 1987: 180-181; Reynolds 2009; Gardela 2013; Gardela & Kajkowski 2013; Klevnäs 2016a). In his study of archaeological evidence from the Anglo-Saxon area, Reynolds (2009: 61-95)

focused on characteristics such as decapitation and amputation of limbs, stones placed on top of the body, burial in prone position, and restraining the corpse by tying up the limbs. These practices are closely paralleled by methods for restraining the dead that are described in the early stories about revenants from Scandinavia, Britain and Germany, especially the focus on heads, including decapitation and rearrangement of skulls. Other practices described in the written sources, such as removal of the heart, are more difficult to recognize archaeologically. Some stories recount bodies being burnt or thrown into rivers. The damage to legs and feet that is found in some atypical burials is not mentioned specifically in most written sources, but it could nevertheless be related to a desire to prevent the dead from rising and 'walking again' (Lecouteux 1987: 31-35; Blair 2009: 546; Gardela 2013: 112; Klevnäs 2016a: 197).

Deviant reopenings

In some cases, the treatment of the human remains in reopened graves was very similar to the manipulations of the body typically associated with deviant burials, which were carried out *peri-mortem* or during the funeral. In a recent paper, Klevnäs has drawn attention to the fact that contrary to what is often thought, the evidence from reopened graves shows that manipulations of the body could take place long after burial, even after the body had skeletonized (Klevnäs 2016a: 198-199). An unknown percentage of cases interpreted as deviant burials may in fact result from post-depositional interventions that were not recognized as such. This may occur when there is no visible reopening pit or due to a lack of osteological and taphonomic knowledge on the part of the excavators. Interestingly, manipulations carried out during post-depositional interventions accord well with the written sources about measures taken against revenants, which are usually carried out some time after burial when the dead are found to be unquiet (Lecouteux 1987: 180-181; Gardela 2013; Klevnäs 2016a).

In the Low Countries there are very few graves

where bone material was sufficiently well preserved to allow recognition of atypical burials. There are however a few interesting exceptions, some of which probably acquired their unusual appearance during a reopening, rather than during the original deposition. In this section I will focus on atypical burials which may only have become atypical after they underwent a post-depositional intervention. In the cemetery of Lent-Lentseveld three graves showed evidence of post-depositional skull manipulation. In grave 46 the deceased's cranium had been placed on the pelvis. There were no cut marks on the skull and the vertebra and mandible were left in *in situ*, indicating that the cranium was moved after the tissues connecting it to the mandible had decomposed. Apart from the displaced cranium, the skeleton showed no indications that it had been disturbed after the onset of decomposition. In grave 39 the skull was missing entirely. It had probably been removed during a later reopening, when the corpse's soft tissues were gone. Lent grave 15 contained the remains of a six year old child that had been curled up into a bundle. The child's skull was found a few centimeters above the rest of the body, separated from it by a layer of clay. Once again there were no indications of a forceful *peri-mortem* decapitation, indicating that the soft tissues had at least partially decomposed before the skull was separated from the body. It seems likely that these skull manipulations took place during post-depositional interventions. However, since the excavators did not note any traces of reopening cuts, the bodies may alternatively have been stored above ground or given a preliminary cover in the grave until the skull could be moved and the grave pit backfilled. The other cemeteries in the region did not reveal such typical examples of skull manipulation as were found in Lent. This could however very well be due to lack of preserved bone. The numbers of post-depositional skull manipulations found by Aspöck, Klevnäs and Zintl for their respective research areas certainly suggest that there may have been many more (Aspöck 2005, 2011; Zintl 2012: 354-

355; Klevnäs 2013: 77-79). There were nevertheless a few other cases of graves that could be described as 'deviant'. Grave 2013-01 from Oegstgeest, contained the remains of a man who appears to have been buried prone in a rather small pit. The front side of his body, including the arm and leg bones, showed signs of burning as if the body was partially cremated while in a crouched position. This was probably a primary deposition, not a body that was first buried elsewhere, dug up and redeposited. Burning of the corpse was one the revenant measures described in the historical sources, although it usually involved a full cremation rather than a partial scorching (Blair 2009: 550; Gardela 2013: 102-104). Most other cemeteries in the dataset yielded varying numbers of cremation graves. These are rather too numerous to be considered truly 'deviant', so they may not be associated with measures taken against revenants. In the intervention cut of grave 58 from the Posterholt cemetery a dog's jawbone was found, which could have been deposited there during the reopening. Its inclusion in the fill may have been accidental, but there are indications from Scandinavia that the deposition of possible musical instruments made from animal jaw bones (usually pig) was associated with the fear of the dead (Gardela 2013: 113-114). An empty grave could also be an indication that the dead person's remains was taken out and reburied or cremated/destroyed to prevent them from haunting the living (Gardela 2011: 383-384, 2013: 104). The lack of preserved bone in the research area makes it difficult to recognize graves without bodies in them, but we may have an example of such a practice in Bergeijk grave 35, where the diggers seem to have taken out the entire coffin from the grave. These finds converge with the observations of Klevnäs and Zintl that there is a small number of cases, both from the Anglo-Saxon area and from continental North-West Europe, in which human remains in reopened graves were clearly treated in purposeful ways that are similar to behaviors which are associated with the fear of revenants in the written sources. In some of these cases, the manipula-

tion of the body or bones may have been the main goal of the reopening. The actions of the reopeners often focused on the deceased's skull, but there are also cases where the legs or feet were targeted.

Apotropaic objects

It is often suggested that particular types of grave goods, especially those that do not seem to have had a 'practical' purpose, such as shells, stones, animal teeth etc. may have been used as amulets to ward off evil influences. In the case of dangerous dead, they may also have served to keep revenants from haunting the living (Zeiten: 1997; Härke 2014: 51). However, the function of such objects is not evident from the material itself. If we do not know what their meaning or purpose was, that is not a sufficient justification for relegating them to the category of 'amulets'. We need actual proof that some object types may have served apotropaic functions. Unfortunately, written evidence about amulets is scarce and objects could have had multiple functions. Beads, animal bones or shells may in some cases have served as amulets, while in others they could have been keepsakes, food remains or decorations (Pollington 2011: 264-365). The graves from the Low Countries that are under consideration in this study have revealed very few items that could unambiguously be classed as potential amulets.

Härke suggests that specific anti-revenant amulets may have included incomplete or broken objects, or objects which look out of place in the context of a particular grave (Härke 2014: 51). Fragmentation of grave goods may therefore have had an apotropaic function to ward off the dangerous influence of the dead. The reopened graves in the research area contained many more fragmented objects than the intact graves. This fragmentation may to some extent have been accidental, resulting from actions that were necessary to reopen the graves. However, there are several examples of objects that seem to show signs of intentional damage, such as the distributed fragmented pottery vessels from Bergeijk and Posterholt. The Posterholt cemetery also

yielded a broken belt plate with an impact fracture. In the Bergeijk cemetery several fragmented weapons were found, including a lance head and two possible swords. It seems likely that at least some of these fragmented objects were broken intentionally. In Bavaria and Kent, Zintl (2012: 342, 354) and Klevnäs (2013: 67) also found many objects that had probably been fragmented during grave reopenings. Among other possibilities, this practice of fragmentation may have been perceived as a way to neutralize the dead person's dangerous powers.

Fearing the dangerous dead

Medieval written sources reveal two main reasons why early medieval people may have thought their deceased community members were liable to become dangerous revenants. Firstly, fears of the dead walking again could arise if the person had an unusual character or profession, or possessed supernatural powers. Blacksmiths, shamans, shape shifters and witches are mentioned as prominent suspects. Secondly, so called 'bad death' was a prime factor. If for instance, a person passed away in anger or unexpectedly died in their sleep and left behind unfinished business, family members sometimes feared their return as an animated corpse (Lecouteux 1987: 171-172; Gardela 2013: 100-105). The corpses of executed murderers were also apt to trigger concerns about revenancy. They combined the factors 'bad death' and unusual personal character, especially if the murderer had used magic or had been otherwise supernaturally powerful (Gardela 2013: 105-107, 118). Revenants were perceived to be a danger to the community because they could for instance injure and kill people, cause disease epidemics, destroy houses or other property and kill livestock (Lecouteux 1987: 112-170; Blair 2009: 546-548; Gardela 2013: 100-107; Klevnäs 2016a: 195).

Klevnäs notes that the post-depositional manipulations in her research area could take place quite some time after the burial, in some cases years later, as is indicated by the state of decomposition of the graves and bodies at the

time of the reopening. This leads her to argue that such manipulations were less related to perceived risk of revenancy associated with specific dead persons, and more to the state of relationships within the living community. She suggests that reopening graves may have given the perpetrators power over the dead, and by association also over their relatives and others associated with the disgraced corpse. If so, allegations of a dead person walking again could reflect conflicts with living family members, similar to the power play seen by anthropologists in the case of witchcraft accusations. If not related to community conflicts, revenant accusations could also have been a response to a crisis in the community, such as a disease epidemic (Klevnäs 2016a: 199-200). The written sources mention two main ways in which the dead could become dangerous and begin to haunt the living. The dead person himself could continue to occupy his body and become restless. Alternatively, the deceased's body or likeness could be occupied by a demon or other evil force. Another possibility found mostly in clerical sources is that an evil entity such as the devil conjures up an illusion of dead person's likeness, without actually turning the deceased into a revenant. This latter option may be a clerical rationalization of pre-Christian beliefs, and need not reflect actual ideas about revenants (Lecouteux 1987: 62-63; Blair 2009: 548-549). Lecouteux (1987: 224-226) argues for Scandinavian revenants described in the sagas that they were often a manifestation of the deceased's *hamr* or *hugr* souls, rather than the actual corpse come to life. The *hamr* and *hugr* were anchored in the body, which meant that destroying the corpse was an effective way of breaking these agents' power. He is of the opinion that similar concepts of the soul and revenants may also have been present in other parts of North-West Europe.

There is quite some variation in the details of revenant stories between the different regions of North-West Europe. For instance, Anglo-Saxon and medieval English tales about the haunting dead lack the element of the struggle or fight with the dead person in their grave

which is found in many Icelandic sagas. Instead, when people go to reopen the offending deceased's grave, the corpses lie inanimate, even if there are signs of supernatural activity such as a blood stained face or objects that have mysteriously moved. The stories do however have elements in common, especially references to manipulation and mutilation of the unquiet corpse, including such acts as displacing the head, removing body parts and burning the remains (Blair 2009; Gardela 2013; Klevnäs 2016a: 194-195).

As was already mentioned in the previous sections of this chapter, the fear of haunting revenants is not the only motivation that can be found in the written sources for reopening graves and manipulating corpses. The *translatio* of saints' relics could also involve removal of part of the remains from a grave (Bonser 1962: 234; Brown 1981: 6-11; Smith 2012: 149-150), as could certain practices performed on the bodies of the elite when they died far away from home or when their remains were to be divided over multiple burial sites (Weiss-Krejci 2001, 2005). From the seventh century onwards the written sources mention cases where body parts, especially skulls, were removed to deposit them in coveted or honored locations, often *ad sanctos* in churches. This makes clear that the absence of a skull is not necessarily indicative of punishment or disrespect for the deceased but could reflect the desire that they should receive, at least in part, burial in an advantageous location (Halsall 1995: 160-162, 272; Effros 2006: 218). Gardela (2013: 107-108) mentions similar positive motivations for some cases from the Scandinavian area. Rather than originating from fear or contempt for the dead, violent practices may occasionally have been a way of showing respect and affection. For instance, in the *Hálfðanar saga Svarta* the body of King Hálfðan was split into four parts because multiple communities wanted to benefit from his benevolent presence. As mentioned above, Klevnäs (2016b: 468) has suggested for Viking Age burials in Scandinavia that the violence involved in reopenings may have served to emphasise the difficulty of bringing the grave occupant's ownership of the grave goods to an end

and passing them on to a new owner. The reopening and manipulation of graves and the remains they contained may also have played a part in divination practices. There are indications for beliefs about corpses being reanimated by the living for purposes of divination. Ealfric complains in the tenth or eleventh century that people go to graves or cross-roads to summon the dead, who appear as a likeness of their former selves, presumably to ask about the future. These references suggest that there could be traces of necromantic practices in early medieval cemeteries, at least in the Anglo-Saxon area (Blair 2009: 548; Klevnäs 2016a: 196). Pollington (2011: 66, 110) suggests that opening a grave could have been a way to enter the otherworld in which the dead person resided. Similarly, watery sites were long perceived as places where people could access the otherworld. Deliberate deposition of objects in such places may have been an attempt to turn their supernatural powers to benefit the practitioner. This could explain the depositions of objects and human bone found in the Meuse at Kessel and Roermond, and at the coastal settlement of Oegstgeest. Semple (2010: 31-32) argues that depositions in watery areas may have been used to facilitate the periodic appropriation of access points to rivers, pools and marshes. Alternatively, they could also have been related to decision-making, oath-taking and boundary disputes. It is equally possible that such deposits were associated with safe passage across liminal or supernaturally charged locations, made at the onset of a journey or on a safe return. Deposits of knives and weapons especially may have had connotations of closing off the supernatural dimension of a place, making it safe for passage. Lund (2010: 50-52, 60) suggests that deposition in wet areas could also have been a way to 'keep' or alternatively dispose of supernaturally powerful, socially charged or taboo items that could not be destroyed.

Were only some of the dead dangerous?

In her recent paper, Klevnäs (2016a: 178-179) holds to the view that post-burial interven-

tions involving body manipulation constituted a separate type of practice from reopenings that were aimed at removing grave goods. However, she does seem to leave some room for a continuum of practices, including both 'regular' grave reopenings and interventions that involved deliberate manipulations of the deceased's remains:

'Burials reopened for bodily manipulation have so far been treated as their own category. However one of the effects of drawing attention to this particular post-burial practice is to call into question the relationships between different forms of post-burial interventions, and further to the conventionally accepted interpretations of certain more widely seen types. [...] At the broadest level, it is likely that we should be prepared to envisage more, and more different kinds, of peri-burial activity in early medieval cemeteries than is generally discussed.' (Klevnäs 2016a: 200-201)

I wholeheartedly agree with this point of view and would like to take it a little further. Every dead person and every grave may have carried some amount of danger and risk of negative influences, which had to be negated through the burial practice. The ancestors were powerful, and could therefore be dangerous if their needs were not satisfactorily met. Whether the deceased's potential for good or evil was fulfilled depended on local circumstances such as their life, occurrences surrounding the death and burial, and probably also the prosperity of the heirs and social relations within the community. These situations were probably surrounded by an air of ambivalence, as was suggested by Gardela (2011) for certain Viking Age burials in Scandinavia. Practices carried out during both burials and reopenings likely aimed at managing the perceived risks involved in dealing with death, promoting a desirable outcome and setting up protective measures in the case the dead turned the wrong way.

5. Conclusion

Early medieval cemeteries all over North-West Europe contain graves that were reopened after burial. These post-depositional interventions often seem to have been carried out while the cemeteries were still in use. The participants dug pits into the graves, rummaged, displaced and fragmented some of the contents, and took out a selection of objects and perhaps also bones. Many other objects and bones were left behind. These reopened graves are often viewed as ‘disturbed’ since their original contents are not intact, which makes them less suitable for mainstream artefact-oriented research. Over the years, there has nevertheless been academic interest for these graves and the post-depositional interventions that affected them (Stoll 1939; Redlich 1948; Fremersdorf 1955; Sagí 1964; Christlein 1966; Koch 1973, 1974; Müller 1976; Roth 1977; Jankuhn et al. 1978; Pauli 1981; Lorenz 1982, Schneider 1983; Grünewald 1988; Dannhorn 1994; Beilner & Grupe 1996; Steuer 1998; Stork 2001; Knaut 1993; Codreanu-Windauer 1997; Aspöck 2005, 2011; Kümmel 2009; Van Haperen 2010, 2013, 2016; Zintl 2012; Klevnäs 2013, 2015, 2016a; Noterman 2016). Interpretations of this phenomenon have evolved from one-dimensional ideas about economically motivated grave robbery to attempts at placing grave reopenings in the context of early medieval society and worldviews. As the scholarly debate about this practice develops into a fully-fledged archaeological specialty and we gather more knowledge about the graves in question, the variety of opinions about its interpretation increases. This study examines data from the Low Countries, a region where little research into reopened graves has been done previously. Comparisons are drawn with the detailed studies of grave reopenings in Anglo-Saxon Kent and German Bavaria by Klevnäs (2013) and Zintl (2012), which are the only studies for this period and region which have a similarly large dataset and level of detail with which the material is examined.

The interpretive chapter takes a scenario-based approach that allows multiple views to be discussed side by side. Like Leskovar (2005), I hope that the incorporation of multiple narratives in the text will help to more honestly reflect the ambiguous nature of the data and its interpretations.

5.1 The graves

For this study I looked at the graves from eleven cemeteries that were excavated across the modern Netherlands and Flanders. This yielded data on a total of 1169 inhumation graves and 201 cremation graves. The largest cemetery is that of Broechem, which consisted of 431 inhumations and 65 cremations. The smallest number of graves was found in Oegstgeest, which yielded only eight inhumations and two cremations. All the cemeteries in the research area held at least a few reopened inhumation graves. There is no evidence for intentional reopening of cremation graves, but this could be due to taphonomic factors. Of all the inhumation graves included in this study, at least 208 were reopened after burial. When the graves with an indeterminate reopening status are taken out of the equation, the inhumation graves in the dataset have an average reopening rate of 41%. The reopening percentages vary between the cemeteries, with the highest (59%) in Posterholt and the lowest (16%) in Lent-Lentseveld. In some of the cemeteries, graves from certain chronological phases had much higher reopening rates than those from others. Siegmund (1998: 237-238) found similar reopening percentages in the adjacent German Rhineland. The reopening rates in the Low Countries and the Rhineland hover neatly between those found in German Bavaria and Anglo Saxon Kent. In the Bavarian cemeteries studied by Zintl (2012: 306), the reopening rates were relatively high at more than 50%. In Kent on the other hand, Klevnäs (2013: 35) found that in the most heavily disturbed cemeteries between 8% and 44% of the graves per cemetery had been reopened, with an average of 21%. On the less heavily affected sites, the numbers of reopened

graves were often limited to one or two per cemetery.

The differences in grave reopening rates between the cemeteries in the research area are probably related to their varying use periods. The cemeteries with the lowest reopening percentages have graves that date comparatively early such as Lent and to some extent Wijchen, and late such as Dommelen. Some of the cemeteries with a longer use period, such as Bergeijk and Posterholt, had very high reopening rates before the end of the seventh century, while very few graves from the last phase were reopened. Generally speaking, most of the reopenings in the research area took place in the later sixth and seventh century, with a few early cases in the fifth and a number of late cases in the eighth century. The graves all seem to have been reopened while the cemeteries were in use. Unfortunately, there is insufficient dating evidence from the research area to define distinct phases of grave reopenings. In addition to changes in grave reopening customs over time, the variations in reopening percentages between cemeteries may be due to local preferences and manifestations of agency on the part of the participants.

In 50 cases, it could be shown that the reopenings took place while the wooden grave containers were still intact, while 56 graves were reopened after the containers had decomposed and collapsed. According to Aspöck's dating method (2005: 251-252; 2011: 302-306), this means that approximately half the graves were reopened within approximately 35 years of the burial and 56 graves reopened more than 35 years after the burial. In Bavaria and Kent, Zintl (2012: 328) and Klevnäs (2013: 43-47) also found many graves that had been reopened while there was still an open space inside the wooden container. The chronology of grave reopenings in Bavaria and Kent is similar to that in the Low Countries. Reopenings seem to have taken place during all phases of the Merovingian period and occurred most frequently from the end of the sixth century and especially in the seventh century. In Kent they may have started in the early sixth centu-

ry and become more frequent in the seventh. The graves all seem to have been reopened while the cemeteries were in use (Zintl 2012: 301-304; Klevnäs 2013: 47-49).

There are interesting differences between the reopening rates of graves with men's, women's and neutral grave goods. Graves with men's objects had higher reopening percentages than graves with women's and neutral objects. The graves with so called neutral, non-gender specific grave goods had the lowest reopening percentages. The diggers seem to have purposely targeted graves with gendered objects over graves with gender neutral objects and graves with typical men's grave goods over graves with women's objects. A similar distribution of reopened men's and women's graves was observed in Anglo-Saxon Kent and German Bavaria (Zintl 2012: 313-314; Klevnäs 2013: 42), although the difference was much less pronounced than in the Low Countries. Only a small number of children's graves could be identified in the research area, but it seems that the graves of children, and especially those of adolescents were opened relatively infrequently compared to those of the population as a whole. However, children's graves were not completely avoided by the grave reopeners either. A similar pattern was observed in Kent (Klevnäs 2013: 41). In Bavaria, the graves of children and adults were opened equally often (Zintl 2012: 312-313).

Reopening practices

Like the funerary ritual itself, grave reopenings seem to have been a relatively homogenous practice across the territories of the modern Netherlands, Belgium, Germany and English Kent. Some graves were reopened in the context of an additional burial or intercut by a later grave, but most reopenings were independent events. There are exceptions, but in most cases the diggers made a pit, usually starting somewhere on top of the wooden container, and dug their way down into the grave. If the container was still intact, they would have needed to break into it. For some graves there are indications that the diggers removed the whole container lid but in other

cases they may have just made a hole in it. The reopening pits usually focused on the interior of the wooden container, especially on the area of the deceased's thorax/pelvis. The region around the deceased's head and legs/feet was less frequently affected by reopenings. The reopening pits were often wider in the upper levels of the grave, becoming more narrow and focusing on a specific area as they went down. In a few cemeteries, there may have been small differences between the ways men's and women's graves were reopened, but these were barely statistically significant. In addition, the differences that were observed did not correspond with the traditional hypothesis that men's graves were usually opened in the leg region and women's graves were opened in the head and chest area (for instance Stoll 1939: 8; Steuer 1998: 519; Stork 2001: 428; Effros 2006: 199; Bofinger & Przemyslaw 2008: 51). In most cases, the reopenings were probably small events where one or perhaps two graves were opened at a time. The number of cases where multiple graves may have been reopened simultaneously is relatively small, but it is possible that additional cases are hidden in the dataset. Most graves seem to have been reopened only once and with a single pit, but there are a few examples of burials with traces of multiple pits. It is often unclear whether these pits were dug simultaneously or whether they represent consecutive reopening events. There was no evidence for search trenches. The fact that the diggers were able to select specific types of graves, such as those containing objects associated with men, suggests that the graves were marked above ground. The nature of these markings is unclear as virtually no traces of them were found. In many cases, it could not be determined whether the intervention pits were backfilled after the reopenings. In some cemeteries the reopening pits' fills were rather homogenous, suggesting that they had been filled with a single load of soil. In a few cases however, the excavators noted layered fills in the pits, suggesting they were filled in stages over a longer period of time, as would happen with natural sedimentation. This suggests that various practices concerning

the backfilling of reopened graves may have existed side by side. The backfilling may have been done by the grave reopeners themselves, or by other people at a later time.

While most grave reopenings seem to have left the affected graves in a seemingly random and jumbled state, there are a few that showed evidence of deliberate manipulations of specific skeletal elements, especially skulls. These graves fall in the range of what is often called 'deviant' (Thäte 2007: 267-272; Aspöck 2008; Reynolds 2009; Gardeła 2013: 109-110, 120-121), except that in these cases the deviancy was created during a post-depositional intervention, rather than during the original burial. In grave 46 from Lent-Lentseveld the deceased's cranium had been placed on the pelvis. There were no cut marks on the skull and the vertebra and mandible were left *in situ*, indicating that the cranium was moved after the tissues connecting it to the mandible and spinal column had decomposed, probably during a grave reopening or by another series of events that gave people access to the decaying corpse. This grave also contained an additional skull bone from a second individual. Lent grave 15 contained the remains of a six year old child that had been curled up into a bundle. The child's skull was found a few centimeters above the body, separated from it by a layer of clay. Once again, there were no indications of a forceful *peri-mortem* decapitation. In grave 39 from Lent the deceased's skull was missing entirely. As in the other cases no cut marks were found on the remaining upper vertebra, so it was probably removed during a reopening. Similar post-depositional skull manipulations are also found in early medieval graves from other parts of Europe (Simmer 1982: 40-41; Aspöck 2011: 307-309, 315-316; Zintl 2012: 354-355; Klevnäs 2013: 76-78). In the Low Countries they are relatively rare, but this need not be an accurate reflection of past practices, as it could be due to the poor preservation of skeletal remains in most of the region.

Taking and leaving objects

The comparison between the objects found in reopened and intact graves revealed much variability, making it difficult to establish which objects may have been taken from, or added to the reopened graves. First and foremost, it was interesting to see that the reopened graves usually yielded many objects that had apparently been left behind by the diggers, usually within reach of the reopening pits where they were less likely to be overlooked. In most of the cemeteries, certain categories of objects were found more often in reopened than in intact graves. This pattern is probably at least partially caused by the fact that the graves of the cemeteries' last phase were usually furnished with fewer grave goods and were reopened less often than the graves of earlier phases, thus lowering the average number of objects found in intact graves. In addition, the people involved in grave reopenings may have actively selected graves with large numbers of objects and particular grave good types. However, it is also possible that the diggers sometimes added grave goods to the graves when they reopened them.

While all types of objects were probably eligible to be taken during reopenings, the diggers may specifically have targeted swords and seaxes, various kinds of women's dress accessories - especially beads and brooches - and possibly also a varying array of utensils such as small knives and pottery vessels. The grave reopeners may have been more interested in weapons of war such as swords and shields than in weapons typically used for hunting, such as lance heads and arrowheads. Belt fittings were often left behind in reopened graves, but some were probably also taken, as is attested by the incomplete belt sets found in a number of reopened graves.

Reopened graves contained many more indeterminate fragments than intact graves and recognizable objects from the reopened graves were generally less complete, indicating that the objects were often broken and fragments were removed during reopenings. This damage and fragmentation may to some extent have been accidental, resulting from actions that

were necessary to reopen the graves. However, several objects show signs of intentional damage, indicating that fragmentation may have played significant role in the reopening practice. The missing fragments may simply have been scattered on the cemetery's surface, but it is also possible that the diggers took them away from the site.

Bones

Very little research has been done on which bones are usually missing from reopened graves. This is a difficult subject because bones may disappear through natural decomposition. Klevnäs notes that there are no indications that the diggers in her research area targeted specific types of bones. She suggests that where bones are absent, the diggers may simply not have made an effort to backfill with the same material as was dug out (Klevnäs 2013: 52). Similar sentiments are expressed by Zintl for Bavaria (2012: 352-253). It is unfortunate that the poor bone preservation in most of the Low Countries does not allow us to answer these types of research questions. However, there are a few finds of human bone from non-cemetery sites that are relevant to this issue. At the Oegstgeest settlement a large number of disarticulated human bones were found in various contexts across the site, mainly in the fills of gullies and ditches. The majority of these scattered finds were long bones and skull fragments. The inhabitants may have selectively gathered and/or deposited bones from the extremities and the skull. The most striking example is a pit containing a star-shaped formation comprising the long bones of at least two individuals. Adjacent to this pit lay a second pit with selected bone fragments belonging to a minimum of six individuals. All bones of which the sex could be determined, belonged to men. The scattered bones found in these deposits may have originated from reopened graves in nearby cemeteries. The finds from the Meuse river near the town of Kessel are another example of early medieval human bones found outside a typical funerary context. The site was in use from the Late Iron Age to the High Middle Ages and part of the

material could be dated to the Merovingian period. Once again, the majority of the sexed bones were male. A similar site may have been located near Roermond. The bones from this site have not been dated yet, but a percentage of the retrieved objects are Merovingian. Such river deposits may have been one of the places where objects and bones from reopened graves were taken to. These human bone deposits and the reopened graves share a few noteworthy corresponding features. The most striking is their apparent focus on the remains of men. This could be an indication that the bones found in the deposits did indeed originate from reopened graves, or that the bone deposits and grave reopenings were influenced by similar worldviews and social practices.

5.2 The interpretations

The causes of and reasons for early medieval grave reopenings were probably complex and variable. In this thesis I have explored a number of different possibilities, focusing on the identity of the grave reopeners, the identity of the deceased, the participants' motives and the wider socio-cultural context. All the interpretations that were discussed may have been true for at least some of the grave reopening cases. They may have overlapped or excluded one another, depending on the context. The interpretations listed here are mostly oriented towards the material from the Low Countries, but may to some extent also apply to other areas of early medieval North-West Europe such as Anglo-Saxon Kent and German Bavaria, since the grave reopenings in these regions have a high degree of similarity.

The views on the role of grave reopenings in early medieval society vary greatly. Many scholars see grave reopenings simply as a means to regain some of the wealth invested in the lavish and costly burial practices. They feel supported by the law texts from the period, in which severe punishments are prescribed for grave robbery. However, this interpretation is contradicted by the selective ideological and symbolic aspects of these practices that have begun to become apparent in the recent re-

search, such as the preferential targeting of certain types of graves and grave goods while other graves and grave goods seem to have been deliberately left untouched. The high percentage of reopened graves suggest that reopenings were probably a socially accepted practice that could very well have been carried out by members of the burial communities themselves, rather than by criminals or outsiders.

Some authors have argued that the chaotic or violent ways in which grave reopenings were carried out are evidence of a disrespectful attitude on the part of the diggers. This is problematic because we do not know what constituted a respectful treatment of graves in the Merovingian period. Behaviors that appear disturbing or violent to us could have been both respectful or disrespectful depending on the intentions of the participants and the context in which they took place (Duncan 2005; Weiss-Krejci 2001: 775-778; Zintl 2012: 388; Gardela 2013: 107-108). However, it cannot be excluded that reopenings were used as a socio-political weapon in small scale conflicts in and between burial communities, as is for instance suggested by Klevnäs (2013: 83).

Alternatively, grave reopenings could have played a part in the formation of social cohesion. The motives for having grave reopenings may have been similar to those for having lavish burials in the first place. Here we could think of options such as relieving of stress created by the death (Halsall 1995: 253-261), strategies for remembering and forgetting the dead (Williams 2003; 2005; 2006) or a rhetorical strategy of the burying group to create and recreate central norms, ideas and values; and to present themselves and their dead to an audience of outsiders (Theuws 2009). These considerations may also help to explain the local variations in grave reopening intensity. Factors such as lack or superfluity of wealth, differing levels of social stress, local traditions and the agency of the community could all have contributed to a lower or higher frequency of reopenings. Reopenings may have offered an opportunity to focus on the grave one more time, expose its contents, bring back

memories, create new ones and gather memorabilia or relics.

Ancestors

One of the interpretations I explored in detail is the idea that early medieval grave reopenings were a form of relic cult for ancestors, similar to the cult of saints' relics which also developed in this period (Van Haperen 2010). This interpretive scenario assumes that grave reopenings were carried out by people from the burial community itself, possibly the deceased's immediate kin, and played an important role in social life and people's relationship with the ancestors. This does not mean that early medieval grave reopenings in rural cemeteries were unauthorized saints' translations, but rather that both types of practices may have originated from a shared reservoir of worldviews and socio-cultural values. They may to some extent also have had similar characteristics, including the practical ways in which they were conducted and their socio-religious role as a medium for maintaining contact between the living and the dead. Like distributed saints' relics, the remains taken from reopened Merovingian graves could reach a wider audience and gain more prestige by being present and accessible in multiple locations.

The evidence for actual ancestor beliefs in early medieval North-West Europe is somewhat scarce, but not absent. From sources such as the tale about the conversion of King Radbod in the *Vita Wulframni*, the *Beowulf* and numerous other sources about the pre-Christian religions in early medieval Anglo-Saxon England and Scandinavia, it can be surmised that early medieval people in North-West Europe valued their ancestors and believed they had the power to influence the condition of the living. In various sources there is much emphasis on ancestry through fathers. If men were indeed considered to be more important ancestors than women, this could explain the higher numbers of reopened graves with men's objects and the predominance of men's bones in bone deposits found in the research area. The relatively low per-

centage of reopened children's graves also fits with the idea that grave reopenings focused on people who had a social standing or life history that would predispose them to becoming a powerful ancestor. The fact that the diggers focused their efforts on graves with gender specific grave goods and preferred to take objects strongly associated with male and female identities corroborates that gender was an important facet in the choice to reopen certain graves.

Klevnäs (2013: 83; 2015: 168) has a different perspective on the function of reopened graves in relation to the ancestors. She argues that the grave reopenings in her research area were performed by enemies of the deceased's family, who aimed to deprive the dead of symbolically significant objects. These activities could have served to take revenge on the burial community and injure the social standing and political power of the deceased's family. In my opinion, it is certainly possible that graves were sometimes reopened by hostile persons rather than by the deceased's family members. However, it is unlikely that all the grave reopenings in the Low Countries came about in this way. The sheer number of them seems to negate the possibility that these were all hostile attacks on graves. Klevnäs' interpretation has more foothold in Kent, where grave reopenings seem to have taken place less frequently. However, given the general similarities of grave reopenings in Kent and the remainder of Europe, it seems likely that they originated from similar, rather than from different intentions. It is nevertheless possible that hostile and non-hostile grave reopenings were carried out in similar ways, in which case there could be a percentage of hostile reopenings hidden in the dataset from the Low Countries.

Grave goods

The fate of the objects taken from reopened graves deserves special attention. When a grave was reopened, some or even most of its contents were usually left behind or even purposely redeposited when the diggers backfilled their pit. This shows that mining for objects or raw materials was often not the primary

aim. The idea that the diggers were targeting precious metals and gemstones is also negated by the fact that they seem to have preferred men's graves over those of women, even though the latter usually contained more jewelry. A specific selection of objects – artefacts and possibly also bones – were taken out, presumably to be employed in later activities. They may have been used in their original form, but they may also have been recycled and made into new objects. In their original state, the objects could have served as relics in the traditional sense of the word, enshrined and subjected to cult practices. If the reopening took place in a more hostile context, the grave goods could have been perceived as trophies. In addition to purely symbolic functions, the objects could also have been employed in more practical ways. This is most obvious in the case of artefacts made of precious metal, glass and pottery. Many of these could probably still be used in the same ways as before their deposition in the grave, although they may have required cleaning and refurbishing. Their known provenance could however have given them a special significance and restricted their use to specific functions, including ceremonial ones. Alternatively, if the objects were recycled, that could have made them unrecognizable as former grave goods. Metal objects especially could have been reworked into new items, either by disassembling them and reusing their parts in new items, or by melting and reformatting. However, such practices need not have served to hide the former grave goods' provenance. In fact, they could have endowed the new objects with a special symbolism and potency, which explicitly referred back to their origins and former state. Early medieval people seem to have deliberately created material mnemonic links with the real or imagined past. In this way they portrayed themselves as legitimate successors to this past, strengthening their claims to power. Former grave goods may have been particularly suitable for this purpose, for instance because their form and decoration recalled specific myths or because people re-

membered the way they had circulated within and between various communities.

Fear of the dead

Early medieval ideas about death and the afterlife may not only have included good powerful dead, like benevolent saints and ancestors, but also rather more ill-intentioned deceased, against whom measures needed to be taken to safeguard the living from their malevolent influence. The fear of revenant dead has traditionally been associated with so called 'deviant' or atypical burials, which differ from the local or regional funerary norm. In the Low Countries there are very few graves where bone material was sufficiently well preserved to allow recognition of deviant burials, but a small number of cases such as the skull manipulations from Lent-Lentseveld involve forms of atypical burial that can arguably be associated with necrophobia, specifically the fear of revenants. Interestingly, these graves probably acquired their unusual appearance during a reopening, rather than during the original deposition. Manipulations carried out during post-depositional interventions accord well with the written sources about measures that were taken to keep the unquiet dead from walking. Measures against revenants found in both written sources and archaeological excavations from early medieval North-West Europe include decapitation and amputation of limbs, stones placed on top of the body, burial in prone position, and restraining the corpse by tying up the limbs (Lecouteux 1987: 31-35, 180-181; Blair 2009: 546; Reynolds 2009: 61-95; Gardela 2013: 112; Klevnäs 2016a: 194-197). It seems likely that the fear of the dead played a significant part in early medieval interactions with graves. Practices carried out during both burials and reopenings likely aimed at managing the perceived risks involved in dealing with death, promoting a desirable outcome and setting up protective measures in the cases the dead were thought to be actively dangerous. The so-called deviant burials probably represent the extremes of a spectrum of practices that meant to safeguard the living from the dead.

5.3 Recommendations

Although there are many uncertainties and points of disagreement in the debate, it is clear that grave reopenings in the Low Countries and in other parts of North-West Europe played a meaningful part in the early medieval interaction with the dead. They therefore merit further study, both by enlarging the dataset and by studying the available data in more detail. However, such studies need to be facilitated by those who make this data accessible: the excavators, conservation technicians and those analyzing and publishing cemetery material. The tendency to regard ‘disturbed’ graves as less interesting and less valuable for research into early medieval society has often led to less than optimal care and attention for these graves in the excavation and post-excavation process. Occasionally there are even attempts to hide the disturbance, for instance in the case of conservation technicians who restore fragmented objects by smoothing over the cracks and filling up missing sections with resin, to make them look almost like they are new. These types of practices are detrimental to the study of reopenings. In this final section I will therefore make a few recommendations for all those working on cemetery finds who are willing to facilitate and promote the study of grave reopenings.

For excavators, the most important point is to pay detailed attention to the information that is encapsulated in the graves’ fills. If a reopening is only discovered when the excavation reaches the grave’s rummaged bottom – or worse, during post-excavation analysis – a lot of important evidence about the reopening is potentially lost. Grave fills may yield traces of the reopening pit and they can contain objects and fragments that were rummaged or mixed in during the reopening. They should therefore be excavated with the largest possible amount of care and documented meticulously. It is recommended to draw and photograph as many levels as is possible within the scope of the excavation and to record the exact height, location and orientation of each individual

find in the fill and on the grave’s bottom, including bones, stones and pottery fragments. Reopening pits and details of a grave’s construction are often more clearly visible in a vertical section of the excavated grave. Especially for deep graves it can therefore be worthwhile to document both levels and sections with drawings and photographs. This can be achieved in various ways, for instance by first levelling down one half or section of the grave and then another, or by preserving a narrow wall of soil between the excavated sections. Even if it is not possible to document sections in the field, it can still be very insightful to make a three-dimensional reconstruction of the grave during post-excavation analysis. For sites with preserved bone material it is imperative to have an experienced anthropologist in the field. They can make observations about the layout of the skeletons which give unique and valuable information about the decomposition process and the state of the skeleton at the time of a reopening that are not apparent to excavators not trained in field anthropology (Noterman 2016: 162-163). It is also important to pay attention to any signs of peri- and post-depositional practices on the cemetery that are not related directly to the graves, such as building post holes, pits or feasting remains.

Conservation technicians can make valuable contributions to the study of reopened graves by respecting the state of fragmentation and incompleteness of the objects that arrive in their laboratories. Fragmented objects can represent relevant past social action that merits study. Research into this subject is much hampered by restoration work that attempts to conceal the objects perceived imperfections and fragmented state. Both in museum displays and publication photographs it is often impossible to assess whether or not objects were originally broken or incomplete. Even in the rare occasions where researchers have the possibility to handle restored objects personally, it can be quite difficult to determine which parts are real and which are made of filler. Broken and incomplete objects tell their own fascinating stories, so it is well worth keeping

them that way, or at least making visible restorations that are easily recognizable. On a related note, I also want to make a plea for not being too zealous in removing debris and corrosion from objects. These layers often harbor remains of textile, wood, insects and other organic matter which can be at least as valuable to researchers as the objects themselves. An important task also rests on the archaeologists analyzing and publishing both old and new cemetery data. They are the ones who make the data available to other researchers. The finds from a site which was excavated well and restored with care, can still be inaccessible because a detailed publication is lacking. When available, detailed plans of every grave should be published, both reopened and intact ones. If reopening pit features were documented in the field, these should be included on the grave plans in the publication. If graves contained fragmented scattered objects, it should be indicated exactly where the different fragments were found. If section drawings or three dimensional reconstructions of the grave were made, include them in the publication. Also publish the heights at which bones and (fragments of) grave goods were found. This is all vital information for dating the reopening and reconstructing how it was carried out. If

the graves contained skeletal remains, it is important to have these examined by an osteologist and publish all the results from this analysis, including which bones were present and absent and their positioning in the grave. For the objects it is helpful to indicate whether they were whole and complete, and if they were not, how much of the fragments is missing. If the drawings in the catalogue show pottery and glass vessels as 'archaeologically complete' for typology purposes, include photographs showing the objects' true state or mention in the description that fragments are missing. Fragmentation and disturbance often reflect relevant past social action, and deserve the same amount of care and detailed study as intact remains.

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Samenvatting

In contact met de doden: vroegmiddeleeuwse heropende graven in de Lage Landen

In vroegmiddeleeuwse grafvelden uit heel Noordwest-Europa komen graven voor die na de begrafenis zijn heropend. De heropeningen, ook wel ‘post-depositionele interventies’ genoemd, vonden vaak plaats terwijl de grafvelden nog in gebruik waren. De deelnemers groeven kuilen in de graven, doorzochten, verplaatsten en fragmenteerden een deel van de inhoud, en namen een selectie van objecten en wellicht ook botten mee. Veel andere objecten en botten werden achtergelaten. Deze heropende graven worden vaak gezien als ‘verstoord’ omdat de originele inhoud niet meer intact is, waardoor ze minder bruikbaar zijn voor de gebruikelijke vormen van artefactgeoriënteerd onderzoek. Door de jaren heen is er desalniettemin veel interesse geweest voor deze graven en de post-depositionele interventies die zij ondergingen (Stoll 1939; Redlich 1948; Fremersdorf 1955; Sagí 1964; Christlein 1966; Koch 1973, 1974; Müller 1976; Roth 1977; Jankuhn et al. 1978; Pauli 1981; Lorenz 1982, Schneider 1983; Grünewald 1988; Dannhorn 1994; Beilner & Grupe 1996; Steuer 1998; Stork 2001; Knaut 1993; Codreanu-Windauer 1997; Aspöck 2005, 2011; Kümmel 2009; Van Haperen 2010, 2013, 2016; Zintl 2012; Klevnäs 2013, 2015, 2016a; Noterman 2016). Dit fenomeen wordt vaak als ‘grafroof’ geïnterpreteerd, een economisch gemotiveerde illegale praktijk. Nieuw onderzoek laat echter zien dat er ook heel andere verklaringen mogelijk zijn, zoals een cultus van voorouderreliken, wraakacties tussen begravinge groepen, en maatregelen tegen onrustige doden. De variatie aan meningen over de juiste interpretatie neemt toe naarmate het academische debat over deze praktijken zich ontwikkelt tot een volwaardige archeologische specialisatie en we meer kennis vergaren over de graven in kwestie. In dit on-

derzoek wordt gekeken naar gegevens uit de Lage Landen, een regio waar tot nog toe weinig onderzoek naar heropende graven is gedaan. Het onderzoeksgebied wordt vergeleken met Angelsaksisch Kent (Klevnäs 2013) en Duits Beieren (Zintl 2012). Dit zijn de enige onderzoeken voor deze periode en regio met een vergelijkbaar grote dataset en niveau van detail. In het interpretatieve hoofdstuk wordt gewerkt met scenario’s die het mogelijk maken om meerdere gezichtspunten naast elkaar te overwegen. Op deze manier hoop ik net als Leskovar (2005) de niet eenduidige aard van de data en de interpretaties zo eerlijk mogelijk weer te geven.

De graven

Voor dit onderzoek heb ik gekeken naar elf grafvelden uit Nederland en Belgisch Vlaanderen. Dit leverde gegevens op over 1169 inhumatiegraven en 201 crematiegraven. Het grootste grafveld was dat van Broechem, dat bestond uit 431 inhumaties en 65 crematies. Het kleinste grafveld was dat van Oegstgeest, dat bestond uit acht inhumaties en twee crematies. In al deze grafvelden zijn heropende inhumatiegraven gevonden. Er is geen bewijs voor het heropenen van crematiegraven, maar deze zijn moeilijker te bestuderen omdat zij gevoelig zijn voor tafonomische factoren zoals beschadiging door ploegen of boomwortels. Bij ten minste 208 van de onderzochte inhumaties was het duidelijk dat zij waren heropend. Wanneer de graven met een onduidelijke heropeningsstatus buiten beschouwing worden gelaten betekent dit dat ongeveer 41% van de graven in het onderzoeksgebied is heropend. De interventiepercentages varieerden sterk tussen de grafvelden, met het hoogste in Posterholt (59%) en het laagste in Lent-Lentseveld (16%). In sommige grafvelden waren grote verschillen tussen de heropeningspercentages van graven uit verschillende chronologische fases. Siegmund (1998: 237-238) vond vergelijkbare percentages bij zijn onderzoek van graven in het Duitse Rijnland. De aantallen heropende graven in de Lage Landen en het Rijnland vallen midden tussen

die in Duits Beieren en Angelsaksisch Kent. In de Beierse grafvelden vond Zintl (2012: 306) relatief hoge heropeningspercentages van meer dan 50%. In Kent daarentegen werden veel minder graven heropend. In de studie van Klevnäs (2013: 35) hadden de grafvelden met de meeste interventies heropeningspercentages van 8 tot 44%, met een gemiddelde van 21%. Op grafvelden met weinig post-depositionele interventies waren meestal slechts één of twee graven heropend.

De verschillen in heropeningspercentages tussen de grafvelden in het onderzoeksgebied houden waarschijnlijk verband met variaties in de tijdsperiodes dat zij in gebruik waren. De grafvelden met de laagste percentages beginnen relatief vroeg, zoals Lent en tot op zekere hoogte ook Wijchen, of relatief laat, zoals Dommelen. Sommige grafvelden met een langere gebruiksperiode, zoals Bergeijk en Posterholt, hadden zeer veel heropenede graven die dateren voor het einde van de zevende eeuw, maar slechts weinig die dateren in de laatste gebruiksfase in de late zevende tot achtste eeuw. In het algemeen kan gesteld worden dat de post-depositionele interventies in het onderzoeksgebied voornamelijk plaatsvonden in de late zesde en de zevende eeuw, met enkele vroege en late gevallen in de vijfde en de achtste eeuw. De graven lijken allemaal te zijn heropend terwijl de grafvelden nog in gebruik waren. Helaas is er onvoldoende gedateerd materiaal om de post-depositionele interventies onder te verdelen in verschillende fases. Behalve door veranderingen in heropeningspraktijken door de tijd heen, zijn de variaties in heropeningspercentages waarschijnlijk ook het gevolg van lokale voorkeuren, keuzes en daadkracht van de deelnemers. In 50 gevallen kon worden aangetoond dat de interventies plaatsvonden terwijl de grafkisten nog intact waren, terwijl in 56 graven de heropening plaatsvond nadat de kisten waren ingestort en vergaan. Dit betekent waarschijnlijk dat ongeveer de helft van de graven werd heropend binnen 35 jaar na de begrafenis, voordat de kist was vergaan, en dat de andere helft juist meer dan 35 jaar na de begrafenis pas werd heropend (Aspöck 2005: 251-252;

2011: 302-306) betekent dit dat ongeveer 50 graven werden heropend binnen 35 jaar na de begrafenis, en dat 56 graven meer dan 35 jaar na de begrafenis pas zijn heropend. In Beieren en Kent vonden Zintl (2012: 328) en Klevnäs (2013: 43-47) ook vele graven die werden heropend terwijl de houten kisten nog intact waren. De chronologie van post-depositionele interventies in Beieren en Kent is vergelijkbaar met die in Lage Landen. Ook hier lijken heropeningen tijdens alle fases van de Merovingische periode te hebben plaatsgevonden en het meest frequent te zijn te geweest van het einde van zesde tot in de zevende eeuw. In Kent begonnen ze mogelijk in de vroege zesde eeuw, waarna in de zevende eeuw het aantal toenam. De graven lijken allemaal heropend te zijn terwijl de grafvelden nog in gebruik waren (Zintl 2012: 301-304; Klevnäs 2013: 47-49). Er zijn interessante verschillen tussen de heropeningspercentages van graven met typische mannen- en vrouwengrafgiftten, en die met gender-neutrale objecten. Graven met mannenobjecten werden het vaakst heropend van alle groepen. De graven met de zogenaamde neutrale grafgiftten hadden de laagste heropeningspercentages. De gravers lijken zich dus bewust te hebben gericht op graven met genderspecifieke objecten en dan vooral op die met typische mannengrafgiftten. Vergelijkbare verschillen tussen mannen- en vrouwengraven zijn waargenomen in Kent en Beieren (Zintl 2012: 313-314; Klevnäs 2013: 42), hoewel de verschillen daar minder uitgesproken waren. Er kon slechts een klein aantal kindergraven worden geïdentificeerd in het onderzoeksgebied, maar het lijkt erop dat vooral die van adolescenten relatief zelden werden heropend. Kindergraven werden echter niet volledig gemeden door de gravers. Een vergelijkbaar patroon is waargenomen in Kent (Klevnäs 2013: 41). In Beieren werden kindergraven even vaak heropend als de graven van volwassenen (Zintl 2012: 312-313).

Heropeningspraktijken

Net als de begrafenisrituelen zelf lijken de vroegmiddeleeuwse heropeningen in Nederland, België, Duitsland en Engels Kent gro-

tendeels op een vergelijkbare manier te zijn uitgevoerd. Sommige vonden plaats wanneer een graf werd oversneden door andere graven of wanneer er een tweede begrafting aan een graf werd toegevoegd. De meeste heropeningen waren echter op zichzelf staande gebeurtenissen. Men groef een kuil in het graf van de bovenkant van de houten kist tot op de bodem. Als de kist nog intact was, moesten de gravers deze openbreken. Soms werd waarschijnlijk de hele deksel van de kist verwijderd. In andere gevallen werd slechts een gat in de deksel gemaakt. De heropeningskuilen waren vrijwel altijd gericht op de binnenkant van de houten grafkisten, vooral het gebied van de borstkas en het bekken van de overledene. De regio rond de benen en voeten werd minder vaak heropend. De kuilen waren meestal vrij breed in de bovenste vlakken en werden smaller en meer gericht op specifieke delen van het graf naarmate zij verder naar beneden gingen. In enkele grafvelden waren mogelijk kleine verschillen tussen de manier waarop mannen- en vrouwengraven werden heropend, maar deze waren nauwelijks statistisch significant. De waargenomen verschillen kwamen bovendien niet overeen met de traditionele hypothese dat mannengraven meestal in de beenregio werden geopend en vrouwengraven in de hoofd- en borstregio (bijvoorbeeld Stoll 1939: 8; Steuer 1998: 519; Stork 2001: 428; Effros 2006: 199; Bofinger & Przemyslaw 2008: 51). In de meeste gevallen waren heropeningen waarschijnlijk kleinschalige aangelegenheden waarbij slechts één of misschien twee graven tegelijk werden geopend. Slechts in enkele gevallen zijn er aanwijzingen dat meerdere graven tegelijk werden aangepakt. De meeste graven lijken slechts een maal te zijn heropend met een enkele kuil, maar er zijn een paar voorbeelden waar sporen van meerdere kuilen zijn gevonden. Het is vaak onduidelijk of deze dan tegelijk of gespreid over een langere periode werden gegraven. Er waren geen aanwijzingen voor het gebruik van zoek sleuven. In combinatie met het feit dat de gravers in staat waren om specifieke types graven te selecteren, zoals die met mannengrafgraven, doet dit vermoeden dat de graven bovengronds gemar-

keerd waren. De aard van deze markeringen is onduidelijk, aangezien er vrijwel geen sporen van zijn teruggevonden. In veel gevallen kon niet worden vastgesteld of de interventiekuilen na de heropeningen weer werden opgevuld. In sommige grafvelden hadden de kuilen een vrij homogene vulling, wat suggereert dat zij in één keer zijn opgevuld met een enkele lading grond. In enkele kuilen hebben de opgravers echter een gelaagde vulling waargenomen, wat erop wijst dat de kuilen gedurende een langere periode langzaam gevuld zijn geraakt, mogelijk door natuurlijke sedimentatie. Waarschijnlijk waren er dus verschillende naast elkaar bestaande praktijken voor het opvullen van heropende graven. Het opvullen zou gedaan kunnen zijn door de deelnemers zelf, of door anderen op een later moment.

De meeste heropende graven hadden een schijnbaar willekeurig verrommeld uiterlijk, maar enkele vertoonden bewuste manipulaties van specifieke skeletelementen, voornamelijk schedels. Deze graven worden vaak als afwijkend benoemd (Engels: *deviant*) (Thäte 2007: 267-272; Aspöck 2008; Reynolds 2009; Gardela 2013: 109-110, 120-121). Dit afwijkende karakter ontstond waarschijnlijk vaak al tijdens de begrafenis, maar afwijkende aspecten konden dus ook tijdens post-depositionele interventies worden aangebracht. In graf 46 uit Lent-Lentseveld was bijvoorbeeld de schedel van de overledene op het bekken geplaatst. Er waren geen snijsporen op de schedel en de wervels en onderkaak lagen nog *in situ*. Het is daarom aannemelijk dat de schedel is verplaatst nadat het zachte weefsel van het hoofd en de nek was ontbonden. Dit wil zeggen dat men langere tijd na het overlijden toegang moet hebben gehad tot het ontbindende lichaam, bijvoorbeeld door het graf te heropenen. Dit graf bevatte bovendien een schedelbot van een tweede individu. Graf 15 uit Lent bevatte het skelet van een zesjarig kind dat was opgevouwen tot een bundeltje. De schedel van het kind was gescheiden van de rest van het lichaam door een laag klei. Ook hier waren geen aanwijzingen voor een *peri-mortem* ont-hoofding. In graf 39 uit Lent ontbrak de schedel van de overledene volledig. Net zoals bij de

andere graven waren er geen snijsporen op de wervels, waardoor het aannemelijk is dat het graf op een later moment is heropend om de schedel te verwijderen. Vergelijkbare post-depositionele schedelmanipulaties zijn ook waargenomen in vroegmiddeleeuwse graven uit andere delen van Europa (Simmer 1982: 40-41; Aspöck 2011: 307-309, 315-316; Zintl 2012: 354-355; Klevnäs 2013: 76-78). In de Lage Landen zijn zulke gevallen relatief zeldzaam, maar dit zou ook het gevolg kunnen zijn van de slechte bewaarcondities voor botmateriaal in veel grafvelden uit de regio.

Meenemen en achterlaten

Met behulp van een statistische vergelijking tussen de objecten uit heropende en intacte graven was het mogelijk om in te schatten welke objecten waarschijnlijk werden meegenomen uit heropende graven, of juist daaraan werden toegevoegd. Allereerst was het interessant om te zien hoeveel objecten er waren achtergelaten in heropende graven, meestal binnen het bereik van de heropeningskuil waar de gravers ze waarschijnlijk konden zien liggen. In veel grafvelden bevatten de heropende graven zelfs meer objecten van bepaalde categorieën dan de intacte graven. Dit patroon werd ten dele veroorzaakt door het feit dat de graven uit de laatste gebruiksfase van de grafvelden vaak minder grafgiften bevatten én minder vaak werden heropend dan de graven uit eerdere fases. Daar komt bij dat de deelnemers aan heropeningen waarschijnlijk actief graven uitkozen met relatief veel grafgiften en met bepaalde objecttypen. Het is bovendien mogelijk dat de gravers soms objecten toevoegden als zij een graf heropenden. Hoewel alle objecttypen waarschijnlijk wel eens werden meegenomen tijdens interventies, lijken de gravers gericht te hebben gezocht naar zwaarden en saxen, kledingaccessoires uit vrouwengraven – vooral kralen en fibulae – en mogelijk ook verschillende gebruiksvoorwerpen zoals kleine messen en aardewerken potten. Ze lijken meer interesse te hebben gehad voor gevechtswapens, zoals zwaarden en schil-den, dan voor jachtwapens, zoals lansen en pijlen. Riemplaatjes werden vaak achtergela-

ten, maar soms werden ook deze meegenomen, zoals blijkt uit incomplete riemassemblages die in verschillende heropende graven zijn aangetroffen. Heropende graven bevatten veel meer niet-determineerbare fragmenten dan intacte graven. Bovendien ontbraken bij herkenbare objecten uit heropende graven gemiddeld meer scherven. Dit wijst erop dat men vaak objecten brak en fragmenten meenam als graven werden heropend. Deze schade en fragmentatie kan deels per ongeluk zijn ontstaan bij handelingen die nodig waren om het graf te openen. Een aantal objecten vertoonde echter tekenen van opzettelijke beschadigingen, wat een aanwijzing kan zijn dat fragmentatie een betekenisvolle rol speelde bij het heropenen van graven. De ontbrekende fragmenten kunnen eenvoudigweg verspreid zijn geraakt over het grafveldoppervlak, maar het is ook mogelijk dat zij werden meegenomen door de deelnemers.

Botmateriaal

Er is nog weinig onderzoek gedaan naar welke skeletdelen er mogelijk werden meegenomen uit heropende graven. Dit is een lastig onderwerp omdat botten ook kunnen verdwijnen door natuurlijke decompositie. Klevnäs merkt op dat er in haar onderzoeksgebied geen indicaties zijn dat de gravers gericht specifieke soorten botten hebben meegenomen. Voor graven waar botten ontbreken gaat zij ervan uit dat de gravers simpelweg niet de moeite hebben genomen om de heropeningskuil weer te op vullen met al het materiaal dat zij eruit hadden gehaald (Klevnäs 2013: 52). Zintl (2012: 352-253) doet vergelijkbare uitspraken voor Beieren. Het is spijtig dat de meeste graven uit de Lage Landen zich door de slechte bewaarconditie van botmateriaal niet lenen voor onderzoek naar dit onderwerp. Er zijn echter wel enkele vondsten van menselijk bot uit niet-grafcontexten die hier relevant zijn. Bij nederzettingsofgravingen in Oegstgeest is een groot aantal menselijke botten gevonden in verschillende contexten verspreid over de site, vooral in de vullingen van greppels en geulen. De meerderheid van deze verspreide vondsten waren lange botten en schedelfrag-

menten. De bewoners lijken selectief deze categorieën menselijk bot te hebben verzameld en gedeponeerd in de grond. Het meest opvallende voorbeeld is een kuil waarin zich op de bodem een stervormige formatie bevond van de lange botten van minimaal twee individuen. Naast deze kuil lag een tweede kuil met geselecteerde botfragmenten van ten minste zes individuen. Alle botten waarvan de sekse kon worden bepaald, waren mannelijk. De verspreide botten in deze contexten waren mogelijk afkomstig van heropende graven uit nabijgelegen grafvelden. De vondsten uit de rivier de Maas bij Kessel zijn een ander voorbeeld van vroegmiddeleeuws botmateriaal wat buiten de funeraire context is gedeponeerd. Deze site was in gebruik van de Late IJzertijd tot de Volle Middeleeuwen. Een deel van het gevonden materiaal dateert uit de Merovingische periode. Ook hier was de meerderheid van de onderzochte botten mannelijk. In de Maas bij Roermond is mogelijk een tweede vergelijkbare site aangetroffen. De botten van die site zijn nog niet gedateerd, maar een deel van de gevonden objecten zijn Merovingisch. Zulke rivierdeposities zijn mogelijk ook plaatsen waar objecten en botten uit heropende graven naartoe werden gebracht. De deposities delen enkele markante kenmerken met heropende graven. Het meest opvallend is hun focus op de overblijfselen van mannen. Dit zou een indicatie kunnen zijn dat het materiaal in deze deposities inderdaad afkomstig is uit heropende graven, of dat de deposities en heropeningen ontstonden op basis van gedeelde wereldbeelden en sociale praktijken.

Interpretaties

De oorzaken van en redenen voor het heropenen van graven in de Vroege Middeleeuwen waren waarschijnlijk gevarieerd en complex. Ik heb in deze dissertatie verschillende mogelijkheden verkend, waarbij ik heb gekeken naar de identiteit en motieven van de deelnemers, de identiteit van de overledenen en de bredere socio-culturele context. Alle besproken interpretaties gelden waarschijnlijk voor ten minste een deel van de heropende graven. Verschil-

lende mogelijkheden kunnen naast elkaar hebben bestaan en elkaar hebben overlapt, afhankelijk van de context. De hier genoemde interpretaties zijn gericht op het materiaal uit de Lage Landen, maar waarschijnlijk zijn ze deels ook toepasbaar op heropende graven uit andere delen van Noordwest-Europa, zoals Angelsaksisch Kent en Duits Beieren, aangezien deze in hoge mate vergelijkbaar zijn met die uit het onderzoeksgebied.

De ideeën over de rol van heropeningen in de vroegmiddeleeuwse samenleving variëren sterk. Veel academici zien interventies simpelweg als een manier om de in graven gedeponeerde rijkdommen te verwerven of terug te krijgen. Zij zien zich hierin gesteund door de wetsteksten uit deze periode, waarin zware straffen voor grafroof worden voorgeschreven. Deze interpretatie is echter moeilijk te rijmen met de recente archeologische onderzoeksresultaten, waarin duidelijk ideologische en symbolische aspecten van deze praktijken naar voren komen. Voorbeelden hiervan zijn het selecteren van specifieke graven en grafgraven terwijl andere graven en grafgraven onaangeraakt blijven. Het hoge percentage heropende graven suggereert bovendien dat interventies sociaal geaccepteerd waren en waarschijnlijk werden uitgevoerd door leden van de begravende groep zelf en niet door criminelen of buitenstaanders.

Verschillende onderzoekers zijn van mening dat de chaotische of gewelddadige manier waarop graven werden heropend laat zien dat de gravers geen respect hadden voor de doden. Dit hoeft echter niet het geval te zijn. We niet weten wat men in de Merovingische periode verstond onder een respectvolle behandeling van graven. Gedragingen die op ons als verstorrend of gewelddadig overkomen, kunnen een uitdrukking zijn geweest van zowel respect als disrespect, afhankelijk van de intenties van de aanwezigen en de sociale context (Duncan 2005; Weiss-Krejci 2001: 775-778; Zintl 2012: 388; Gardela 2013: 107-108). Het is echter weldegelijk mogelijk dat interventies soms werden gebruikt als wapen in kleinschalige conflicten tussen grafveldgemeenschappen, zoals bijvoorbeeld door Klevnäs (2013:

83) wordt voorgesteld. Daar staat tegenover dat heropeningen als gemeenschapsrituelen een rol gespeeld kunnen hebben in het bevorderen van sociale cohesie. In dat geval zouden de motivaties voor het heropenen vergelijkbaar kunnen zijn met die, welke tijdens begrafenissen van belang waren. Hier kunnen we denken aan het verlichten van de stress die ontstond door een sterfgeval (Halsall 1995: 253-261), strategieën voor het herinneren en vergeten van de doden (Williams 2003; 2005; 2006) of retorische strategieën van de begravingende groep om centrale normen, ideeën en waarden vorm te geven en om zichzelf en de dode te gunstig te presenteren aan een publiek van buitenstaanders (Theuws 2009). Deze overwegingen kunnen een bijdrage leveren aan het begrip van de lokale variaties in de percentages van heropende graven. Factoren zoals armoede en rijkdom, sociale stress, plaatselijke tradities en de daadkracht en keuzes van de gemeenschap kunnen allemaal hebben bijgedragen aan het vaker of juist minder vaak voorkomen van post-depositionele interventies. Het heropenen van graven bood de mogelijkheid om nogmaals samen te komen bij het graf, de inhoud te beschouwen, herinneringen op te halen, nieuwe herinneringen te maken en memorabilia of relieken te verzamelen.

Voorouders

Eén van de interpretaties die ik in detail heb verkend is de mogelijkheid dat het heropenen van vroegmiddeleeuwse graven een vorm van voorouder-reliëkencultus was, lijkend op de verering van heiligenreliëken die in dezelfde periode opkwam (Van Haperen 2010). Dit interpretatieve scenario gaat ervan uit dat interventies werden uitgevoerd door mensen uit de begravingende groep zelf, mogelijk de directe familie van de overledene. In dat geval speelden heropeningen een belangrijke rol in het sociale leven van de gemeenschap en in de relatie die mensen hadden met hun voorouders. Dit betekent niet dat het heropenen van graven in rurale grafvelden een soort ongeautoriseerde heiligentranslatie was, maar wel dat beide typen praktijken mogelijk ontstaan zijn uit gemeenschappelijke wereldbeelden en soci-

aal-culturele waarden. Wellicht hadden ze ook vergelijkbare karakteristieken, zoals de praktische manier waarop ze werden uitgevoerd en hun socio-religieuze rol als medium voor het onderhouden van contact tussen de levenden en de doden. Net als heiligenreliëken, bereikten de overblijfselen die uit Merovingische graven werden meegenomen een groter publiek en vergaarden zij meer prestige doordat zij over meerdere plaatsen konden worden verdeeld. Het bewijs voor het geloof in voorouders is voor vroegmiddeleeuws Noordwest-Europa weliswaar schaars, maar zeker niet afwezig. Uit het verslag van de bekering van koning Radbod in de *Vita Wulframni*, de *Beowulf* en vele andere bronnen over de voorchristelijke religies in vroegmiddeleeuws Engeland en Scandinavië kan worden afgeleid dat mensen in Noordwest-Europa grote waarde hechtten aan hun voorouders en geloofden dat deze macht hadden over de levenden. In verschillende bronnen ligt de nadruk vooral op de afstamming via vaders. Als mannen inderdaad beschouwd werden als belangrijkere voorouders dan vrouwen, zou dit kunnen verklaren waarom graven met typische mannengrafgiftten vaker werden heropend dan graven met vrouwenobjecten of neutrale grafgiftten, en waarom de botten van mannen de meerderheid vormen in de deposities in het onderzoeksgebied. Het lage percentage heropende kindergraven past ook in het idee dat interventies zich vooral richtten op de graven van mensen met een sociale status of levensgeschiedenis die hen geschikt maakte om machtige voorouders te worden. Het feit dat de gravers zich voornamelijk richtten op graven met genderspecifieke grafgiftten, en bij voorkeur objecten meenamen die sterk geassocieerd waren met mannen en vrouwen laat ook zien dat gender een belangrijk aspect was in de keuze om specifieke graven te openen. Klevnäs (2013: 83; 2015: 168) heeft een ander perspectief op de functie van heropende graven in relatie tot de voorouders. Zij is van mening dat graven in haar onderzoeksgebied werden geopend door vijanden van de familie van de overledene die erop uit waren om de doden objecten met een belangrijke symboliek

te ontnemen. Dit zou een manier geweest zijn om wraak te nemen op de begravende groep en schade toe te brengen aan de sociale status en politieke macht van de familie van de overledene. Ik denk dat het zeker mogelijk is dat graven soms werden heropend met vijandige intenties, maar het grote aantal heropende graven in de Lage Landen maakt het onwaarschijnlijk dat alle graven hier op deze manier werden heropend. De interpretatie van Klevnäs is beter toepasbaar op Kent, waar post-depositionele interventies zeldzamer waren. Gezien de uiterlijke overeenkomsten tussen de heropende graven in Kent en andere delen van Noordwest-Europa lijkt het echter aannemelijk dat deze voortkwamen uit vergelijkbare motivaties. Het is desalniettemin mogelijk dat vijandige en niet-vijandige interventies op vergelijkbare manieren werden uitgevoerd, wat zou betekenen dat er ook de dataset uit de Lage Landen een verborgen percentage graven bevat dat in vijandige omstandigheden werd heropend.

Grafgiftten

Wanneer een graf werd heropend werd een groot deel van de inhoud meestal achtergelaten of zelfs bewust teruggelegd in de kuil wanneer deze weer werd opgevuld. Dit laat zien dat het verkrijgen van objecten of grondstoffen meestal niet het primaire doel was. Het idee dat de gravers gericht op zoek waren naar kostbare metalen en edelstenen wordt ook tegengesproken door het feit dat zij de voorkeur gaven aan mannengraven boven vrouwengraven, terwijl de laatste meestal meer sieraden bevatten. De deelnemers namen een specifieke selectie van objecten mee – mogelijk zowel artefacten als botten – die later bij verschillende activiteiten konden worden ingezet. De bestemming van deze meegenomen objecten verdient bijzondere aandacht. Zij werden mogelijk in hun originele vorm gebruikt, maar konden ook worden omgevormd tot nieuwe objecten. In hun oorspronkelijke staat zouden ze dienst gedaan kunnen hebben als relieken in de traditionele zin van het woord, en worden vereerd als onderdeel van een vooroudercultus. Als graven werden heropend in een

vijandige context konden de meegenomen objecten dienen als trofeeën. Naast deze puur symbolische functies kunnen de objecten ook op meer praktische manieren zijn gebruikt. Dit is het meest vanzelfsprekend voor artefacten van edelmetaal, glas en aardewerk die nadat ze waren schoongemaakt en opgeknapt gewoon weer bruikbaar waren. Ze ontleenden dan mogelijk wel een bijzondere betekenis aan hun herkomst uit het graf, waardoor ze vooral geschikt waren voor ceremonieel gebruik. Als de objecten echter werden gerecycled, waren zij mogelijk niet meer herkenbaar als voormalige grafgiftten en konden zij op andere manieren worden gebruikt. Vooral metalen objecten leenden zich hiervoor omdat ze uit elkaar konden worden gehaald of geheel konden worden omgesmolten. Ook zulke handelingen hoeven echter niet noodzakelijkerwijs de herinnering aan hun herkomst te hebben uitgewist. De nieuwgemaakte objecten konden delen in de symboliek en kracht van de voormalige grafgiftten. Vroegmiddeleeuwse mensen lijken bewust gebruik te hebben gemaakt van hun materiële cultuur om specifieke herinneringen aan het echte of ingebeelde verleden op te roepen en te versterken. Op deze manier verbeeldde zij zichzelf als legitieme erfgenamen van dit verleden om bijvoorbeeld claims van macht te versterken. Voormalige grafgiftten waren hiervoor waarschijnlijk bij uitstek geschikt, bijvoorbeeld omdat hun vorm en decoratie deed denken aan specifieke mythes, of omdat men zich herinnerde hoe zij tussen en binnen verschillende gemeenschappen hadden gecirculeerd.

Angst voor de doden

Vroegmiddeleeuwse ideeën over de dood en het hiernamaals omvatten waarschijnlijk niet alleen positieve machtige doden, zoals heiligen en voorouders, maar ook kwaadaardige doden tegen wie maatregelen moesten worden getroffen om de levenden te beschermen. De angst voor terugkerende doden wordt geassocieerd met atypische graven die afwijken van de lokale of regionale norm. In de Lage Landen zijn helaas weinig graven waarvan het botmateriaal zo goed bewaard is dat we deze graven kunnen

herkennen. Toch zijn er enkele gevallen bekend zoals de graven met schedelmanipulaties uit Lent-Lentseveld, welke in verband kunnen worden gebracht met necrofobie, met name de angst voor terugkerende levende doden. Het is interessant dat deze graven waarschijnlijk pas hun atypische uiterlijk verkregen toen zij werden heropend, en niet al tijdens de begrafenis. Manipulaties van het skelet die werden uitgevoerd tijdens post-depositionele interventies komen goed overeen met historische bronnen waarin maatregelen tegen terugkerende doden worden beschreven. Zulke maatregelen konden in Noordwest-Europa de vorm krijgen van onder andere onthoofding en amputatie van ledematen, het plaatsen van stenen op het lichaam, begraven in buikligging en het vastbinden van lichaamsdelen (Lecouteux 1987: 31-35, 180-181; Blair 2009: 546; Reynolds 2009: 61-95; Gardela 2013: 112; Klevnäs 2016a: 194-197). Het is aannemelijk dat de angst voor de doden een belangrijke rol speelde in de vroegmiddeleeuwse interactie met graven. Praktijken die werden uitgevoerd tijdens begrafeningen en heropeningen waren er waarschijnlijk op gericht om de gepercipieerde risico's in te perken en te beheersen. De zogenoemde atypische graven zijn waarschijnlijk de extreme uitersten van een spectrum van praktijken die de levenden tegen de doden moesten beschermen.

Aanbevelingen

Hoewel er veel onzekerheden en discussies zijn over de juiste interpretatie, is het duidelijk dat het heropenen van vroegmiddeleeuwse graven in de Lage Landen en andere delen van Noordwest-Europa een belangrijke rol speelde in de omgang met de doden. Deze graven verdienen daarom extra aandacht, zowel door het vergroten van de dataset als het meer in detail bestuderen van de bestaande gegevens. Dat kan echter alleen met medewerking van opgravers, restauratoren en uitwerkers die vondsten bewerken en toegankelijk maken voor andere archeologen. Het idee dat 'verstoorde' graven minder interessant en waardevol zijn voor onderzoek heeft er vaak toe ge-

leid dat deze graven niet goed werden gedocumenteerd en gepubliceerd. In sommige gevallen is zelfs geprobeerd de verstoring te verbergen, bijvoorbeeld in het geval van restauratoren die gebroken objecten uiterlijk 'als nieuw' maken door breuken dicht te smeren en ontbrekende delen aan te vullen met hars. Ik wil daarom enkele aanbevelingen doen voor het opgraven en uitwerken van grafvelden. Voor opgravers is het van belang dat zij aandacht besteden aan de informatie die besloten ligt in de vulling van graven. Als een heropening pas ontdekt wordt wanneer de bodem van het graf is bereikt – of erger nog, tijdens het uitwerken na de opgraving – gaat er veel belangrijke informatie verloren. De vulling van graven kan sporen bevatten van heropeningskuilen, en er kunnen ook objecten en fragmenten van grafgiften doorheen zijn gemengd. De vulling moet daarom zorgvuldig worden opgegraven en nauwkeurig gedocumenteerd. Het is aan te bevelen om zo veel mogelijk verschillende vlakken te tekenen en te fotograferen en van iedere vondst in de vulling de exacte hoogte, locatie en oriëntatie te documenteren, ook van botten, stenen en aardewerkfragmenten. Heropeningskuilen en details van de grafconstructie zijn vaak beter zichtbaar in verticale coupes dan in het horizontale vlak. Vooral voor diepe graven kan het daarom de moeite waard zijn om zowel vlakken als profielen te tekenen en fotograferen. Dit kan op verschillende manieren worden gedaan, bijvoorbeeld door eerst de helft van een graf in vlakken op te graven zodat het profiel van de andere helft kan worden gedocumenteerd, of door smalle profielwandjes te laten staan tussen opgegraven segmenten. Zelfs als het niet mogelijk is om in het veld profielen te documenteren kan het heel inzichtelijk zijn om tijdens de uitwerking driedimensionale reconstructies van de graven te maken. Voor sites waar botmateriaal bewaard is gebleven, is het van groot belang om een ervaren fysisch antropoloog op de opgraving te hebben. Deze kan waarnemingen doen met betrekking tot de ligging van het skelet die unieke informatie verschaffen over de staat van het graf en het ontbindende lichaam tijdens post-

depositionele interventies die andere archeologen zouden ontgaan (Noterman 2016: 162-163). Tot slot is het belangrijk om aandacht te besteden aan tekenen van peri- en post-depositionele praktijken op het grafveld die niet direct aan graven verbonden zijn, zoals paalkuilen van gebouwen en kuilen met resten van feestmaaltijden.

Restauratoren kunnen een waardevolle bijdrage leveren aan de studie van heropende graven door de gefragmenteerde staat van objecten te respecteren. Het breken van objecten kan een belangrijke ceremoniële handeling zijn. De bestudering hiervan is onmogelijk als breuken en ontbrekende delen bij de restauratie zijn verborgen. Zowel in museumopstellingen als in publicatiefoto's is het vaak onmogelijk om vast te stellen of de getoonde objecten oorspronkelijk gebroken of compleet waren. Zelfs wanneer onderzoekers in de gelegenheid zijn om gerestaureerde objecten vast te houden, is het vaak moeilijk te zien welke delen van het object echt zijn, en waar er vulmiddel is gebruikt. Gebroken en incomplete objecten vertellen hun eigen fascinerende verhalen, waardoor het de moeite waard is om ze in hun gefragmenteerde staat te bewaren, of ten minste alleen zichtbare restauraties uit te voeren. Daarnaast wil ik ook pleiten tegen het verwijderen van residuen en corrosielagen. Deze bevatten vaak overblijfselen van textiel, hout, insecten en andere organische materie die minstens net zo waardevol zijn voor onderzoekers als de objecten zelf.

Ook voor archeologen die oude en nieuwe grafvelddata uitwerken en publiceren is een belangrijke taak weggelegd. Zij zijn degenen die opgravingsgegevens beschikbaar maken voor andere onderzoekers. Vakkundig opgegraven en gerestaureerde vondsten kunnen

nog steeds onbruikbaar zijn als zij niet goed zijn gepubliceerd. Indien beschikbaar, zouden van alle graven tekeningen moeten worden getoond in de publicatie, zowel van de heropende zowel als de intacte. Als er sporen van de heropeningskuil zijn waargenomen, moeten deze worden opgenomen in de te publiceren graftekeningen. Wanneer graven verspreide fragmenten van gebroken objecten bevatten moet worden aangegeven waar deze zich in het graf bevonden. Als er profieltekeningen of driedimensionale reconstructies van het graf zijn gemaakt moeten ook deze worden opgenomen in de publicatie. Tot slot is het van belang dat de hoogtes waarop botten en objecten zijn gevonden in het graf in de publicatie worden vermeld. Dit is essentiële informatie voor het reconstrueren en dateren van post-depositionele interventies. Als de graven skeletmateriaal bevatten, is het van belang dat dit door een fysisch antropoloog wordt onderzocht en dat ook hiervan de resultaten volledig worden gepubliceerd, inclusief informatie over de aan- en afwezigheid van bepaalde skeletdelen en de positionering van de botten in het graf. Voor grafgiften is het nuttig om aan te geven of zij heel en compleet waren, en zo niet, of en welk deel van de fragmenten ontbrak. Als het aardewerk en glas op de tekeningen in de catalogus voor typologische doeleinden als 'archeologisch compleet' staat afgebeeld, is het van belang om daarnaast foto's met het ware uiterlijk van de objecten te plaatsen en dit ook in de beschrijving van de objecten te noemen. Fragmentatie en verstoring zijn interessante historische processen en verdienen daarom net zo veel zorg en aandacht als intacte vondsten.

About the author

Martine van Haperen was born on May 26, 1985 in Middelburg. After receiving her VWO diploma at the Christelijke Scholengemeenschap Walcheren in 2004, she completed her bachelor's degree in archaeology with a minor in cultural anthropology at the University of Amsterdam in 2007. She went on to obtain a cum laude research master degree in European archaeology in 2009. Her master thesis about early medieval reopened graves won the W.A. van Es award from the state archeology service (RCE).

Van Haperen then started work as a researcher for the ANASTASIS Merovingian cemetery project at the Amsterdam Archaeological Centre, which aimed to publish and analyze data from old cemetery excavations in the central and southern Netherlands. In 2011 she received a scholarship from the Dutch science foundation (NWO) to continue her work on reopened graves in a PhD project at the Archaeology Faculty of Leiden University, of which this dissertation is the result.