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GERMANS BEYOND THE *LIMES*.
A REASSESSMENT OF THE ARCHAEOLOGICAL EVIDENCE IN THE *LIMESVORLAND* OF SOUTHERN *GERMANIA INFERIOR/SECUNDA*.

Parts One - Three

Part One The Text

Karen Elizabeth Waugh

Submitted for the Degree of PhD
University of Durham,
Department of Archaeology

October 1998

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27 JAN 2000

ABSTRACT

GERMANS BEYOND THE *LIMES*. A REASSESSMENT OF THE ARCHAEOLOGICAL EVIDENCE IN THE *LIMESVORLAND* OF SOUTHERN *GERMANIA INFERIOR/SECUNDA*

Karen E. Waugh

The study area is located on the Lower Rhine, in the modern German *Bundesland* of Rhineland-Westphalia. During the Roman period the area lay directly in front of the southern part of the Roman imperial province of *Germania Inferior*, later *Germania Secunda* and its capital Cologne. In this study, a relatively small part of the border zone on the right hand bank of the river Rhine has been selected for detailed research. The main objective of the research has been to evaluate and describe the large quantity of archaeological remains from the region dating to the Roman period, and use this evidence to discuss a number of hypotheses that have become prominent in the last decades within Roman archaeology in north-western Europe. These are primarily:
- the social structure of the Germanic people occupying this area;
- the scale of interaction between this group and the inhabitants of the Roman province on the left bank;
- the chronological developments within the study area against the background of current historical reconstructions.

In contrast to other regional studies where the emphasis is placed on the settlement evidence, this research has concentrated on a more detailed analysis of the burial data. Whilst this was mainly due to practical reasons, the poor state of the material record from settlement sites, theoretical considerations were also of primary concern. The data from the cemeteries and individual burials in the study area have provided detailed information on both chronological and demographic patterns, and the cultural-ethnic composition and social stratification of the population. Important conclusions that have been made in this study are that firstly, the level of Romanization of the Germanic peoples settled in the *Limesvorland* should not be overestimated and, secondly, the Roman military border does seem to have functioned as a surprisingly strict cultural barrier.

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DECLARATION

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CHAPTER 1 BACKGROUND AND AIMS OF RESEARCH

1.1 The Study Area

The study area chosen for research is limited to a narrow strip land on the western border of Germania, within the frontier region or *Limesvorland*[1] of the southern part of the former Roman Germanic province of *Germania inferior* (later *secunda*). It covers a relatively narrow strip of land which stretches eastwards from the southern part of the Roman province of Lower Germany, to a maximum distance of *c.* 57 km from the right bank of the Rhine.[2] The area is delimited by the *Siebengebirge* range of hills in the south, by the southern bank of the river Lippe in the north, and by the onset of the higher *Bergisches Land* to the east. Only in its north-eastern corner does the area have no clear geographical boundary. Here, the modern political boundary between Rhineland and Münsterland in the state of Rhineland-Westphalia has been adhered to (see Fig. 1.1).

1.2 Incentives For Research

The primary incentive for undertaking research in this specific region was provided by Jürgen Kunow's publications which identify and discuss the significance of the Roman period findspots in the region.[3] Kunow's work highlights the fact that, although much has been done to understand the origins, development and settlement of the lower German province itself, relatively little research has been carried out into the evidence for settlement and society on the adjacent right bank of the Rhine, the *Limesvorland*, on the political periphery of the province and thus the Roman Empire.

Within the discipline of provincial Roman archaeology, for the western Empire in particular, an increasing interest has developed over recent years in issues dealing with the very nature of the Roman Empire, particularly in the manner of its expansion and its ability to control diverse and extensive territories. This interest, which is reflected archaeologically in the increasing number of field surveys undertaken and a reviving interest in the study of artefacts to support new research on questions of a more sociological and economic nature, has also been paralleled by a new awareness of the value of historical

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[1] Literally translated, 'the area in front of the *limes*'.

[2] That is the province of *Germania inferior*, which became the province of *Germania secunda* after AD 297. See also Chapter 2.1.

[3] Kunow 1987a; 1990.

periods for the development of archaeological methodology.[4]
The ever-increasing accumulation of archaeological evidence, coupled with the development of new concepts and theories, means that the chance now exists in many areas, not least in the *Limesvorland*, to compare the purely archaeological data with the existing historical data, as well as being able to reevaluate the prevailing assumptions about occupation in the southern frontier region of the Roman province of Lower Germany.
A further incentive for selecting the study area was its particular suitability for such research. This can be summarized as follows:
- the large quantity and good preservation of the excavated archaeological record, both the material and documentary evidence, available for study;
- the relatively favourable findspot situation, i.e. mostly comprising small, evaluable assemblages concentrated within a geographically limited spatial area;
- the existence of historical data relating to the area;
- the key strategic position of the area on the right bank of the Rhine, directly opposite important military installations within the province and including major routes penetrating eastwards into Germanic territory.

1.3 Research Objectives

In broad terms, the main purpose of this study is concerned with understanding the significance and the development of the *Limesvorland* from its beginnings until into Late Antiquity, based primarily on a survey of early Germanic material culture from the end of the pre-Roman Iron Age, more specifically, the first century AD (Augustan period onwards[5]), until the late fourth or possibly early fifth century AD, with the appearance of the Franks in the region.
The strategy adopted has been to investigate the material evidence recovered from the study area and use it to assess the social and economic processes at work. The significance of the timespan chosen is primarily due to the presence of closely dated Roman imported material, in particular pottery.[6] Whilst an assessment of individual archaeological sites is made, the research concentrates specifically

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[4] The collection of conference papers on the theme of the early Roman Empire in the West (Blagg & Millett 1990) highlights the increasing interest and amount of work being carried out on this subject. More recently, see also Metzler *et al.* 1995.

[5] The historical background to this periodization and the material evidence supporting it are discussed below, in Chapters 3 and 8 respectively.

[6] The problems involved in attempting to closely date the Germanic material are discussed in Chapters 5, 8 & 10.

on a detailed analysis of the recovered finds.
The research is based on an analysis of published literature and the study of unpublished museum collections.[7] At the outset it was envisaged that the underpinning of the evidence would be based on a more balanced dataset, drawing on material from both burial and settlement findspots. After completing the analysis of the excavated archaeological record, however, it was immediately clear that, in contrast to the large quantity and high quality of data from burial findspots, the settlement data recovered was relatively sparse in quantity and sporadic in quality, and thus relatively weak as a basis for further research. Very few settlements have been identified in the study area, and even fewer have been fully excavated or recorded, let alone published.
The nature of the excavated archaeological record therefore necessitated a change in direction at this point. It was therefore felt to be more logical to place the emphasis of the research and its conclusions on a more detailed understanding of the funerary data.[8] In this context, the rise of processual archaeology has provided a useful theoretical framework in which to study mortuary practices,[9] and the development of specific computer programs has enabled a more structured, statistical analysis of large quantities of data.[10] It must be said, however, that, especially in the last decade, a more conceptual approach to archaeology has levelled criticism at this rather dogmatic approach of treating quantified data as factual evidence for socio-cultural interpretation. The influence of processual archaeology is certainly present within this thesis. In the last chapters, dealing primarily with the interpretation of the material, a more culture-historical and contextual approach has been adopted.[11]
The detailed objectives of the research can be defined as follows:

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[7] Much of the data collection for the research was made possible by a two-year scholarship awarded by the *Deutscher Akademischer Austauschdienst* (the German Academic Exchange Service) to study at the Institüt für Vor- und Frühgeschichte at the Friedrich-Wilhelm Universität in Bonn between 1987 and 1989. Since 1989 the research has continued on a part-time basis.

[8] The quantity and quality of the material evidence is discussed in Chapters 4, 6, and 7. The finds area discussed more specifically in Chapter 5 and the catalogues in Appendices I-III.

[9] For example O'Shea 1984. See also Chapter 6.

[10] For the early use of computerization on Germanic burial material see, for instance, the work of Gebühr & Kunow 1976; Gebühr & Kampffmeyer 1980/1. In this thesis see particularly Chapters 8 & 9.

[11] Hodder 1987, and also, for example, van der Leeuw 1994 for a critical note on post-processual archaeology. Also Morris 1992, and in this thesis Chapter 6.2.

- to establish a typology, definition and chronology for the type of occupation and material evidence existing in the area;
- to attempt to explain the nature of Germanic social structure in the region, as far as this is reflected in the archaeological record. In particular, to assess such aspects as background or ethnicity, evidence for social stratification, cultural traditions, and relationships;[12]
- to attempt to ascertain what level of Romanization, if any, was attained to amongst the Germanic peoples living in the area, as reflected in material evidence for trade, contact and the adoption of Romanized - or, more specifically, provincial Roman - manners, traditions, and rituals;
- to see if the various historical reconstructions put forward for the area and the use of its associated terminology are justified and can be supported by the archaeological evidence. For instance, in calling the area the *Limesvorland*,[13] one is already implicitly reflecting a particular relationship with the province and ultimately the Roman Empire;
- to evaluate whether environmental and topographical conditions affected either the settlement of the area or the nature of the settlement, or whether the site distribution and chronology as reflected by the archaeological evidence was more a consequence of the value the area represented to the Empire. In this context several questions are raised:
- was the narrow strip of land of primarily strategic significance to the Empire, and thus a security zone?;
- was the area made free for uninhibited settlement or was it alternatively more significant for military logistics?;
- was the strip seen as an integral part of the Empire or rather the adjacent most westerly extremity of Germania?

1.4 The German Archaeological Tradition: An Overview

The aim of this section is not to provide an account of the historical background of the archaeological tradition in Germany as a whole, but is intended to focus specifically on the development of the methodology and ideology that has influenced our present day understanding of the study area and, importantly, the compilation of records and publications pertaining to it, during the archaeological period in question.

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[12] For instance, the question of an attached client zone of dependant Germanic tribes is a relationship better known with respect to other tribes both inside the province and in other areas of northern Germania. See Kunow 1987a, 72-7; 1990, 93-5.

[13] The German term has been adopted in this text for ease of reference.

The following section has two main objectives. Firstly, it is an attempt to provide a background to the present study. Secondly, especially following on from section 1.2, it is meant to provide a summary of previous archaeological interpretations of the study area and relevant adjacent regions, which have provided further initiative for undertaking the research.
The discussion is rather detailed since, in order to set this current thesis in its context, especially for a reader not fully acquainted with the publications and traditions, it is necessary to understand the processes, attitudes and traditions that have dominated German archaeological thinking, and thus publications on German archaeology, since the beginning of the century, when archaeology emerged from its roots in nineteenth-century antiquarianism to become an independent discipline.
In the introduction to their publication *Barbarians and Romans in North-West Europe from the later Republic to late Antiquity*[14], Barrett and Fitzpatrick suggest that the history of a particular frontier region, and thereby the archaeology of 'culture contact' in that region, depends on two relatively autonomous processes: firstly, the isolation, or recognition, of the organizational properties of indigenous pre-contact societies which would partly determine the historical trajectory of the contact process and, secondly, the organizational demands of Roman military and economic activity. Barrett and Fitzpatrick stress, quite rightly, that the easy assumption that Roman authority was the dominant force, must be paid much closer attention in frontier regions. A major problem they see in archaeology is that, whilst native studies have always traditionally lain within the scope of 'prehistory', Roman military history remains the preserve of 'Roman archaeology'. They further state that this divide between the two specializations occurs at precisely the point where the processes of integration need to be most carefully analysed. The different conception of history implied in both specializations also works to subvert an holistic study: prehistorians have tended to be concerned with the understanding of long-term processes of social and economic change, whereas, by contrast, Roman frontier studies often remain fixed to the precise chronology of events. The result of this process is that the distinction becomes not just a matter of different chronological scales of analysis, nor of different qualities of data, but concerns profound differences in the perception of historical processes, differences which are not directly compatible. This generally-applied interpretation also describes the underlying problem encountered in frontier research within the German Rhineland, at least until the 1980s, and is a reflection of the outlook and intellectual tradition of German archaeology that has always been

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[14] Barrett & Fitzpatrick 1989, 9.

firmly divided into two distinct disciplines: the study of prehistory, known at various stages of its development as *Urgeschichte* (early history) or *Vorgeschichte* (prehistory), and the study of 'Roman' or Classical archaeology. This division is perpetuated in the manner in which the discipline is taught within the university structure: institutes or departments of *Vor- und Frühgeschichte* concentrate on the teaching of prehistoric and early medieval archaeology, thus for the most part by-passing the first - early fifth centuries AD, which are deemed more appropriately placed within the domain of *Klassische Archäologie*, grouped with the teaching of the archaeology, art and architecture of Classical Antiquity.

Moreover, whilst national traditions of archaeology in Europe have tended to fluctuate and adapt themselves to new theoretical concepts over the last three decades, in the Netherlands[15] and Britain[16] in particular, the cultural-historical tradition of archaeology, dominant in Europe until the 1960s, has steadfastly remained the basis for mainstream research in Germany. As Härke points out,[17] 'New Archaeology' has never completely taken on in Germany. Processual and post-processual archaeology laid down no firm foundations and the rising British tradition of theoretical archaeology has, to a large extent, been rejected, with the emphasis of research still preferring to be rooted in a solid and methodical approach to the evidence. Härke suggests that the motto cited by the preeminent Dutch archaeologist Van Giffen in his 1913 doctoral thesis "*Die Interpretation schwankt, die Tatsachen bleiben*"[18] is still the, albeit unwritten, motto of German archaeology today. Härke describes, not altogether unsympathetically, the present situation in German archaeology as follows: "In the meantime, the German supertanker is still lumbering on the old, cultural-historical course while the officers have studiously ignored successive mutinies of some of the deck hands".[19] Within the Rhineland, the emphasis of investigations during the last

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[15] In the sphere of frontier studies in particular, the cultural-historical stance of Dutch archaeology has been significantly influenced by new theoretical ideas, the symposium "Romans and Natives in the Low Countries" held in Amsterdam in 1980 being a culmination of these ideas, focussing on the importances of acculturation and integration problems between Romans and the indigenous population in the delta area, rather than on a purely military-historical view. See Brandt & Slofstra 1983. Further specific interpretations of frontier interaction within the Netherlands include: Bloemers 1989; 1990a; 1990b; Willems 1986; Roymans 1995; Roymans 1996.

[16] Blagg & Millett 1990; Millett 1990; Metzler *et al.* 1995; Whittaker 1994.

[17] Härke 1994.

[18] "The interpretation varies, the facts stay the same".

[19] Härke 1994, 35.

hundred years has been firmly placed on military archaeology, i.e. the excavation and publication of the *limes* installations. Research has concentrated largely on the establishment of refined chronologies for particular finds groups in order to more precisely date the foundation and individual building phases of the *limes* forts.[20] Gechter and Kunow argue that this can be explained, and excused, by the sheer quantity and quality of historical source material in the form of documentary and epigraphic evidence which, when combined with the archaeological finds, serves research into the military history of the Roman province of Germania Inferior and its successor Germania Secunda particularly well.[21]

That the study of Germanic archaeology has been overshadowed by Roman military archaeology, especially since the Second World War, can for a great part be attributed to a backlash against the events affecting the development of the discipline of prehistory during the early decades of this century. In the 1930s in particular, the results of prehistoric research began to be used and often constrained to fit a particular set of National Socialist Party theories that gradually took hold of the ruling classes and became built into the fabric of the state.[22]

The theme of *Ursprung und Verbreitung* has had a long and not always distinguished career in the historiography of the early Germans. In the nineteenth century the Celts were popularly viewed as the original settlers of Europe beyond the Rhine and as the main agents of culture, craftsmanship and trade. The Germans, in contrast, were viewed as savage interlopers, to cite Todd, "blundering about the northern lands, destroying Celtic cities, cultivating their land with the help of Celtic prisoners and taking whatever else they needed from their Celtic neighbours".[23]

On the eve of the First World War, the trend in German archaeological thinking was marked by the return of an ethnohistoric approach to theory. Publications dealing with the subject of race and genetic engineering increasingly appeared. The groundwork for an ethnocentric German prehistory was laid by Gustaf Kossina (1858-1932), whose method of study was founded on the principle (which he never permitted to be critically examined) that tribes or groups of tribes could be readily identified in the cultures distinguished by archaeologists. Kossina convinced himself, and most of his contemporaries, that there was an ethnic continuum in northern Europe from the earliest prehistory (certainly the Bronze Age and possibly the Neolithic) down to the Roman Iron Age and the emergence of the Germans in history as the

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[20] For example, Gechter 1979.
[21] Gechter & Kunow 1986, 377-8.
[22] For example, Arnold 1990.
[23] Todd 1975, 20.

tribes named by Ptolemy and Tacitus. The genesis of the Germans was therefore to be sought in the brilliant Nordic Bronze Age Culture which covered northern Germany from the Weser to the Oder, Denmark and the west Baltic islands. Kossina, in his *Kulturkreis* theory, proposed that cultural diffusion was a process whereby influences, ideas and models were passed on by more advanced peoples to the less advanced with whom they came into contact. This attitude manifested itself in the intentional exaggeration of the importance of German cultural influence in western civilization (the idea of a 'superior Ayran race') and led to the identification of geographical regions with specific ethnic groups on the basis of material culture. Prehistory played an important role in the rehabilitation of German self-respect after the First World War and was directly used to lend theoretical support to the expansionist policies of the National Socialist Party and Nazi Germany. Politicians began to take an interest in prehistoric archaeology, which seemed well-suited to nationalist visions.[24]
Kossina's ethnocentric and zenophobic perspective was adopted by Alfred Rosenberg and became the basis for the workings of the *Amt Rosenberg* which resulted in the neglect or distortion of data which did not directly apply to Germanic peoples. In the 1930s, scholars whose main interest was provincial Roman archaeology were labelled *Römlinge* by extremists and considered 'anti-German'.[25] The Römisch-Germanische Kommission in Mainz was also the object of defamatory attacks primarily because it concentrated on the excavation and study of provincial Roman Germany.[26]
In 1935 *Reichsführer* Heinrich Himmler set up the *Ahnenerbe* as the Research and Teaching Society for "Ancestral Heritage". The contradictory philosophies in the adoption of prehistory of the *Amt Rosenberg* and the *Ahnenerbe*, were nothing more than window dressing for the upper eschelons of the National Socialist Party where there was no real respect for the past or its remains.[27]
Although there was a critical opposition, and some became victims of the regime, prehistoric archaeologists in the 1930s seemed to have everything to gain by an association with the rising Nazi party. New institutions sprung up, eight new chairs were created in German prehistory between 1933 and 1935, and funding for prehistoric excavations was made available. Indeed, some of these benefits were real, for instance, the foundation of museums and institutes, the funding from Government programmes, the organization of amateur archaeology and the widespread popular support of and interest in prehistory.

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[24] Arnold 1990, 464.
[25] Jacob-Friesen 1950, 4.
[26] Eggers 1986, 234.
[27] Arnold 1990, 469.

Sound work was done during the 1920s and 1930s in spite of political pressure. In 1923 for instance, Kossina published Oscar Almgren's typochronological study of north European brooch forms which has become a standard reference work for all finds researchers dealing with provincial Roman material.[28] Whilst some excavations in the 1930s were explicitly geared to the Nazi party's goals, most excavation reports paid lip-service to the party in the introduction and conclusion, while the rest was, as Clark puts it, "business as usual".[29] In other words, the vocabulary conformed to the policies of the funding source, but the methodology was relatively unaffected.
To focus specifically on the Lower Rhineland *Limesvorland* region, the subject of the current study, two ground-breaking pieces of research in particular were published before the Second World War. Firstly, in 1922, Erich Rademacher published his survey of the Germanic cemeteries around Cologne which included an objective discussion of the chronology and dating of material and burial types as well as an interpretation of the historical and archaeological sources.[30] Secondly, in 1938, Rafael von Uslar published his doctoral thesis on the cultural relations of the Germanic peoples to the east of the *limes* in Middle and West Germany during the early and middle Roman periods.[31] Von Uslar based his research purely on the archaeological material excavated from burial and settlement sites. Whilst his discussion concentrates mainly on an analysis of the Germanic material, the catalogue contains a comprehensive inventory of the finds assemblage from each site in his study area.[32] Von Uslar's catalogue continues to be a sound basis for research into aspects concerning the material culture of the region, not least for this doctoral thesis, and his typochronological division of the Germanic pottery continues to be accepted and adapted in modern publications.[33] Apart from the obvious addition of more recent finds, only major correction to Von Uslar's catalogue has been necessary with regard to the sites in the *Limesvorland*. The early Roman period burial at Mehrum, which is now situated on the right bank of the Rhine near Voerde (Kreis Wesel) because of a change in the course of the river, was originally within the Roman province on the left bank.[34]
During the decades after the Second World War, a certain paralysis in

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[28] Almgren 1923. Also used in this study, see below Chapter 5.8.

[29] Clark 1939, 202.

[30] Rademacher 1922.

[31] Von Uslar 1938.

[32] Gechter & Kunow 1983, esp. 450.

[33] See Chapter 5.2 below. Also, for example, Joachim 1987 for the publication of the cemetery of Troisdorf within the study area.

[34] Gechter & Kunow 1983, esp. 450). The fluctuating course of the Rhine is discussed further below, Chapter 2.1.

prehistoric research after the political events of the preceding years. This sense of mistrust in many circles led to the predominantly pragmatic orientation of prehistoric research in Germany today. Research within Germania[35] turned again to the Classical discipline for its methodology and began to concentrate on such topics as the evidence for Romano-German contact, especially through trade, and the establishment of an absolute chronology of Germanic finds based on the dating of Roman artefacts with which they were found. The Classical absolute chronological division was based on the historical processes recognized within the Romano-Germanic frontier area, i.e. events from the development of the Roman *limes* from the Augustan period conquest to the so-called *limes* fall around AD 260/275.

For over forty years the most influential work in this field has been that of Hans-Jürgen Eggers who, working from this Classical standpoint, published a catalogue of imported Roman glass and metal vessels found within Germania: *Der römische Import im freien Germanien.*[36] The vessels were typologically ordered and presented with the help of various distribution maps. The other finds groups which Eggers had collected but not published in detail in the catalogue, the pottery, brooches, weaponry, figurines and other artefacts, were all illustrated on one distribution map. Eggers' discussion of the absolute chronology was published a few years later.[37] Although Eggers himself admitted that his work was only a provisional treatment of the evidence and that the main goal of the project was a complete collection of all recovered archaeological material, both publications have become, without too much modification,[38] cornerstones in modern research. The continuation and extension of Eggers' work has now been taken in hand by the *Römisch-Germanische Kommission* in Frankfurt under the project title "*Römische Funde im mitteleuropäschen Barbaricum*".[39] The project aims to coordinate the compilation of a complete catalogue of all Roman imports for the whole Germanic area from the North Sea to the Carpathians. Whilst the analysis of the material is not one of the aims of the project, one assumes it will be, along with more detailed research into the Germanic material, a natural consequence of the catalogue's completion.

In the 1980s, running parallel to the preference for material based research, the new ideas prevalant in archaeological thinking elsewhere slowly began to take hold in certain academic circles. To concentrate on the German Rhineland province and the area chosen for research in

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[35] That is the Germanic area beyond the Roman *limes*.

[36] Eggers 1951.

[37] Eggers 1955.

[38] See Kunow 1983 for the publication of additional material and the refinement of some of Eggers' conclusions.

[39] Von Schnurbein & Erdrich, 1992; Erdrich 1996.

this study, new regional surveys were undertaken and publications began to appear dealing with the development of settlement and the cultural landscape within the Roman province.[40]
This work provides a continuity in research strategy with the Dutch Central and Eastern River Area projects in the northern Lower Rhine region.[41]
The work of a small group of archaeologists attempted to revitalize *limes* research in the region by introducing and applying 'New Archaeology' ideas such as central place theory and the concept of spatial analysis within an archaeological landscape.[42]
Most importantly for this study, the reorientation in approach to the study of occupation within the province had important consequences for the reanalysis and furtherance of research into the Romanization and integration of the frontier area within the *Limesvorland*. Whilst it was already known that, following large migrations, people settled on the left bank of the Rhine in Lower Germany during the Roman period, very little attention had previously been given to the adjacent strip of land on the right bank. Only two main publications can be cited in this context, both containing models based on historical sources and general considerations with little consideration for the archaeological evidence. Kahrstedt's conclusion was that the *Limesvorland* had been treated as a "glacis" under Roman policy.[43] Von Petrikovits went further, stating that the land was most probably used to fulfil the army's need for exploitable land rather than any concern for security.[44] The first serious attempt to approach the argument from the point of view of a primary analysis of the archaeological evidence was made by Kunow.[45]. As stated at the beginning of this chapter, his list of Roman findspots located in the area provided the initial incentive for the present study.
The use of the term 'Germania' within this thesis to describe both the study area, and the larger geographical (and political) Central European land mass adjacent to the Roman Empire needs some explanation. The term 'Germania' has been adopted in accordance with the arguments put forward by Schnurbein and Erdrich who reject the other most commonly used terms, 'Free Germany' or the latinized

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[40] For example, Cüppers & Rüger 1985; Gechter & Kunow 1986; Gaitzsch 1991, or more recently, Gaitzsch 1993.

[41] Willems 1986.

[42] Kunow 1988; 1989.

[43] Kahrstedt 1950, 66-8; Kunow 1987a, 64-5; 1990, 87-8.

[44] Von Petrikovits 1979, 67; Kunow 1987a, 65; 1990, 87-8.

[45] Kunow 1987a.

'Germania libera'.[46] Whilst it is unclear when these terms were first introduced, neither can be traced back to Antiquity. The origin of there use is most likely to be modern, within the late Humanist period, that later became inseparable from the rise of the German Nationalist movement. Schnurbein and Erdrich argue that, the use of highly interpretative adjectives such as 'Free' is inappropriate, and does not reflect the true political situation at the time. The relations between individual Germanic tribes and Rome could not be described as completely independent, and therefore 'free' in the strictest sense of the word. The friendly relations of Rome with the Marcomanni and the Hermunduri, as well as the placing of 'kings' within the Brukteri and Quadi, are cited as examples of this complex situation.[47] The term 'Germania' without any associated adjective is preferred since it is not open to political interpretation and compares more readily to descriptions known from Antiquity.[48]

1.5 Content and Organization of the Thesis

Against the research objectives and background as set out above, this thesis is organized in the following way. For ease of presentation, the thesis has been divided into three parts. Part One comprises the main text (Chapters 1-10) and the Bibliography.
Chapters 2 and 3 function primarily as introductory chapters. Chapter 2 discusses the geographical and morphological elements that define the study area and have influenced the choice of site location as well as the recognized pattern of archaeological site distribution. Chapter 3 deals with the historical and proto-historical context of the study area, presenting a consensus on the state of knowledge to date. The particular historical context of the area means that an evaluation beyond the regional level is necessary in order to establish what is particular to the region.
Chapters 4 and 5 concentrate on providing a definition and classification of the specific archaeological contexts and the excavated material record. Chapter 4 describes the dataset, outlines the research strategy adopted in this thesis, and provides a classification for the findspots within the area. The results of the research as described in this chapter are provided in the Catalogues of Findspots, Appendices I-III (see below). An explanation of how the information from individual findspots cited in the catalogues is referred to in the text is given in Chapter 4.2. Chapter 5 forms the

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[46] Schnurbein & Erdrich 1992, 8-10, with further literature in their notes.

[47] Schnurbein & Erdrich 1992, 9 for historical sources.

[48] See also Todd 1995, 8-10.

core of the thesis, providing an extensive discussion of each finds group, with particular emphasis on the material from funerary contexts.

The remaining chapters (Chapters 6-10) deal primarily with the interpretation of the archaeological record, based on the material evidence. Chapter 6 is intended as a detailed critique of the burial evidence, providing a typology of grave types and a discussion of the burial ritual. A comparative analysis of the evidence from settlement sites is then presented in Chapter 7. Chapter 8 establishes a periodization for the study area which, in turn, is used as a background for dating the individual sites. The application of this periodization also provides evidence for continuity and change on a local (site) and more regional (study area) level. Chapter 9 deals with the evidence for patterns of social differentiation within the funerary data. Here a comparison of the anthropological and artefactual (i.e. grave good) evidence is used to support models for sex and social differentiation. In conclusion, the synthesis in Chapter 10 provides a summary of all the evidence and interpretations from the previous chapters, based on the primary research objectives as set out above in 1.3.

Part Two comprises the text of Appendices I-IV. Appendices I-III provide glossaries of all the recorded archaeological evidence from burial, settlement and stray find sites and findspots respectively. Appendix IV includes the statistical ordering of the graves in Rheindorf used in Chapter 9 for the analysis of status. Part Three comprises all Figures and Tables that pertain to chapters 1-10 of the main text as well as all the Figures pertaining to Appendices I-III illustrating the site assemblages.

CHAPTER 2 THE LANDSCAPE

2.1 The Study Area and its Geographical Elements

The area under study lies to the east of the southern part of the former Roman province of *Germania inferior/secunda* on the right hand side of the Rhine. The region covers an area of *c.* 4000 km^2, stretching as a relatively narrow strip of land along the Rhine for *c.* 170 km of its meandering, modern course (*c.* 75 km as the crow flies). At its widest point, in the south, the study area extends to a distance of *c.* 57 km in an easterly direction. At its narrowest point in the north it only extends *c.* 10 km in an easterly direction. Although the area can be described as lying within the modern political boundaries of the region covered by the Rhineland *Bodendenkmalpflege* to the right of the Rhine, its boundaries are also well-defined geographically. The area is relatively enclosed, extending over parts of three geographically distinct units (see Chapter 1.1 and Fig.1.1).

In the south, it covers the eastern part of the *Niederrheinische Bucht*[49] which extends across both banks of the Rhine. On the right bank of the Rhine the southernmost boundary of the *Niederrheinische Bucht* is defined by the *Siebengebirge* at Königswinter, the edge of the hilly and mountainous ranges of the *Rheinische Schiefergebirge.* At this point the expansive, low-lying embayment opens out of the narrow strip of land along the *Mittelrheintal* (the Middle Rhine valley) bordered to the east by the *Westerwald.*

To the south of Düsseldorf the *Niederrheinische Bucht* begins to merge with the low-lying *Niederrheinische Tiefland.* The most north-easterly limit of the study area coincides with the edge of the *Niederrheinische Tiefland* as it meets the modern political boundary between the Rhineland and Münsterland.

To the east, the study area ascends into the hilly ranges of the *Bergisches Land* on the western edge of the *Mittelgebirge* (the Central Uplands).

The northern boundary of the study area is the southern bank of the present course of the river Lippe. The river was of major importance throughout the Roman period, and earlier, as a riverine route eastwards into Germania. This boundary, although geographical, was primarily chosen on the grounds of the prior existence of published research into the material remains of the Late Iron Age and Early Roman period in the Lippe mouth area directly to the north and north-

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[49] For a detailed discussion of the geographical factors in the area see Meynen and Schmithüsen, 1953-1962. A short account is also given in Gechter 1979, 113-4.

west of the river.[50]
In the Late Iron Age and Roman period the confluence of the Lippe and Rhine was most probably situated at a more northerly location than its present point. For both strategic and communications reasons it is highly likely that the military and later civilian installations at Xanten on the left bank of the Rhine would have been situated opposite the Lippe mouth unstead of further to the north as it is today.[51] Although the Lippe's course in the Roman period remains uncertain, von Petrikovits argues for a probable course lying directly south-east of Bislich.[52] To the west, the geographical boundary of the study area is the river Rhine. Again, it is difficult to be certain about its exact course during the Roman period, since the river was regulated in the nineteenth century. As a result of this regulation the original course of the Roman Rhine has been, for the most part, obscured, especially in the northern part of the study area.[53] Schoenfelder notes, with reference to the area immediately north of the study area, that geological and historical sources verify that the Rhine has taken a more easterly course since the prehistoric period.[54] Kunow suggests that the Roman Rhine would have been multi-channelled along many of its sections, with the river landscape forever changing its appearance, thus continually surprising both the military and civilian inhabitants along its banks.[55] At best, the shifting course of the Rhine can only be plotted with any certainty back to the Middle Ages.[56]

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[50] Reichmann 1979.

[51] Reichmann 1979, 15-6, with further literature.

[52] Von Petrikovits 1952, esp. 47 and note 12 for earlier literature. See also Hoppe 1970, 18. Von Petrikovits 1959a, Abb. 1 shows the various course changes of the Rhine and Lippe around the Bislicher Insel near Xanten and indicates how these changes have affected the location of the military installation of *Vetera II*.

[53] Kunow (1987a, 64 note 3) argues that many of the hypotheses put forward for earlier courses of the Rhine are either too imprecise or incorrect. See also Hoppe 1970; Klostermann 1986.

[54] Schoenfelder 1992, 16.

[55] Kunow 1987a, 64.

[56] According to the Mercator map of *c.* 1590, see Von Petrikovits 1959a, 89-281, and for further literature; 1959b, 282-4, esp. Abb.1. Also Reichmann 1979, 16, note 27.

2.2 Geology and Morphology[57]

The geological and morphological elements within the study area are mapped in Figure 2.1. A large part of the study area is covered by the hilly Bergisches Land, rising to a maximum of 150-200 m above sea level. Geologically, the formation of the oldest parts of this region date back to the Palaeozoic period. However, since its formation, continuous erosion, volcanic activity in the Tertiary and Quaternary periods, as well as sedimentation, mainly during and since the last Ice Age (during the Pleistocene and Holocene periods), have drastically changed its appearance from a mountainous range to a more undulating hilly landscape. This undulating appearance is emphasized by the many smaller and larger river valleys that cut deeply through the hills in a generally east-west direction on their course to the Rhine, from south to north the rivers Sieg, Wupper, and Ruhr, with the Lippe influencing the development of the most northern parts of the area. Most of these river valleys were already formed before the last Ice Age, but were further widened and deepened during and after this period.

Most of the low-lying land within the study area, after being flooded during the Tertiary period, gained its definitive character, i.e. the creation of terraces and river meadows along its main rivers and their tributaries, during the Quaternary period (mostly during the Pleistocene).[58] Within the study area this development particularly applies to the river Rhine. Until the beginning of the Holocene, regular floodings of the Rhine covered the lower terraces with high tide streams or drainage channels. Levees formed next to the streams and, behind them, a wide strip of fertile, high tide loam-covered land. The fine sand from the valley meadow lands was blown onto the lower terraces where it formed dunes. The valley of the Rhine itself thus comprises lower terraces covered with Holocene fluvial sediments and fossilized stream ridges (levees and beds). The other wider river valleys in the study area, i.e. those of the Lippe and the Sieg, are also made up of similar but narrower lower terraces with deposited fluvial sediments. In the transitional area between the low-lying Rhine valley and the *Bergisches Land* are situated the middle terrace plateaus which are mostly covered with coversands and fertile loess deposits. These wind-deposited sediments date at least back to the end of the last Ice Age. These well-drained Pleistocene terraces, where the groundwater table is nevertheless easily reached in the sand and gravel subsoils, have provided conditions within the Lower Rhine

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[57] For more detailed accounts see, for instance, Deutloff 1976; Hempel 1976.

[58] This account is partly based on Schoenfelder 1992, 11-12.

landscape that are particularly suitable for habitation.
Other important geological elements within the study area which are known to have been exploited during the Roman period include the Trachyt tuff stone, basalt lava and lead, possibly also copper and zinc, outcrops on the edge of the *Siebengebirge* near Königswinter[59] and slate from the *Rheinisches Schiefergebirge*. There is also evidence for iron production on several sites, using iron ore extracted from the so-called *Brauneisenstein* found in the more mountainous areas and bog iron ore from the sandier areas.[60]

2.3 Soils and Vegetation[61]

The *Niederrheinische Bucht* and *Niederrheinische Tiefland* are situated within a temperate climate zone with mild winters and moderately warm summers.[62] This favourable climate for vegetation, together with the mostly flat landscape and the loosely compacted sediment allows, for the most part, a deep-reaching weathering of the soil.
In the western and south-western part of the study area the highest hilly region of the *Bergisches Land* (*c.* 200 m above sea level) is mainly covered by a relatively thin, impoverished horizon of brown soil, principally made up of dry sandy or clayey loam, usually with a high rubble and stone content. Although fertile land, the fairly acidic nature of this soil prevented it being used as intensive arable in the past until the introduction of modern techniques of manuring and liming.
There are no densely wooded regions remaining in the study area. Large areas of the Lower Rhine landscape, especially the higher areas, would have been covered in woodland until as late as the medieval period. Since the prehistoric period these areas would have been gradually cleared for use as arable land.
Deforestation and inadequate cultivation methods have led in some areas to the localized leaching of the podzols, resulting in the spread of *Heide* (moorland). The soils made up of Holocene fluvial sediments within the higher narrow river valleys cutting through the *Bergisches Land* are only slightly alkaline and range from a weak loamy sand to a clay loam. The high groundwater table means, however, that the soils are mostly heavy and wet, only sustaining grassland of

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[59] Appendix II: Königswinter B2 and B41. See also Röder 1974; Gechter & Gechter-Jones 1997, 45-7.

[60] For instance Essen-Hinsel B33, Düsseldorf-Stockum B27, and B41 Königswinter-Bennerscheid (see catalogue entries in Appendix II).

[61] For a more detailed account see, for instance, Maas & Mückenhausen 1971.

[62] Schoenfelder 1992, 14.

varying quality. The control of the groundwater table is possible in flatter lands based on such soils, but is extremely difficult in the narrow, highland valleys.
The middle terraces of the Rhine (between *c.*50 m - 200 m above sea level) in the *Niederrheinsche Bucht* comprise a band of well-drained loess; the most fertile and easily worked soil within the study area and a good tillage and pasture zone of long standing. Along the western edge of the middle terraces the sandy and loamy soils, made up of coversands and gravelly soil deposits are, in contrast, shallow, dry and relatively infertile, only made cultivable today by the use of heavy machinery.
The lower terraces of the Rhine valley comprise deep horizons of Holocene fluvial valley sediments, comprising alkaline, sandy loam and loamy brown soil types (*Parabraunerden*) with a relatively high groundwater table. These fertile soils, combined with the even flatness of the land, are easily worked and suitable for cultivation. Along the lower valleys of the main rivers running through the study area, i.e. the Sieg, Wupper, Ruhr, and the southern bank of the Lippe, in particular at their points of confluence with the Rhine, the fluvial sediments have developed into soils ranging from loamy sand to loamy clay. In general, these soils are naturally fertile (mostly *Auenboden*) although traditionally have mainly only been used as pasture land since the changable nature of the soil prevents its use for overall, year-round cultivation. Immediately along the banks of the Rhine the highly fertile, fluvial sediments are partly subject to seasonal flooding, with a high groundwater table in summer. These water meadows have likewise traditionally been used as pasture and grazing lands (the so-called *Brauner Auenboden*), although in the Roman period these soils were certainly suitable for, small-scale arable farming.[63]
Whilst the fertile soils on the lower terraces of the Rhine would have been extremely favoured by early settlers, modern intensive cultivation, the spread of extensive built-up areas, within the industrial *Ruhrgebiet* for instance, and the evidence for sand and gravel quarrying in the study area have clearly taken their toll on the potential number of relevant findspots which remain to be discovered within the contemporary landscape.[64] Otherwise, there are few indications, such as the presence of *plaggen* soils or other raised, man-made soils, to suggest the changing of soils through time

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[63] Willems 1986, Chapter 1; Kooistra 1996 esp. Chapter 3.3, for a discussion of soil development and the possibilities for agriculture in the Kromme Rijn area of the Netherlands.

[64] See Appendices I-III. Many of the sites listed in the catalogues are known to have been damaged or destroyed by sand and gravel quarrying. The exact number of sites destroyed is unknown.

due to the effects of human activity, particularly modern agriculture.

2.4 Influence of the Landscape on the Distribution of Findspots

A distribution map indicating the location of all the findspots recorded in the study area is presented in Figure 2.2.[65] It can be argued that the pattern of the distribution of findspots can be linked to the evidence presented in the previous sections for topography, soils and vegetation. A problem is that this argument is to some degree self-perpetuating and biased by the nature of modern-day land use.[66] The appropriateness of the soil and topography of the landscape for agriculture and habitation have continued to be decisive factors in the choice of settlement location since the medieval period. Modern land useage may well have destroyed unrecorded a significant number of sites. There is a chance that there remains more sites to be found in the unoccupied, uncultivated higher areas. But again, the poorness of the soil, the density of the woodland until the medieval period, and the general inhospitable nature of the surroundings suggest that whilst a number of sites undoubtedly remain undiscovered, their total would not significantly affect the balance of the present-day site distribution.

Equally problematic is knowing to what extent the recorded sample reliably reflects the spectrum of sites surviving until the present day. In this regard, a number of known factors indicate the almost certain absence of information on unrecorded sites, some of which may still be present in the subsoil, or have been destroyed unrecorded. Landscape changes since the Roman period, such as the changing course of the Rhine, may also have had an effect on the disappearance of sites. More recent medieval, post-medieval and modern-day land use on the other hand, have almost certainly had an effect, with the introduction of intensive agricultural programmes and extensive town development. Other sites may simply have been placed beyond recovery by the growth of woodland and spread of coversand. The chance of discovering archaeological sites remains higher in areas that are more densely populated, or under more intense cultivation. Whilst the map does, therefore, reflect a real distribution pattern, the picture is probably more heavily influenced by the higher chance of finds in these areas. The spread of known sites across the region is fairly sparse and uneven, with noticable clusters around the main centres of modern population (for instance, Cologne, Bonn, Düsseldorf, and Duisburg). Although this may well be a reflection of the situation in the Roman period, the quality of the archaeological reconnaissance of

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[65] In total, 164 sites and findspots. See Chapter 4.1.

[66] For settlement sites, see also Chapter 7, esp. 7.1.

the region to date could well be a controlling factor. No systematic regional survey has been carried out to test the case and investigate the 'site free' zones along the Rhine in particular. Such surveys in the *Limesvorland* of the neighbouring region to the north, the Lippe mouth area,[67] and within other areas of the Lower Rhine province[68] illustrate what effective results can be achieved.

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[67] Reichmann 1979.

[68] For instance, for the Rhine terraces, see Gechter & Kunow 1986; for the Eastern River Area of the Netherlands, see Willems 1986.

CHAPTER 3 HISTORICAL BACKGROUND

3.1 Introduction

The purpose of this chapter is not to assess the current state of knowledge of the relevant historical events and developments that may have influenced both Germanic and Roman activity within the study area, but rather to provide a background presenting the general consensus of the state of knowledge.[69] In Chapter 10 below, these historical developments and their significance are reassessed in the light of the archaeological evidence.

3.2 The Late Pre-Roman Iron Age

One of the aims of the present research is to investigate the degree of effect the Roman occupation had on the native inhabitants and events within the study area. An understanding of the events and developments of the immediately preceding period, the late pre-Roman Iron Age is, therefore, clearly useful to enable an interpretation of any subsequent changes. However, in summarizing the state of knowledge for the Late Iron Age within the study area, or for the Lower Rhine as a whole, it becomes obvious that, whilst the evidence for the Early Iron Age within the study area (during the period of the Hallstatt *niederrheinische Grabhügelkultur*) is as abundant both in the number of recorded sites and finds as well as in number of publications,[70] there is a lack of a comprehensive synthesis of the archaeological evidence for the later Iron Age. This research lacuna is also highlighted by the results achieved through regional studies and excavations in more easterly neighbouring areas of Germania. Wilhelmi's survey of the region between the Sieg and Middle Weser indicated that the unfavourable conditions for settlement prevailing in the wet and weather-beaten hilly or mountainous areas of the Sauerland and Siegerland (parts of the *Mittelgebirge*) have meant a lack of findspots dating from the Iron Age. In contrast, the chalkland hills of northern

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[69] The discussion in this chapter is mainly based on the following: von Petrikovits 1974; Willems 1986; Kunow 1987b; Roymans 1990; Bechert & Willems 1995.

[70] A critical assessment of the huge amount of literature on the thousands of Early Iron Age Hallstatt period remains, particularly the graves, within the study area is neither desirable or appropriate for the present research. Detailed surveys with further literature that discuss either the whole or parts of the study area include Rademacher 1912, Kersten 1948 (esp. Abb. 4 and 6-10 for distribution maps), who also briefly discusses the Early La Tène period, Marschall *et al.* 1954, Reichmann 1979 esp. Karte 6, and most recently Schoenfelder 1992 (esp. his *Fundortverzeichnis* 257-85).

Westphalia were fairly well-populated since the late Hallstatt period.[71] For the whole area between Sieg and Middle Weser, Wilhelmi suggests that towards the end of the pre-Roman Iron Age Elbe-Germanic cultural elements gradually began to infiltrate the sparse indigenous populations, resulting in the development of the Rhein-Weser cultural grouping in the last century BC.[72] The recent excavations of the multi-period settlement remains at Soest-Ardey in Westphalia, south of the river Lippe, have brought to light good evidence for pre-Roman Iron Age and Roman period occupation. On this site, primarily on the basis of the pottery dating, the transition from Elbe-Germanic to Rhine-Weser Germanic culture is proposed to start from the second half of the first century BC onwards.[73]

Directly to the north of the area of this study, a regional study has been published by Reichmann for the later Iron Age and Early Roman occupation around the mouth of the Lippe.[74] Kunow discusses the fact that, in the region of Altkreis Rees north of the Lippe, fairly widespread and extensive field surveys in the 1960s collected evidence that enlarged the number of findspots previously known and enabled a more detailed and comprehensive understanding of the chronology of settlement in the area.[75]

In his study of the Late Iron Age of northern Gaul, Roymans, relying exclusively on published material, includes the present study area within his research.[76] He notes the existence of very few publications on later La Tène period graves and settlements within the German Lower Rhine area, the burials in particular being as a rule, poor in artefacts and thereby less suitable for traditional research into typochronology.[77] Roymans admits, however, that his 'empty' zones are most likely due to the absence of a detailed regional study that would collate the data from the large number of disparate publications.

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[71] Wilhelmi 1981, 9.

[72] Wilhelmi 1981, 57. For further discussion on cultural and tribal groupings see Chapter 10.

[73] Halpaap 1994, esp. 66-7.

[74] Reichmann 1979.

[75] Kunow 1987a, 69 and Abb. 1-4.

[76] Roymans 1990.

[77] Whilst he states that most chronologies in the area are based on a study of settlement material, Roymans does note Reichmann's 1979 study of the Lippe mouth area as an exception, where a chronological scheme is given based on the study of grave goods: Roymans 1990, 7, table 1.

Kunow[78] states that the La Tène D1 period (first half of the last century BC) is represented throughout the whole of the *Limesvorland*,[79] whereas the second half of the first century BC is only represented by reliably dated findspots to the north of the Lippe, with none occurring to the south in the present study area. Even sparser is any evidence for continuity from the pre-Roman Iron Age into the Roman period. This absence of La Tène D2-3 period material is attributed by Kunow again to the lack of research. Since his publication that gap has been partly filled by the publication of the small excavation at Essen-Burgaltendorf (B32) in 1993.[80] This Germanic settlement consisting of at least one aisled *Wohnstallhaus* could be dated on the basis of the pottery between the first century BC and the first decades of the first century AD. Stray finds from the topsoil might indicate the reuse of the area, possibly as a Germanic cemetery (A75), in the second - third century AD. A second late Iron Age Germanic settlement that continued into the Augustan period has been identified near Königswinter in 1995/6 (Königswinter-Bennerscheid, B41). What made this site even more interesting is the presence of an enclosure consisting of a round-cornered, square palisaded wall combined with a ditch directly next to the settlement. Within both the settlement and the enclosure is evidence for the production of lead. According to the current interpretation, the walled enclosure is seen as the defended trade post of an Augustan period lead trader operating for the Roman military across the river.[81] Occupation on this site, as well as on Essen-Burgaltendorf (B32) clearly break off around the second decade of the first century AD.

Clearly there is a need for further research into the identification and definition of new findspots in the field, as well as through the analysis of the backlog of unpublished museum and private collections. Equally a reassessment of the chronology of some known sites in the study area may be necessary, for example to specify the end dates of the Late La Tène settlement at Porz-Lind,[82] the small fortified settlements[83] of Bensberg-Erdenburg (covering an area of 2.5 ha) near

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[78] Kunow 1987a, 69 note 24.

[79] See the findspots listed in Marschall *et al.* 1954. Notes on new finds are to be found in the annual reports, or *Jahresberichte*, of the *Bonner Jahrbücher*. Kahrstedt (1950, 64 note 7) also lists several Late La Tène sites.

[80] Brand & Hopp 1994.

[81] Gechter and Gechter-Jones 1997.

[82] Joachim 1980; 1982a, 161-2.

[83] For terminology see Roymans 1990, 194-9 and fig. 8.12.

Bensberg,[84] and the Petersberg (covering an area of 7.5 ha) near Königswinter,[85] as well as the smaller settlement at Essen-Delwig[86] and some of the burials in the cemetery at Rheindorf.[87]
The sparsity of artefacts within burials as a result of contemporary ritual can obviously lead to an inability to correctly date some contexts. The difficulty in securely dating a context to the last phases of the La Tène or the first phases of the Roman period when faced with the presence of only a small amount of native pottery and no Roman imports is clearly a problem that, to date, has not received the attention it is due.[88] A step forward has been made in the refinement of the dating of La Tène glass bracelets, which Roymans and Rooijen suggest should be regarded as type fossils for the last stages of the La Tène D and earliest Roman period (i.e. the Augustan period) in the Lower Rhine.[89] Unfortunately, Reichmann lists only one example of these that has been found in the study area, in Duisburg-Wedau.[90]
The pattern of dispersed, small agrarian settlements that Roymans pictures for the South Netherlands, Belgium and other parts of the Lower Rhine,[91] may well, after further research, prove also to be true of occupation within the study area during the closing stages of the La Tène and early Roman period. However, distinctions such as the presence of the fortified settlements of Erdenburg and Petersberg may alternatively reflect a certain localized differentiation in the settlement structure.[92].

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[84] Joachim 1974, 67-8, Abb.7-10, & 81 note 38 for earlier literature.

[85] Kersten 1937, 71; Joachim 1982b. Kahrstedt (1950, 64 note 8) states that the chronology of both the Erdenburg and the Petersberg extend into the Augustan period. Cf. Appendix III, Findspot C1.

[86] *Bonner Jahrbücher* 1955/56, 457.

[87] Von Uslar 1964. See catalogue entry A22 in Appendix I.

[88] This chronological problem will be discussed further in Chapter 8.

[89] Roymans & Rooijen 1993, esp. 4.

[90] Reichmann 1979, 445 no.22 and Karte 7.

[91] Roymans 1990, 213. See also his research into the landscape development of the Meuse-Demer-Scheldt region of the southern Netherlands for example, in Roymans 1995a, 2-24.

[92] Kahrstedt (1950, 64) lists the Güldenberg near Altenrath as a possible third oppidum in the area, although this site is not mentioned by Roymans (1990).

The ethnic identity and origin of the people living in the region at the end of the Iron Age has been much debated, in particular by Hachmann *et al.* and later Roymans and Baatz,[93] and will be discussed further in Chapter 10. It suffices to state here that the problem of the ethnicity of these 'people between Germans and Celts', as Roymans calls them,[94] centres around the interpretation of historical sources which present a confused and contradictory picture. At this stage, with the present level of archaeological evidence, any discontinuity between the Iron Age and Roman period cannot be conclusively proved. Admittedly, evidence to support continuity beyond the Augustan period is minimal. The commonly-stated model, although not necessarily the only explanation, is that there was either a reduction in the size of the population or a change in the population composition compared to the Hallstatt and Early La Tène periods due to the restless situation that existed throughout the whole north-west European zone including Belgium, the Netherlands and North Gaul as well as the Rhineland. Germanic migrations southwards and westwards might have clashed with the resident Celtic groups and Roman expansion eastwards.

3.3 The Roman Occupation of the Southern Lower Rhineland

The material evidence for occupation within the study area during the Roman period is the subject of the present research and will therefore be discussed in later chapters. This section presents a survey of the mainly historical evidence that already exists for the Roman occupation of the province on the left bank of the Rhine, insofar as it reflects the contemporary attitude towards the neighbouring Germanic peoples. This attitude was particularly reflected in the manner in which the frontier, or *limes*, was established and maintained. It is argued here that an understanding of the changing nature of the Roman Empire is directly relevent to the course of events within the study area. Changing political attitudes of the emperors and internal political unrest were clearly reflected along the frontier and had consequences for their attitude towards the adjacent territory.

The information and interpretation presented below is not new. The body of literature that exists for this area discussing the events reported in the classical sources and the supporting archaeological evidence is as immense as it is comprehensive and cannot be cited in

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[93] Hachmann *et al.* 1962, Roymans 1983; 1990, 11-6; Baatz 1996/97.

[94] Roymans 1990, 14.

detail here. For this reason, only a summary of relevant evidence is included.[95]

Knowledge of the first Roman presence in the Rhineland is based on Julius Caesar's own *Commentarii* of his Gallic campaigns, the *de Bello Gallico* fought between 59 and 51 BC. General unrest and the ever-increasing number of threats to Rome and her authority, gave Caesar the opportunity to begin a series of military operations whose ultimate success meant the conquest of Gaul up to the Rhine. The need for a military presence to suppress dangerous revolts against the newly-established administration was constant, forcing Caesar to recognize the precarious nature of the peace in Gaul. Such a peace could only become permanent if the buffer zone could be controlled, i.e. the territory, known in German as the *Vorfeld* or *Vorland*, situated in front of his main battle-lines. To this end, Caesar began a systematic destruction of existing tribal structures (as described, for instance, in his own account of the extermination of the Eburones in 53 BC)[96] which left the way clear for the introduction of Rome-friendly peoples to the region.

A need to control the buffer zone led to Caesar's crossing of the Rhine in 55 BC and again in 53 BC at a location most probably in the vicinity of the Neuwied Basin (*Neuwieder Becken*) *c.* 40 km south of the study area.[97] These raids were primarily intended as an expression of the manifest power and superiority of Rome. Such an intention could be said to have been all the more easily achieved since Caesar chose to cross the Rhine, which he described as being the boundary between the Celtic and Germanic peoples (a convenient, politically-motivated, simplification of the actual situation[98]) into the tribal territory of the already Rome-friendly Ubii (see Fig.3.1).

Although the breaking up of the anti-Roman coalition in North-East Gaul in 53 BC meant that the authority of Rome was secured in the Rhineland with the Rhine as the frontier, it was only in 51 BC, with the last campaigns against the Belgae and the Treveri, that Caesar could proclaim the absolute conquest of Gaul. With this conclusion the Rhineland became part of the Roman world, a state of affairs which was to last for almost the next five hundred years. Until the last two

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[95] The most concise and recent publications in this respect (citing earlier literature) are all in German and include: Von Petrikovits 1974; 1978; Kunow 1987b, as well as the *Zeittafel* with a chronological list of events in the province in the same volume (Horn 1987, 659-70); see especially for a more recent summary Bechert & Willems 1995. In English, see Todd 1995.

[96] Caesar, *Bellum Gallicum* VI & VIII.

[97] Baatz 1996/97, 37 and note 7.

[98] See Chapter 10.

decades of the century, however, the troops remained in Central Gaul, thus not on the Rhine, in order to enforce and secure the new order. After the return of Caesar to Rome in 50 BC, there is no more record of events in the region until, in 39-38 BC, Agrippa began a policy of resettling Germanic tribes, filling up the dangerous vacuum of empty territory left by the Gallic wars, particularly in the strip of land along the left hand bank of the Rhine and in the bordering hinterland. The Ubii were resettled from across the Rhine into the region directly opposite the study area.[99]

Whilst the Romanization of Gaul progressed fairly speedily, the Germans on the right bank of the Rhine remained opposed to the neighbouring military presence and continued their raids across the Rhine. Long-term remedies were sought for this situation. The building of an extensive road network, including the road from Lyon along the Moselle over Bitburg and Jünkerath to Cologne and possibly Neuss, not only served to connect the conquered areas with each other, but, in the Rhineland at least, was intended to display a *Sicherungspolitik* to the Germanic tribes to the east. After 19 BC attention was once again focused east of the Rhine. Matters came to a head in the region after the defeat of Lollius in 17 or 16 BC by the Sugambri, supported by the neighbouring Tencteri and Usipeti. Augustus, from this moment, took personal control of the Rhineland. In 13 BC command of the military campaigns against the Germans was given to his stepson Drusus and Augustus set in motion his intentions to invade and conquer the Germans beyond the Rhine and Upper Danube as far as the Elbe, which was now perhaps conceived as the new front line.

The term *limes*, or more correctly *limes ad Germaniam inferiorem*, to describe the fortified military installations along the Lower Rhine was introduced only in the Late Antique period. At the beginning of the Roman period, at least in the early first century AD, the boundary of this part of the province comprised little more than a fortified road, a *via militaris*, running along the highwater-free edge of the lower terraces on the left bank of the Rhine. During the reign of Augustus archaeological evidence attests to the presence of only small military units, marching and supply camps for operations across the Rhine.[100] During 15-12 BC, the beginning of the offensive saw the establishment of further strategically placed, larger bases along the rivers Rhine and Lippe (the most important supply route into German territory) as a necessary prerequisite for campaigns to the east. The Elbe was crossed in 9 BC and the Sugambri were eventually suppressed. Literary sources state that part of the tribe (*c.* 40 000 Germans) were

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[99] See, most recently, Baatz 1996/97, 37 .

[100] Bechert & Willems 1995, esp. 9 & 24.

resettled in Roman territory on the left of the Rhine in 8 BC.[101] After the death of Drusus, subsequent campaigns, initially under Tiberius, took place on the right bank of the Rhine. The whole area between the Rhine in the west and the Elbe in the east was seen as part of the occupied province. With more military sites being established along the Lippe, the military presence along the Rhine was strengthened, particularly in the region from the Dutch Neder-Rijn to the Cologne-Bonn basin (*Kölner-Bonner Bucht*), to become the major supply line, i.e. the logistical basis for future offensives.

The scale of Augustus' plans had been clearly too great. After the ignominious defeat of Varus with his three legions in AD 9 by an alliance of tribes (probably the Marsi, Bructeri and Chatti under the leadership of the Cherusci (under Arminius), it became evident that there was little or nothing to gain by further attempts to occupy land east of the Rhine. The details of the *clades Variana* are well-known and need not be repeated here, not least since the site of the disaster is now presumed to be north-east of the study area, near Kalkriese.[102] Certain aspects are worth emphasizing here, however, since they shed important light on the state of affairs that existed along the Rhine frontier and within the adjacent German territory at this time and had important consequences for Rome's attitude towards Germania as a whole. The wiping out of the *legiones XVII*, *XVIII* and *XIX* with nine auxiliary units and the subsequent attack on military establishments on territory to the right of the Rhine indicates that the Germans had clearly found new strength in a combined alliance. The Roman forces comprised 20 000 men, half of the Rhine army which itself comprised a quarter of the whole Roman army at this period. The figure of Arminius, the leader of the Cherusci, has passed into legend. It is interesting to reflect on what circumstances or treatment of his peoples and allied tribes had changed a man apparently brought up in Rome and with the rank of equestrian into an opponent of the new order.

In order to salvage the situation, Tiberius returned to the Rhine and increased the military presence to eight legions (see Fig. 3.2). The splitting of the army in two, with four legions on the Lower Rhine commanded from *Vetera* and four on the Upper Rhine commanded from Mainz, laid the foundations for the later division of the provinces into the two entities of Lower and Upper Germany. However, Germanicus' lack of success against a still cohesive enemy forced the now emperor Tiberius (AD 14-37) to decide against any further attempts at

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[101] Dio 55.6-8.

[102] Schlüter 1992; 1993.

annexation beyond the Rhine.[103] Never again were any serious attempts made to bring large areas of the territory east of the Rhine and north of the Danube under direct Roman occupation. Whittaker argues, however, for a somewhat vague borderline in Roman thinking in defining the difference between the limits of organizational space and the claims to imperial control beyond these limits. This implies that from Rome's (and the emperor's) point of view, areas outside the military borders could still be seen as part of the empire and the inhabitants seen as subjects. This would have been the case even when the political situation was in fact rather unstable.[104]

Internal wranglings among the German tribes at this period disintegrated into tribal fighting and intrigue. This situation was characterized by the enforced exile of Marboduus, the chief of the Marcomanni, and the assassination of Arminius by one of his own landsmen. For the next two hundred years no threatening external pressure was placed on the Lower German *limes*.

Under Tiberius the legionary fortresses were at Bonn, Cologne, Neuss and Xanten, although these were not all contemporary. After the Varus disaster, Tiberius had two legions (*legio I*, *legio XX*) stationed at Cologne. The Roman Navy, the *Classis Germanica*, was stationed at Cologne-Alteburg. Twenty to twenty-five years later *legio I* was sent to Bonn and *legio XX* to Neuss. Xanten remained a double legionary fort (*legio V*, *legio XXI*) because of its role as base for the Lower German army but also, importantly, because of its strategic significance situated opposite the mouth of the Lippe. Under Tiberius, 22 000 legionary soldiers and 20 000 armed auxiliary troops were stationed to protect the whole of the Lower German *limes* to the North Sea coast. Hardly any event of note along the *limes* can be attributed to the reign of Gaius (AD 37-41), neither was an active *Germanenpolitik* pursued by Claudius (AD 41-54). Several short campaigns are, however, recorded for this period, for example, those of Corbulo against the Frisii and Chauci to the north of the study area, before he and his troops were recalled to the Rhine by Claudius in AD 47.[105] Claudius' own political and military interests lay not on the Rhine but with the occupation of Britannia. In employing his troops elsewhere, Claudius did not underestimate the German enemy and his decision to retain the remaining army in Lower Germany along the Rhine was certainly the right one. Claudius' preference was for diplomatic means to achieve Rome's interest to the right of the Rhine, attempting to exploit

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[103] The concept of a 'frontier' at this date is somewhat contentious. See Bechert & Willems 1995; Callies 1995; Baatz 1996/97, 44-6.

[104] Whittaker 1994, Chapters 3 & 4.

[105] Callies 1995, 22.

inter-Germanic conflicts and decreasing pressure on the Rhine by means of client relationships with the Rome-friendly tribes. Under Claudius, for the first time, the chain of forts along the Rhine became a closed system. The location of the forts indicate the defensive nature of the new system. It can, however, be questioned as to whether it was a conscious decision to abandon altogether an offensive *Germanenpolitik*.[106]

The level of control on the *limes*, as well as the relative peace that appears to have ensued during the reign of Nero (AD 54-68) were, however, not felt adequate to allow any relaxation of this defensive strategy. Apparently it was still felt necessary to keep the military buffer zone along the right bank of the Rhine free from Germanic settlement since, as Tacitus records, all requests by the Frisii and Ampsivarii to settle in this zone were denied.[107]

The crisis in the imperial succession in AD 69 after the death of Nero, known as the 'year of the four emperors', brought an abrupt reversal of the peaceful conditions existing along the Lower Rhine. Vitellius, since AD 68 Commander of the Army on the Lower Rhine, proclaimed himself emperor in Cologne in AD 69 and requisitioned 70 000 soldiers from the Rhine army, 10 000 of whom had been responsible for the frontier defences of the Lower Rhine, to march to Italy to ensure the success of his claim in Rome. That the frontier, which had been left in a catastrophic condition with the removal of so many troops, could not be adequately defended was a fact not lost on the German adversaries. Such conditions led to the Batavian revolt of AD 69/70, led by Civilis, a Batavian of noble birth and also former commander of a Batavian unit stationed on the Lower Rhine. Civilis, whilst officially supporting Vespasian's imperial claim over that of Vitellius, at the same time wanted the independence of the Batavians, a Germanic tribe living within the empire with the status of *gens foederata* and, in cooperation with Celtic tribes such as the Treveri, the establishment of an *Imperium Galliarum*. As well as being supported by his Batavian troops, the Tencteri and Bructeri from across the Rhine are also recorded as joining his cause. This is not the place to go into the details of the Batavian revolt, except to say that archaeological evidence reveals burning layers in almost all the Rhineland forts dating to this period and the most strategically important fort in the area, *Vetera*, was burnt to the ground, indicating widespread revolt and collusion along the Lower Rhine. After Vespasian's victory in AD 69, it was necessary to send Cerialis with orders to defeat Civilis (achieved in AD 70) and reconquer the

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[106] See Whittaker 1994, Chapters 3 & 4. The theory that lands across the Rhine remained to some level under Roman control is discussed in Chapter 10.

[107] Tacitus *Annals* 13, 54; Kunow 1987a, 64-5; 1990, 87-8.

Lower Rhine.
As a consequence of the Batavian revolt, the reign of Vespasian (AD 69-79) is characterized by the complete rebuilding of the frontier defences and the first sign of a strategic concept being adhered to in the stationing of troops. These troops no longer comprised men commandeered from the area, but soldiers of foreign origin, in order to combat the threat posed by the adjacent Germans. By this time there was, on average, only a distance of 10 km separating one fort from another, thus closing the remaining holes in the Claudian *limes*. This concept of defence was to remain the strategy for the control of the Lower German *limes* until the third century (see Figs. 3.3-4).
The strategy for the defence of the *limes* and the stationing of troops in the Vespasianic period can be explained as being a direct result of the circumstances and conditions existing in the Germanic territory across the Rhine.[108] Opposite, and to the south of, the southernmost part of the study area, the *limes* defence comprised a *cohors equitata* stationed at Remagen, the legionary fortress at Bonn with two units and the Navy at Cologne-Alteburg. Further strengthening of this section was apparently not considered necessary since the adjacent buffer zone contained no enemy.[109] In addition, this section of the *limes* was protected by the natural barriers of the Siebengebirge and the Bergisches Land. For the remaining part of the *limes* opposite the study area northwards of Cologne (and continuing until the Dutch border), defence was controlled in a fundamentally different manner. As well as the legionary fortresses at Neuss and Xanten (11 000 men), seven or eight *alae* were stationed in the area. This area, opposite the tribal territory of the Tencteri, was defended exclusively by cavalry units, no infantry were stationed there. According to Tacitus, the Tencteri provided some ot the best horse riders amongst the Germans.[110] Roman strategy clearly seems to have entailed confronting like with like (and presumably superior). The *alae*, whose military expertise and manoeverability surpassed that of the cohorts, protected what was seen as the most dangerous and vulnerable section of the frontier.
Breeze discusses the role of the cavalry along the frontiers from the Hadrianic period onwards. He argues that several factors operating together probably determined the nature and scale of the Roman cavalry forces on any particular stretch of the frontier. Breeze points out three main factors that may have led to a concentration of three *alae* up river to the south of the legionary fortress of Vetera clustered around Neuss, or *Novaesivm* (with another two to the north). Firstly,

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[108] See Kunow 1987b, 67-8; Breeze 1992, 24-32.

[109] See Chapter 10 for further discussion.

[110] Tacitus, *Germania*, 32.

the nature of the lower-lying terrain to the east of the river may have made this a more suitable method of control than infantry alone. Secondly, the importance of protecting the river Lippe, either as a trade route, or more likely as a potential invasion route into Germania. Thirdly, the potential threat from the, possibly substantial, Germanic population in the valleys of the Lippe, Ruhr and Wupper may have been equally, or more, instrumental in determining the necessity for a strong force here.[111]

Although no serious attacks on the frontier are recorded during Vespasian's reign, a successful campaign led by Rutilius Gallicus against the Bructeri in AD 77 is recorded.

Under Domitian (AD 81-96), the basically peaceful situation along the Lower German *limes* stayed almost as it had been under Vespasian. After the AD 70s, diplomatic rather than military means were more readily used in dealing with the German tribes. Shortly after AD 80 the provinces of *Germania inferior* and *Germania superior* were formed under their own separate commands and administrations.[112] A further campaign against the Bructeri, which, according to Tacitus, resulted in a client king being placed on their throne, may well have been in the reign of Nerva (AD 96-98).[113]

During the following period of the so-called 'adopted emperors', the province of *Germania inferior* entered its best decades, with little unrest being recorded amongst the neighbouring Germans. It can be concluded from Trajan's (AD 98-117) reduction of the troops along the Rhine, i.e. the removal of the legion from Neuss, Koenenlager, in order to strengthen his campaigns for the annexation of Dacia. Whilst it could be argued that the importance of Dacia was simply being put in front of the security of the Rhine, it seems unlikely that only three legions would have been left in the province, had the frontier not been relatively peaceful and under no immediate threat. In fact, in the course of a hundred years, the strength of the Rhine army in the Lower German province can be seen to have been reduced by a half: 42 000 under Tiberius, to 21 000 under Trajan. Whilst one might argue that this reflected the unimportance of the region to the emperor, it is more likely that the reduction of the troops during this period is another indication of peaceful conditions that existed. This is

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[111] Breeze 1992, esp. 24-30 & Map 5.

[112] Willems (1986, 404-5) states that, although there are no historical data as proof, whereas the two German provinces did not exist before AD 80, they had certainly been created by AD 100. Bechert (1995, 9) states that this split from the province of Gaul took place shortly after AD 83/4.

[113] The presence of a Roman military camp in the study area, possibly related to the Flavian campaigns against the Bructeri, is discussed in Chapter 7.3 below.

possibly supported by the heavy investment in infrastructure that, in contrast to the reductions, seems to have taken place during this period.[114]

The Hadrianic and Antonine periods saw the continuance of the earlier defensive strategy, grouping units beside a line of advance, and the gradual physical strengthening of the frontier system by rebuilding the earlier wooden forts in stone.

The catastrophic consequences of the Marcomannic Wars (AD 169-175, AD 178-180) on the provinces of Noricum, Raetia and Upper Germany, had little visible repercussions on Lower Germany, which remained peaceful.

Under Commodus (AD 180-192), a German raid on the province is briefly mentioned, although the name of the tribe is not recorded.

The Lower German defence system in the first half of the third century under the Severan emperors remained much the same as in the preceeding period. Any raids that may have taken place across the frontier are not recorded, However, the fact that Lower German troops were required by Caracalla (AD 211-217) to reinforce his attack on the Alamanni who were threatening the Upper German *limes* to the south (AD 213), would certainly have left the Lower Rhine with a seriously reduced capacity for its own protection. Again in AD 234, Lower Rhine troops were used by Maximinus (AD 235-238) to combat invasions by the Alamanni and Chatti. The short-lived and chaotic reigns of the 'soldier emperors', a series of quick-changing candidates put forward by the army, did nothing to improve the security and stability of the province. By the mid-third century pressure on the empire's frontiers from hostile peoples was becoming insupportable. The further withdrawal of troops from the Rhine and Danube armies by Valerian (AD 253-259/60) in order to fight the Sassinids in the Persian Wars, was an opportunity not lost on the Germans. What became a personal debâcle for the emperor in Persia also had disastrous consequences for the Lower Rhine frontier where Rome was confronted with the Franks: the old enemy with a new name. The Franks, a loose confederacy of existing Germanic tribes, welded together during a time of change in the tribal geography of the early third century, comprised, among others, the Bructeri (by that time possibly merged with the Tencteri), Chamavi, Chatvarii and Ampsivarii. At the end of AD 256, or the beginning of AD 257, the Franks crossed the Rhine, most probably in the middle section of the Lower Rhine frontier, near Krefeld-Gellep. There was no army, either on the frontier or within the province, that was of any size strong enough to stop them.

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[114] Dendrochronological dating of recent finds along the *limes* in the Netherlands seem to indicate substantial building programmes under Trajan and especially Hadrian in the Lower Rhine area (pers. comm. W.A.M. Hessing, ROB, Amersfoort, The Netherlands).

Whereas the empire's defensive strategy as it had developed in the late first and second centuries had implicitly assumed that the army would only have to mount major operations in one theatre at any one time, the empire was now faced with simultaneous threats from several points around its perimeter.[115] These threats proved too much for the Roman strategic system which started to disintegrate and led to the collapse of imperial control in the Lower German province and the setting up of the Gallic Empire under Postumus (AD 260-269) with Cologne as the capital. Postumus succeeded in holding the *limes* against the Germans until AD 268 when he lost the support of the army. With the dissolution of the Gallic Empire and reversion to *Imperium Romanum* under Aurelian (AD 270-275) and the removal of the Imperial residence from Cologne to Trier in AD 271, the objectives governing the now province of *Germania secunda* were fundamentally changed: the security of the inner province and civilian self-defence were the new order, with the appearance of protective signal stations in the hinterland along the main routes and roadways.

The overall picture of the later third-century empire is one of profound stress affecting all the principal organs of government and defence.[116]

The fortification and walling of towns such as Cologne can be seen, for the most part, as a reaction to the general unrest and as protection against attack from across the river. Throughout the last part of the third century, the Frankish attacks steadily increased. In AD 276 *Vetera II* was destroyed, to be rebuilt on a new, smaller site as *Colonia Ulpia Triania (CUT)*, with a defensive wall and double ditch. A new order was needed since, by the period of Diocletian (AD 284-305) and the reign of the Tetrarchy, with Constantius and Maximian ruling the western empire, the Franks were not just crossing the Rhine on raids but were now permanently settling within the empire.

The emperors of the third century had been essentially conservative in their view of the organization, strategy and tactics of the army which they had inherited from Augustus and his successors. The work of strong emperors such as Aurelian and Probus (AD 276-82) had been able to use it to good effect to start to stabilize the situation and this work was carried to its conclusion by Diocletian and Maximian. During the later third century, from the time of Gallienus (AD 260-8) on, two important modifications were introduced into the army. The first was the appearance of the *comitatus*, a body of troops in direct attendance on the emperor himself. The second was the increasing importance of cavalry, like the *comitatus* detached from the frontier armies. It was however only in the fourth century, under Constantine I (AD 306-337),

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[115] Cleary 1989, 1. See also Luttwak 1976, 145-54.

[116] Cleary 1989,1-2.

that the 'new model army', as Cleary calls it, was devised.[117] The former two-fold division into legions and auxiliaries was replaced by a new division into *limitanei* (lower-grade frontier troops) and *comitatenses* (higher-grade mobile field-armies). The *limitanei* were the decendants of the units which had manned the frontiers from the beginning of the second century or earlier. These were charged with policing and holding the frontier both against small-scale acts of aggresion and large-scale invasions. The *comitatenses* developed out of the late third-century *comitatus* and were increasingly stationed away from the emperor, becoming instead regional field armies that could intercept invaders if the frontier was breached. Although there is still only a small amount of evidence to support the theory, it seems clear that while the late Roman army bore the titles of the old-style units such as legion or cohort, their size probably reduced and internal structure most probably did not stay the same.[118] Whilst the number of units may have increased over that of the second century, the number of troops at this period is not known, though they were most probably present in reduced numbers and the size of the units probably differed greatly since archaeological evidence suggests that the size of the Late Antique forts were not all the same, as they had been in the first to the third centuries.

As the fourth century progressed, the empire experienced difficulty in recruiting enough troops from amongst its own people. The Lower German province was no exception in this. Increasingly troops were employed from outside the boundaries of the empire. The *laeti* were made up of barbarians who had surrendered to the empire and were settled in ethnic groups in areas of the western empire, supplying recruits in return for permission to settle and use of land. The *foederati* were bands of barbarians who entered the empire under a treaty arrangement, retaining their ethnic identities, methods of fighting and leaders. As Cleary states, however, there is no evidence for federate troops proving unreliable or deserting to the barbarian side in peace or war. What most of the barbarians wanted, and increasingly gained, was a share in the Roman system.[119] Indeed, the known history of the fourth century shows that, in the main, it was basically a period of military stability along the Rhine.

Four campaigns against the Franks were led by Constantius' son Constantine, or his son Constans, between the years AD 306-318/9. For Constantine (AD 306-337), it was not enough to cleanse the province of these invaders. In AD 310, a bridge was built across the Rhine protected by the fort of *Divitia* at Cologne-Deutz on the right bank, a

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[117] Luttwak 1976,170-88; Cleary 1989, 4-5.

[118] Cleary 1989, 5-6.

[119] Cleary 1989, 7.

prototype Late Antique fortification. Constantine's successful campaigns ensured twenty more years of peace. However, in AD 341, four years after his death, the Franks once again crossed the Rhine. The Frankish infiltration could no longer be controlled and the German contingent continued to grow in the province. Although the Rhine remained the official frontier of the empire until the fifth century, by this time the *limes* had no buffer zone with military power over the Rhine. In AD 350 Constans (AD 337-350), the victim of a revolt in Trier, was replaced by the usurper Magnentius (AD 350-353), a soldier of high military rank who crucially had the support of the Gallo-German army. His removal of 36 000 troops to fight Constantius II (AD 337-361) in Illyricum and his subsequent defeat, meant such substantial losses from both the western and eastern armies, that the fighting power of the Roman army as a whole was seriously weakened for decades. On the Lower Rhine in particular, the internal political conflicts and withdrawal of so many troops had left the frontier insecure and incompletely defended. In the years AD 352 and 353 the Alamanni on the Upper Rhine and the Franks on the Lower Rhine crossed the river in great waves and broke deep into Gaul. Cologne's defences held until AD 355 although the province of *Germania secunda* was, once again, no longer under Roman control.[120]

The literary account of Ammianus Marcellinus, accompanying Julian to the Lower Rhine in AD 350, under order of Constantius II to reconquer the province, chronicles that there only remained a fort at Remagen and an intact watch-tower near Cologne. Julian, however, apparently took over the provincial capital without opposition and brought the Franks to heel. By summer AD 358 could once again see the Rhine as the frontier of Roman territory.

After a peace won by reconquest that lasted hardly ten years, in AD 364 new threats were being posed by waves of Frankish and Saxon invasions by both land and sea. In the short term, events remained stable and a new building programme instigated by Valentinian (AD 364-375) built new forts and fortified old ones, as well as constructing more crossings over the Rhine in an effort to strengthen the reestablished defensive concept.

The *Notitia Dignitatum* reveals that by the end of the fourth century there were three major and two minor *limitaneus* commands in Gaul and *Germania prima* although for the Lower Rhine area of *Germania secunda*, the document reveals almost a complete depletion of regular troops. The conclusion that has to be drawn from this is that the region's

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[120] Cleary states (1989, 18) that according to some accounts the eastern emperor Constantius II instigated the barbarian invasion across the Rhine to weaken and distract his opponent Magnentius and to avenge his brother Constans' death. If this was the case, it proved too successful and after the overthrow of Magnentius, Constantius himself was unable to overthrow the Alamanni and their allies.

defence was left largely in the hands of irregular *foederati* units. These were probably more independent Frankish groups, only nominally serving Rome.[111]

During the last phases of the Roman period, the Lower Rhine frontier became the foremost line of a defence-in-depth strategy and was thus continually subjected to invasions and attacks (see Figs. 3.5-6). Willems presents a model for the fourth-century defence in depth system of *Germania secunda*.[112] In view of the numerous uncertainties and unknowns that exist, Willems makes no attempt to distinguish between different (i.e. Diocletian, Constantinian, Valentinian) stages of development within the system, although he states that as a representation of the facts and some assumptions, it is largely valid only for the Valentinian system. Adjacent to the study area, Willems depicts the existence of military fortifications along the frontier at Xanten, Rheinberg, Moers-Asberg, Krefeld-Gellep, Neuss, Haus Bürgel and Bonn. The map also depicts the road forts, the fortified settlements and *burgi* established along the land and water routes within the province.

The gradual process of the German province's disintegration from the empire took place during the fourth century. Historical sources are unfortunately inadequate in assessing the speed with which or order in which events occurred. It was not, however, the local situation that proved to be the turning point in the history of the province, but rather events in the east. In AD 378, two-thirds of the eastern army under Valens were decimated by the West Goths at Adrianople. The empire as a whole could not sustain such huge losses and was divided in AD 379, with Gratian (AD 375-383) emperor in the west and Theodosius (AD 379-395) in the east.

Gratian's ultimate removal of the seat of power from Trier to Milan in AD 381 was clearly more than just a change of residence. It indicated a now deep-seated indifference to the defence of Gaul, with more regard being given to the defence of the Italian 'mother country'.

Further Frankish invasions, for the most part unchecked, are known to have occurred during the reign of his successor Magnus Maximus (AD 383-388).

The actual date at which the frontier defences finally fell remains a matter of confusion and some contention. Bechert cites the year AD 402 as the beginning of the end, when Stilicho recalled numerous units from Gaul to defend Italy against the Goths.[113] The breaking up of at least the southern part of the Rhine *limes*, was not until the year AD

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[121] See, for instance, Cleary 1989, 21 & fig. 3; Whittaker 1994, 251.

[122] Willems 1986, fig. 143, 292-3.

[123] Bechert 1995, 27.

406/7 in the reign of Honorius (AD 395-423)[124]. The northern front apparently held out for a few years longer. The reign of Honorius was certainly the last time that any sort of central control was still backed by force. Willems suggests either AD 423, the time of Honorius' death, or earlier in AD 406, the date of a massive successful invasion launched by the Vandals who crossed the Rhine at Mainz, as the formal historical events which terminated the Roman period.[125] The Late Antique *limes* of Germania secunda may not have been finally given up until AD 413 at the latest, after the death of Jovinus (AD 411-412). This dissolution of the *limes* probably took place relatively peacefully, since by this time the already large numbers of migrant Germans settled on land left of the Rhine meant that there was nothing 'Roman' more to defend.

The fifth century was characterized by the systematic elimination of all Roman strongholds in the area. Among them, the town of Cologne was not conquered by the Franks until AD 460. The gradual unification of lands controlled by warlords and petty kings culminated by the end of the fifth and beginning of the sixth centuries AD with the emergence of the Merovingian kingdom under Childeric and Clovis and their successors.

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[124] Kunow 1987, 102.

[125] Willems 1986, 27.

CHAPTER 4 CLASSIFICATION OF THE FINDSPOTS

4.1 The Compilation of an Inventory of Archaeological Data

A total of 175 sites and findspots have been identified in the study area. The location of each of these is shown in Figure 4.1. This distribution map is the result of the primary aim of the research, which was to collect, evaluate and interpret all the relevant archaeological data from the study area. The first step in its production was to assess the incidence, nature and chronology of all recorded sites in the region during the Roman period. Active collection of new field data was not undertaken as the research was confined to the assessment of previously recorded evidence. The inventory of findspots was achieved by undertaking a detailed survey of all relevant literature, surviving original excavation notes and plans as well as museum collections and archives containing evidence from the study area.

A list of findspots within the designated region was compiled from existing archives, primarily the *Ortsarchiv* (*OA*), within the *Rheinisches Amt für Bodendenkmalpflege* (*RAB*).[126] Within the *OA*, the documentation for each findspot includes at best all, but more usually only part, of the following documentation; a date and general description of the nature of the findspot, locating grid references, copies of aerial photographs, correspondence, excavation notes and the results of any survey work carried out on the site, a description and inventory of the finds, a list of any published references to the site, information as to the present location of the finds (i.e. in which museum or private collection). Information stored in the *OA* of the *RAB*, together with the annual reports of the activities and discoveries of the *RAB*, the *Jahresberichten*, or its preceding equivalent, which have been published in the *Bonner Jahrbücher* since the middle of the nineteenth century,[127] formed the initial basis for

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[126] The *Ortsarchiv* can best be compared with the Sites and Monuments Record in England. The *Bodendenkmalpflege*, although state-run, actually functions as a non-governmental, independant organization, working in the public interest for the preservation and protection of all archaeological material remains of significance (*Bodendenkmäler*) as defined within the Monuments Act of 1980 (revised in 1988, the *Denkmalschutzgesetz Nordrhein-Westfalen*). The spectrum of work undertaken within the *Bodendenkmalpflege* is mainly concerned with academic and scientific investigation and research, as well as the publication, conservation and restauration of monuments (*Bodendenkmäler*).

[127] The *Bonner Jahrbücher* are published by the *RAB* in conjunction with the *Rheinisches Landesmuseum Bonn* and the *Verein der Altertumsfreunde der Rheinlande.*

research.[128] In optimal cases, the *OA*, or the various museum archives, often contained additional useful information, such as original excavation notes or illustrations, which could enable a revision and often clearer interpretation of previously published evidence. Wherever possible, the excavated material from each findspot was completely reanalysed. An exception was made in the case of the cemetery and settlement at Troisdorf-Sieglar (A8 and B8 respectively) because the existence of a recent excavation publication meant that further identification of the material was unnecessary.[129] Other exceptions were made of necessity. These included large settlement sites where the material was not available for consultation and where the sites themselves were still in the early phases of being written up.[130] A further exception had to be made where material from museum collections, and particularly private collections, could not be traced, or had been destroyed.[131]
For all findspots, the maximum amount of information was recorded so that reinterpretation of the finds or findspots could take place at a later stage without a reexamination of the finds being necessary.

4.2 Definition of Site Types

The production of an inventory of archaeological data from the study area resulted in the catalogues of burial, settlement and stray find sites and findspots in Appendices I-III respectively. Whilst the layout and organization of each catalogue is discussed in detail in the 'Key to Appendices I-III' in Part Three, the main abbreviations used are described here to enable ease of cross-referencing.

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[128] The majority of the findspots listed in the *OA* of the *RAB* from within the study area had already been identified and listed in Kunow 1987a, 66-7.

[129] Joachim 1987.

[130] Most of the material from the unpublished settlement excavations at Essen-Überruhr-Hinsel (B33) was unavailable for consultation during the period in question. It was also not possible to adequately record the largely unpublished settlement excavations at Düsseldorf-Stockum (B26). In addition, many of the pre-1980 finds from the site were not accessible in the Düsseldorf Stadtmuseum during 1987. During the last stages of this study some additional information from recent excavations of the settlements Leverkussen-Schlebusch (B42), Konigswinter-Rubhausen (B41), and Voerde-Friedrichsveld (B40) has been included. The information summarized in the catalogue is, however, only based on prelimary reports.

[131] For instance, a part of the collections of the Römisch-Germanisches Museum in Cologne were destroyed during the Second World War.

All sites in Appendices I-III are referred to in the text by numbers. These simply indicate the place of the entry in the glossary. The list of sites and findspots has been compiled geographically, beginning with the most southerly-lying site and ending with the most northerly-lying site. All burial site and findspot numbers from Appendix I are prefixed with an 'A', settlement numbers from Appendix II are prefixed by a 'B', and stray finds from Appendix III are prefixed with a 'C'. For example, in the text chapters, the largest cemetery of Rheindorf is referred to as 'A22'. The toponomic names of the sites are often used in the text, and all are given in the appendices. In order to establish a useful classification or typology of sites and findspots based on the material remains, an explanation of the terminology and concepts used is an essential prerequisite. The classification put forward below forms the framework for the layout and organisation of the catalogues in Appendices I-III.
The classification as discussed below is largely based on the definitions put forward in Willem Willems' thesis in categorizing the findspots within the Dutch Eastern River Area.[132] The model presented in Figure 4.2 defines the processes of inference, or interpretation, that enable the recognition of each new conceptual level.

4.2.1 The Findspot

At the lowest level of interpretation is the *findspot* (Fig. 4.2, Interpretation Level 1). Findspots are here defined as the direct or indirect result of human activity which thereby generates an assemblage at a specified, spatially limited, location. Findspots can be used to reflect very general distribution patterns, but are not generally seen as archaeological entities suitable for further analysis. They only become relevant after their further interpretation and recognition as an archaeological *site* (Fig. 4.2, Interpretation Level 2). Findspot 10 in Figure 4.2 represents rejected findspots that cannot be further interpreted, either singly or in combination, as sites. These are defined as comprising assemblages or individual finds from secondary contexts, e.g. redeposited material.
Findspots, either singly or in combination (Fig. 4.2, Findspots 2 and 3, 6 and 7), are converted into sites based on their interpretation in spatial terms (i.e. the size or spatial limits of the assemblage), and on the evidence for activity or function. Proximity, mostly within 50 m, or at most 100 m, is an important factor when considering the combination of findspots. With settlement evidence in particular, it may be justifiable to consider combining findspots at a greater distance apart but clearly indicating one extensive settlement. Associated burials, on the other hand, are probably unlikely to be

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[132] Willems 1986, 17-8, 89-92.

further than 100 m apart, unless, for example, they can be proved to come from a heavily-disturbed cemetery where all intervening burials have since been destroyed. Alternatively, a number of findspots, whilst each probably forming part of a single site, cannot be combined due to a lack of conclusive evidence. Where appropriate, the catalogue entries in Appendices I-III all list the original findspots that have been combined to form a site. The need for a 'level of certainty' to judge the reliability of a particular classification is discussed below.

4.2.2 The Site

Once a site has been defined, its further classification is based on the recognition of the nature of activity on it. Concepts which are commonly used interchangeably have a single specific meaning within the conceptual framework of this research. For instance, whereas a settlement can always be referred to as a site, a site is not always a settlement. A specific site can be a combination of two or more findspots, but on the other hand, one findspot can eventually be shown to be the location of more than one site, perhaps both a settlement and a cemetery (Fig. 4.1, Findspot 4).
Four different 'Site or Findspot Types' have been distinguished: burial, settlement, isolated finds, and stray finds (Fig. 4.2, Interpretation Level 3). For burials and settlements, various distinctions within each group lead to the further refinement of the classification into various Site Types. The various definitions are given in Table 4.1. The classifications of burial, settlement, stray find and isolated sites are given in Tables 4.2-4 respectively. The very nature of the evidence recorded under isolated and stray finds does not enable their further interpretation as sites rather than findspots (see below).

4.2.2.1 Burial Sites

In total, 75 sites with burials have been identified (see Table 4.2). These are presented in the catalogue in Appendix I. With the possible exception of two inhumation burials, all are cremations. In the most optimal circumstances, the bone, the grave goods and the urn (if originally present) have survived. Even on locations where heavy ploughing or other destructive activity such as construction work have significantly damaged and scattered the contents of funerary contexts, one or more of the above elements can be recognized.
Problems of recognition occur in the few cases where no remains of cremated human bone are found on a site, but where complete vessels or other isolated complete artefacts are found which might in other circumstances be associated with aspects of the burial ritual and thus be described as burial sites. Complete vessels, primarily pottery,

have thus, as a rule, been taken to represent urns or grave goods from a burial, unless other indications make this improbable. The vagueness of the find circumstances can usually be attributed to the lack of information in the original report of discovery, often dating to the last century, when the antiquarian value, and often more significantly, the financial value of the complete artefacts often greatly outweighed the need to record any other seemingly mundane factors associated with their discovery.

Whilst the distinctions between the four burial site types (table 4.1) is straightforward in theory, in practice analysis of the records for certain sites can indicate that distinction remain vague. For instance, a single burial attributed to Burial Type 1 may only be all that remains of an originally larger cemetery. Such a supposition seems likely when one considers that apparently isolated burials are more often than not found when a limited spatial area is excavated under archaeologically-uncontrolled conditions (for example, a construction trench or road corridor). The same may be true for sites with a number of burials attributed to Burial Type 2 and 3. Whenever an archaeological excavation has been carried out on a site, the interpretation of the site can be judged to be more reliable, since an the field research would usually take into consideration a more extensive area around the burials, thus confirming the lack of other features in the proximity.

4.2.2.2 Settlement Sites

In total 42 settlement sites have been identified in the study area (see Table 4.3). The primary division of settlement sites into native settlements (37), military camps or forts (2) and infra-structural elements (4)[133], of which the latter two are more readily associated with the Roman province than Germania, proposes a clear destinction between two concepts of activity that vary immensely in intention.[134] Sites belonging to Settlement Types 2 and 3, although few in number, are easily recognizable from the archaeological evidence and play an important part in the discussion as to the significance of the *Limesvorland* for the development of the southern area of the Lower German province.

The results of the inventory reproduced in the catalogue in Appendix II show the limitations of the information in respect of Type 1 settlement evidence, i.e. native settlements. Assemblages mainly comprise unstratified surface finds from arable fields, usually recovered by amateur archaeologists. At only five sites, Düsseldorf-

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[133] Because Königswinter-Bennerscheid B41 appears to be a combination of Settlement Types 1 and 3, the total sum of Settlement Types is therefore 43.

[134] This division has already been published by Kunow 1987a.

Stockum (B26), Essen-Überruhr-Hinsel (B33), Voerde-Friedrichsveld (B40), Essen-Burgaltendorf (B32), and Leverkusen-Schlebusch (B42) have modern excavation techniques been applied to achieve a significant amount of information. As previously stated, however, the results from these excavations have not yet been fully analysed and published. Unlike the Dutch Eastern River Area where the presence of ancient settlement soils on Holocene deposits, identified by the high concentration of visible phosphate in the subsoil, proved of outstanding importance for the recognition and identification of settlements,[135] the lack of any similar information within the study area meant that an interpretation could only be based on an analysis of the limited, recovered archaeological assemblages.

The basic classification of what constitutes a settlement in such circumstances is thus clearly fraught with problems. Willems notes, when discussing the minimum requirements for a site to be called a settlement, that a classification "is an assumption with no absolute value. It only represents a point in time in the find histories of sites in different areas, after which new finds generally confirm the hypothesis regarding the nature of the site."[136] For the purposes of this study, a site is identified as a settlement when the recovered assemblage from a specific location, for which no further data is available, contains a minimum of ten appropriate artefacts. Appropriate artefacts would normally comprise pottery sherds, but a more reliable interpretation would naturally be based on an assemblage containing, for instance, tools, evidence for activities, house daub, food remains, as well as pottery. The clustering of a small assemblage of artefacts within a limited spatial area, also represents an apparently more conclusive picture than the same number of artefacts being found spread across a much larger area. Where the find circumstances of a site have not been recorded, or have been incompletely recorded, the boundary between a settlement and burial site, and even more so between a settlement and stray find site, become unsatisfactorily blurred.

4.2.2.3 Isolated Sites

A group of nine sites can be attributed to this category. These are represented by artefacts illustrating a deliberate, or intentional, single action of deposition in antiquity (see Table 4.4). Such sites include hoards, monuments or mile stones. The majority of these artefacts are of pure Roman provenance. The second group of sites within this Site Type is more problematic. These sites comprise recovered assemblages, again usually single artefacts, that were

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[135] Willems 1986, 74-5.

[136] Willems 1986, 90.

deliberately placed in the location in which they were eventually found, but were placed there in the more recent past. Such sites are identified by the obvious reuse of Roman building material or sculptural elements within more modern structures. Whilst it may be argued that such sites should be rejected on the grounds of their secondary context (Fig. 4.2, Interpretation Level 2), or at most be classified as stray find evidence, it was felt that there was no overwhelming conclusive proof to suggest that the artefacts had not been discovered at or near the location of their reuse, although their transportation over the Rhine from sites within the province could be equally as likely. The inherent unreliability of this category must be kept in mind.

4.2.2.4 Stray Findspots

This category has been treated as the 'safety net' for all the remaining findspots, 44 in total, that could not be given any other classification (see Table 4.4). Once again, the incompleteness of the record of find circumstances meant that no findspot can conclusively be rejected as irrelevent. For instance, where assemblages comprise coins found on river banks, or finds dredged from river bank deposits, the findspots have been included in the study since they were at least found on land *within* the study area.

4.3 The Character of the Material Evidence

The present study is based on the excavated evidence for material culture that is still available for research, as well as surviving literature recording material long since lost, destroyed, or simply given away.

There are several limitations relating to the character of the evidence. For instance, whilst it can only be assumed that this level of information may be a reasonable indication of the original number of sites in the study area, it cannot necessarily be assumed that the whole spectrum of sites originally to be found in the study area are represented. Also, in the absence of modern-day survey techniques, sites with very little or no material culture are almost impossible to recognize. Another problem is assessing how much potential information remains unrecorded, i.e. unreported archaeological finds made by amateur archaeologists, construction companies and the modern phenomenon of illegally-used metal detectors.[137] The influence of landscape use and development on the distribution and discovery of

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[137] Since 1980, however, the Monuments Act for Nordrhein-Westfalen (*Denkmalschutzgesetz Nordrhein-Westfalen*, revised 1988) has done much to improve the situation, if not completely eradicate the problem, by providing the legal means whereby the authorities can act whenever necessary.

findspots has already been discussed in Chapter 2.4. Further limitations exist when dealing with the nature of the evidence actually available. A large number of the sites recovered cannot be classified in a completely satisfactory way, as described above. Nevertheless, because classification is essential in order for a site to be represented, a measurement of uncertainty concerning the value of the information for further assessment has been introduced into the interpretative process. This uncertainty is essentially a lack of specific data. A three-tier system indicating the reliability or certainty of a site's status has been devised and is set out in Table 4.5. This factor is also recorded for each site in Appendices I-III and in the overview produced in Tables 4.2-4. Whenever information on a site is judged to be completely reliable, the site is described as 'certain', i.e. 'A'. Whenever the information is judged to be not completely reliable, then the site is described as 'probable', i.e. 'B'. Sites where there is a strong reason to doubt their interpretation are described merely as 'possible', i.e. 'C'. The unreliability of the data can be caused by the original factors controlling the deposition of the assemblage as well as be the result of post-depositional processes. Very often, however, they are a direct result of the manner in which the assemblage was recovered and recorded. The reliability of reports of older finds in particular, has to be evaluated with care. The differing processes of recovery recognized for sites within the study area, which directly affect the reliability of the information, are therefore set out in Table 4.6. This is also recorded for each site entry in Appendices I-III and in the overview of sites in Tables 4.2-4.

Such limitations need not lead to a deficiency in the value of the remaining information, as long as they are taken into account at all levels of interpretation. Obviously, the more carefully a site is investigated, the more that is known about it and consequentially, the more reliable the interpretation of the material evidence. Many of the limitations are simply the result of the sites not being excavated using modern methods. This is apparent in Chapter 6, for instance, when attempting to reconstruct the burial ritual and establish a typology for the grave forms occurring across the study area. In addition, a controlled archaeological excavation is more likely to produce reliable information than that acquired from unstratified and unsystematically recovered surface material. Haselgrove discusses the problems and stages involved when making inferences from a sample of artefacts drawn from the context of a cultivated soil horizon.[138] The additional sorting processes which ploughsoil assemblages have undergone compared to most other buried material adds significantly to the difficulty of their interpretation. The number of distinct

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[138] Haselgrove 1985, esp. 8-14 and fig. 1.1.

conceptual stages that are necessarily involved also increases when inferences are drawn from assemblages of artefacts obtained by fieldwalking or surface collection rather than excavation.
Despite the obvious limitations, the material assemblage from the study area also exhibits very positive strengths. Although the dataset from settlement sites is rather weak, the dataset from burials is particularly strong (see Chapters 1.3 and 5.1). Whilst the individual burial contexts have not always been clearly described, the majority of records relating to the grave contents are very comprehensive. The vast majority of the artefacts found within the graves are also well preserved. This has meant that detailed descriptions and illustrations could be made, and has resulted in a high percentage of artefacts being identified. All the finds groups are discussed in detail in Chapter 5. The very size of the chapter indicates the quantity of information that can be gained from the finds groups. A reanalysis of all the finds coupled with earlier descriptions has meant that for some graves, its specific burial type could be reconstructed from the excavated evidence.[139] The treatment and appearance of the finds has also enabled detailed discussions as to their function and role within the burial ritual.[140] The sheer quantity of particular finds groups, coupled with their quality, has clearly been significant in enabling a reassessment of the chronological development of finds groups, contexts and sites.[141] The suitability of the material and the incentives it provides for the present research have already been pointed out in Chapter 1.2, but are worth repeating here: the large quantity and good preservation of the excavated archaeological record, both the material and documentary evidence, available for study; the relatively favourable findspot situation, i.e. mostly comprising small, evaluable assemblages concentrated within a geographically limited spatial area. Finally, based almost exclusively on a study of the material culture from the recorded findspots, hypotheses can be put forward to explain the significance and the development of the *Limesvorland* during the Roman period, the ultimate aim of this research.[142]
As Todd points out in his study of the early Germanic peoples, we are now very much better placed to construct an account of settlement in the Germanic world within its appropriate social and economic context on the basis of the vast amount of archaeological data available to us. There are naturally constraints on how these data can be used and

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[139] See Chapter 6.4.

[140] See especially Chapters 5, 6.6 and 9.

[141] See especially Chapters 5 and 8.3.8.5.

[142] See Chapter 1.3, but especially Chapter 10.

limitations on what they reveal, but the growing coherence and consistency of the archaeological record are the ultimate guarantees of their fundamental reliability.[143]

[143] Todd 1995, 62.

CHAPTER 5 THE FINDS

5.1 Introduction

As has been stated earlier, in particular in Chapter 4.3, an analysis of the material evidence, that is the finds, is essential for the further detailed discussion of the research objectives. As far as the burial contexts are concerned, the treatment of the individual finds groups has attempted to be as comprehensive as possible. The settlement and stray find material has necessarily been discussed more superficially. It is important to note here that this chapter is not intended to take on the form of a detailed 'Finds Report', but is rather an overview of the variation and significance of the evidence as presented in the catalogues in Appendices I-III. The material assemblage has been studied in order to answer the specific research objectives of this study.[144] The importance of studying the material extends beyond the need to date findspots or divide them into Site Types. Whilst this can be one of their primary functions, the finds can and should be used as an interpretative tool in order to help develop hypotheses on various aspects of past societies. As Willems points out, however, in his treatment of the finds from the Dutch Eastern River Area, relations between the archaeological record and the structure of the society that left it are neither simple nor straightforward.[145]

The discussion below concentrates on the typology and chronology of particular finds groups. Not all groups have been discussed to the same level of detail. The finds from the two Iron Age - Early Roman settlements (B32 and B41) have not been included in this chapter. These sites were discovered after the inventarisation phase of the present study. The available information from the preliminary reports is summarised in the catalogue. For the rest of the finds the emphasis has been placed on groups for which new typochronological information can be provided, and where strong evidence can be provided for answering the research objectives.[146] The problems of provincial Roman import versus local production, or alternatively Germanic import from outside the study area, is also discussed for various finds groups.

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[144] See Chapters 1.3 & 4.3.

[145] The problems involved in this sort of approach have been discussed in earlier chapters, and are also discussed by Willems (1986, 133-4 with notes 1 & 2).

[146] One reason for discussing certain finds groups in greater detail has been in order to inform an English reader who is not necessarily aware of the European, particularly German and Dutch literature.

The frequency and distribution of material is also discussed, particularly for the burial sites where inter- and intra-site comparisions are made.
Chapter 5 is, therefore, primarily intended to provide the relevant background information which will then be drawn on to support the interpretations put forward for analyses of the burial ritual and aspects of Germanic settlement and society in Chapters 6-10.
For each find group discussed below, the individual vessels are listed noting the context in which they are found and the status of the find, i.e. i-iv. This classification gives a general idea of the reliability of the provenance of the artefact and is explained in detail elsewhere.[147] The majority of finds, certainly all identifiable grave goods, have been illustrated and are present in the Appendices. References to illustrations are given in the catalogue, per grave for each burial, and per site for the rest.

5.2 Germanic Pottery

5.2.1 General Remarks

Germanic pottery makes up the largest finds group found within the study area. The analysis of the Germanic pottery is based primarily on its role within the burial ritual where, within funerary contexts, Germanic pottery represents *c.* 29% of the total number of grave goods and *c.* 53% of all pottery vessels represented in the grave goods assemblage, either as complete vessels or sherds.[148]
The term 'Germanic' has been chosen here to describe the pottery for several reasons. The term has been used not so much as an ethnic label, but in clear contrast to the term imported ware, which is exclusively used to describe the provincial Roman pottery. Descriptive terms such as handmade or wheelmade have also been avoided. The vast majority of vessels were handmade, but often of such high-quality and symmetrical form that they were almost certainly finished, at least, on a slow wheel. Terms such as 'native' or 'local' ware could also have been used. The term 'Germanic' has been considered most appropriate because it can be directly linked to the mass of German literature on the subject.
For the purposes of this study research has concentrated on three different aspects:
- to reassess previously established typo-chronological classifications that are relevant to the assemblage, with a view to

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[147] See 'Key to Appendices I-III' in Part Three.

[148] The total number of grave goods being 2343 and the total number of Germanic and provincial Roman pottery vessels represented being 1276, 681 of which are Germanic vessels.

confirming or redefining the chronology of specific contexts and findspots;
- to assess the functional role of the various typological groups as reflected in the different contexts or findspot types represented in the assemblage;
- to assess the evidence for and significance of any patterns in vessel distribution that can be recognized across the study area.
This section does not contain a detailed discussion of the physical and technical attributes of the material, such as fabric and decoration, unless these are directly relevant to the research points as set out above. To date no publications dealing with sites within or near the study area have provided detailed fabric descriptions for the material, all concentrate on typology. A detailed description of the fabric would have proved too large a task for the time available. Its absence does little to affect the substance of this research.
The first publication of significance on the Germanic pottery within the study area was provided by Rademacher in 1922, where he identified the earlier *Wahner Typus* and the later *Gießener Typus* as being the leading forms found on sites around Cologne, belonging to the Rhine-Weser cultural group.[149]
A detailed classification of Germanic pottery, principally a typo-chronological division based on six main vessel types (Forms I-VI) and their decoration, was published by von Uslar in the 1930s and still remains, for the most part, the handbook for modern research.[150] Later publications of sites within and outside the study area have all referred to von Uslar's classification with little apparent need for adaptation.[151]
Only very recently, in Halpaap's 1994 publication of the settlement of Soest-Ardey in Westphalia, has any significant attempt been made to reassess both the typology and chronology put forward by von Uslar, as well as introducing functional descriptions of certain vessels.[152]
Halpaap redefines a number of von Uslar's typological groups, particularly von Uslar's Forms II, III and IV. Whilst agreeing in general with von Uslar's conclusions on the chronology of vessel forms, some refinements are introduced. These are applied below to the material from the study area.

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[149] Rademacher 1922, 191-207.

[150] Von Uslar 1934; 1938, with various forms illustrated in Taf.A and 1-14.

[151] For the study area see, for example, Joachim 1987, esp. 11. For regions in the Netherlands see, for example, van Es *et al.*, 1985. A more detailed discussion of Roman period pottery from the northern Netherlands is given by Taayke 1992; 1995; 1997.

[152] Halpaap 1994, 44-68 & esp. 60-103.

Although von Uslar does include the majority of the Germanic pottery from the study area in his publication, more recent finds, Halpaap's conclusions, as well as the particular research objectives of this study, make a complete reassessment of the material necessary. Considering the assemblage as a whole, the majority comprises undiagnostic body sherds. Only 58% can be identified as belonging to specific forms.[153] The appearance of ✡ denotes that the vessel was found complete, * denotes semi-complete. Only pottery of recognisable vessel form has been discussed in detail below.

5.2.2 Form I

Characteristic of the early Rhine-Weser pottery tradition are the vessels of Form I.[154] The main attributes of the form are a short, either upright or beaded rim, a funnel-shaped body, and a high, sharply angled shoulder. The further division of the group into variants Ia and Ib depend on the base type (see below).[155] Slight variations in the form do exist, with graduations from a straight-sided to a rounder body and a slightly curved rather than angular shoulder. The vessel in A22 Gr.169 is exceptional in that it has a high, 'stepped' base. None of these variations, however, appear to be of chronological significance. There are certainly variations in the size of vessels, the rim diameter ranging from 12 cm - 30 cm, and the height (when measurable) ranging from 8.4 cm - 21.5 cm. It is possible that there exists a link between size and vessel function.

Vessels for which the base type is unknown are listed here:
From burials: A7 Gr.8 i; A7 Gr.8 iii; A7 stray iii; A8 Gr.19 i; A8 Gr.33 i; A8 Gr.52 i; A8 Gr. 59 i; A9 Gr.11 iv✡; A18 Gr.3 i (x4); A18 Gr.5 iv; A18 Gr.6 i; A18 Gr.10 i; A18 stray i; A22 Gr.51 iv; A22 Gr.118 ii; A22 Gr.119 i; A22 Gr.120 iii; A22 Gr. 122 i; A22 Gr.123 i; A22 Gr.127 i; A22 Gr.131 i; A22 Gr.141? iii; A22 Gr.150 i; A22 Gr.157 ii; A22 Gr.160 iii; A22 Gr.163 i; A22 Gr.167 i; A22 Gr.172 i; A22 Gr.173 iv; A22 Gr.175 i; A22 Gr.176 i; A22 Gr.176 iii; A22 Gr.181 i; A22 Gr.189 ii; A22 Gr.191 i; A22 Gr.197 ii; A22 Gr.205; A22 Gr.212 i; A22 Gr.217 i; A22 Gr.220 i; A22 Gr.222 i.
From settlements: B9.

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[153] For instance, of the 681 Germanic vessels recovered, only 394 are of identifiable forms.

[154] Rademacher's *Wahner Typus*, 1922, 198-9; Von Uslar 1938 59-61; 1979/80, 702 Abb. 3,1-10; Günther 1983, 24 Abb. 11; Van Es *et al.* 1985, 596, Abb.32; Halpaap 1994, 67-8,70. See also Reichmann 1979, *Typentafel* K.

[155] For further descriptions of the form, see von Uslar 1938, 14-5; Halpaap 1994, 70.

5.2.2.1 Form IA

From burials: A7 OAB i¤; A8 Gr.48 i; A8 Gr.56 i; A22 Gr.8 i; A22 Gr.120 i¤; A22 Gr.156 i*; A22 Gr.159 iv¤; A22 Gr.189 iii¤; A22 Gr.204 i*; A60 Gr.1 i*.
From settlements: B18; B5; B9; B26.
Vessels of this variant have either a flat, or very low footring base.

5.2.2.2 Form IB

From burials: A7 Gr.3 i¤; A7 Gr.7 i¤; A7 Gr.11 i*; A7 Gr.13 i; A7 OAE i; A8 Gr.25 i*; A8 Gr.37 i; A8 Gr.51 i; A8 Gr.54 i¤; A9 Gr.4 i¤; A9 Gr.9 i*; A9 C iv¤; A18 Gr.10 i¤; A18 Gr.26? i; A22 Gr.18 i; A22 Gr.108 i¤; A22 Gr.129 i¤; A22 Gr.131 ii¤; A22 Gr.132 i¤; A22 Gr.149 i; A22 Gr.152¤; A22 Gr.169 i¤; A22 Gr.171 i¤; A22 Gr.189 i; A22 Gr.198 i; A22 Gr.199 i¤; A22 Gr.214 i*; A22 Gr.215 iv¤; A22 Gr.225 i¤; A22 Gr.227 i; A22 Gr.230 i*; A22 Gr.234 i¤.
Vessels of this variant have a narrow, hollow or solid pedestal base.

5.2.2.3 Transitional Forms

A small group of vessels are clearly transitionary between Form I and others:

Form I/IIA From burials: A7 Gr.1 i¤; A22 Gr.242 ii¤.
Form I/II From burials: A7 Gr.15; A9 Gr.1; A21 Gr.1 iv¤.
From settlements: B9.
Form I/IIB From burials: A22 Gr.173 iv; A22 Gr.190 i¤.
Form I/III From burials: A22 Gr.76; A22 Gr.131; A22 Gr.132 i.
Form I/IVa From burials: A22 Gr.114 i.
Form I/IVb From burials: A22 Gr.258 ii¤; A22 Gr.189 i¤.
This group represents only *c.* 3% of diagnostic vessels and only *c.* 2% of all Germanic pottery.
Of these, only one complete vessel was possibly used as an urn.[156]
None of the vessels show signs of secondary burning:

5.2.2.4 Discussion

Dating evidence suggests that Form I begins to appear towards the end of the first century AD (Eggers' *Stufe* A), deriving originally from pre-Roman Iron Age forms.[157] The vast majority of the vessels from the study area date between the end of the first century and the early second century AD (within Egger's *Stufe* B2). The form is certainly still found, for instance in Troisdorf (A8 Grs.21 and 54), until the middle of the second century AD.[158] Dating evidence from Roman military sites on the left bank of the Rhine, such as Zugmantel,

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[156] A22 Gr.258.

[157] Halpaap 1994, 70.

[158] Joachim 1987, 11, Taf. 14,44 & 23,3.

indicate that the form had gone completely out of use along the *limes* by the second half of the second century AD.[159]
Of the total Germanic pottery within funerary contexts, 86 vessels can be identified as Form Ia or b[160] (22% of the diagnostic vessels; 13% of all Germanic pottery). The majority of the vessels (53; 61.5%), are from the cemetery at Rheindorf (A22).
Single sherds or a number of sherds from the same vessel make up 56% of the assemblage. Only 22 vessels are complete and 8 semi-complete (35%). Of these the majority, 18, are completely undecorated. In general decoration is uncommon and limited in range.[161] Where it does exist, it never appears above the shoulder or on the rim and comprises zones of stabbed decoration and incised wavy lines. The most common decorative technique is a horizontal cordon applied to the top of the pedestal, found on nine vessels, possibly primarily to disguise the join between the base and the body. The majority of the vessels are of a fine fabric with smoothed or burnished surfaces. Such attention to the finish does suggest that the vessels were produced with a more significant function than simply use as utilitarian cooking ware.
Within the burial ritual the vessels fulfilled various functions. There is evidence for only nine of the complete or semi-complete vessels having been used as urns within the graves.[162] One vessel (A22 Gr.156) had been used as a lid, placed upside down over a terra nigra Form Holwerda 50 urn.
The large size of some vessels would suggest their use as containers or storage jars.[163] The flat base would have obviously made a vessel more steady, whilst the roughened surfaces would have facilitated the grip around the vessel.
More elaborate examples, such as those with pedestal bases (31% of all vessels), may well have been used as drinking vessels (see 5.2.3.6 below). The narrow pedestal base did not make the vessels particulary stable. A small number of the vessels have such narrow, uneven-based pedestals that it is difficult to envisage them being made to be

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[159] Von Uslar 1934.

[160] This discussion does not take account of the transitional forms in 5.2.2.3.

[161] Von Uslar 1938, 15.

[162] A7 Gr.3; A7 Gr.7; A8 Gr.21; A8 Gr.25; A8 Gr.54; A21 Gr.1; A22 Gr.159; A22 Gr.204. Due to inadequate recording, which applies to all of the form groups discussed here, the original number of urns may have been greater.

[163] For example: A22 Gr.120; Gr.156; Gr.163.

freestanding.[164] Such vessels may even have been chosen deliberately for the burial ritual because of their impracticability for everyday use.
Over a third of all the vessels (34%) show clear signs of having been burnt on the pyre, including six complete and four semi-complete vessels.[165]

5.2.3 Form II

Vessels of Form II can be generally characterized as necked jars with either a sharply carinated or a rounded shoulder and a thickened, or lipped rim. The base can either be flat or have an applied low foot ring or higher pedestal similar to Form I.[166] Halpaap's analysis of Form II vessels in Soest-Ardey led to a more detailed typological division of the material than had previously been put forward by von Uslar.[167] Nine of Halpaap's thirteen variations can be identified within the present study area.

5.2.3.1 Form IIA

From burials: A18 Gr.9? i; A22 Gr.161 iii.
These jars are of Halpaap's *Typus Halder*. This group represents the earliest vessels recorded by Halpaap as having all the main characteristics of Form II. Within Soest-Ardey this form can be dated from the second half of the first century into the second century AD.[168]

5.2.3.2 Form IIB

From burials: A22 Gr.71 ii☼; A22 Gr.102 i☼; A22 Gr.135 iii.
From settlements: B9.
These jars have a carinated shoulder, and everted neck and rim. They show similarities to Form IIA and have an early date within the Form

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[164] A7 Gr.11?; A22 Gr.149?; A22 Gr.173; A22 Gr.222; A22 Gr.227?; A22 Gr.230.

[165] A7 Gr.3; A8 Gr.21; A8 Gr.25; A8 Gr.37; A8 Gr.54; A22 Gr.108; A22 Gr.132; A22 Gr.169; A22 Gr.204; A22 Gr.225.

[166] Rademacher's *Gießener Typus*, 1922, 191-207; von Uslar 1934; 1938.

[167] Halpaap 1994, 76-85.

[168] Halpaap cites an early parallel from Kiln 2 in Halder that dates between AD 65-80. AD. See Halpaap 1994, 79, Abb.33,1.

II sequence, from the first - second century AD.[169]

5.2.3.3 Form IIC
Essentially this jar form can de defined as having a carinated shoulder and straight neck. Four main variants have been identified in the study area.

5.2.3.3.1 Form IICi
There are two variants within this group:
IICia with a flat or footring base From burials: A10 Gr.1 iv¤; A16 Gr.1 i¤; A22 Gr.48 i¤; A22 Gr.52 ii¤; A22 Gr.82 i¤.
IICib with a pedestal base From burials: A7 OAA i; A8 Gr.1 iv¤; A8 Gr.7 i¤; A8 Gr.8 i¤; A8 Gr.11 i¤; A8 Gr.20 i*; A8 Gr.47 i¤; A10 Gr.3 iv¤; A14 Gr.1 iv¤; A22 Gr.68 i*; A22 Gr.102 i¤; A22 Gr.225 iii¤; A22 Gr.229 i; A22 Gr.235 i; A27 Gr.1 i¤; A56 Gr.9 i*.
Base type unknown From burials: A7 Gr.15; A9 Gr.11 i; A10 Gr.17 i; A18 Gr.2 iv; A22 Gr.1 ii; A22 Gr.8 iii; A22 Gr.11 iii; A22 Gr.17 iv; A22 Gr.21 i; A22 Gr.26 i; A22 Gr.61 i; A22 Gr.64? i; A22 Gr.79 ii; A22 Gr.83 i; A22 Gr.89 i; A22 Gr.97 i; A22 Gr.98 iii; A22 Gr.99 i; A22 Gr.144 iii; A22 Gr.196 i; A22 Gr.271 i; A22 Gr.272 i; A62 i (x2).
From settlements: B7; B9; B18; B26; B37.
These jars are characterized by a carinated shoulder, a vertical neck, and a thickened squared or beaded rim. The group represents Halpaap's Form IIa and is seen as the 'standard' Form II vessel form. In contrast to the vessels Halpaap cites from Soest-Ardey that are mostly undecorated, the majority of examples from the study area are decorated using a variety of techniques, mostly either on or below the shoulder. This group includes small and medium-sized vessels. A unique example with a 'stepped' profile is found in Rheindorf (A22 Gr.102). Vessels of this form date from the second half of the second century AD and continue into the third and possibly a small number even into the fourth century AD.[170]

5.2.3.3.2 Form IICii
IICiia with a flat base From burials: A8 Gr.4 i; A10 Grs. 1-3(x3) i; A14 Gr.1 iv¤; A22 Gr.59 i¤; A22 Gr.60 i¤; A22 Gr.62 i¤; A22 Gr.101 i¤; A22 Gr.161 iii; A64 Gr.1 i¤.
IICiib with a footring or pedestal base From burials: A10 Gr.5 i¤; A22 Gr.56 i¤; A22 Gr.78 i; A22 Gr.104 i¤; A22 Gr.268 i; A30 Gr.2 i¤; A55 C i¤.
Base type unknown From burials: A22 Gr.61 i; A22 Gr.84 i; A22 Stray

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[169] Halpaap 1994, 84 with note 347 for further parallels, also Abb.33,2.

[170] Halpaap 1994, 80-1, Abb. 34,1.

i.
These jars typically have a more rounded than carinated shoulder. There are clear overlaps with the 'standard' IICi group, the only difference being the execution of the shoulder, making these vessels more round-bodied. The variation is contemporary with IICi.[171]

5.2.3.3.3 Form IICiii
IICiiia with a pedestal base From burials: A10 Gr.13 iv¤.
Base type unknown From burials: A10 Gr.7 i; A22 Gr.246? i.
These jars have a sloping roof-like shoulder. The execution of the shoulder in this variant is similar to that on Form I vessels and the slightly everted rim is similar to that of Form IIA vessels. Both elements suggest an early date in the sequence, although Halpaap is no more specific than the second - third centuries AD.[172]

5.2.3.3.4 Form IICiv
IICiva with a pedestal base From burials: A22 Gr.74 i¤.
Base type unknown From burials: A10 Gr.10 i*; A22 Gr.136 i; A27 Gr.1 i¤.
These jars have a relatively high shoulder and a sloping roof-like rim. Within the group the Rheindorf vessel with pedestal base (A22 Gr.74) also shows the sloping shoulder characteristic of IICiii. The vessel from Hilden (A27 Gr.1) is a miniature. Whilst this variant appears to bear similarities to Form I, with its higher shoulder and shorter neck, it dates to the second half of the second century (after *c.* AD 160) to the third century AD.[173] The variant is relatively uncommon, but is known from other north German sites.[174]

5.2.3.4 Form IID
From burials: A22 Gr.56? i; A22 Gr.80 i; A22 Gr.263 i.
From settlements: B26(1).
These jars all have an inward-sloping neck. The group represents Halpaap's Form IIb. The vessel from A22 Gr.56 has been severely deformed by heat making its original form doubtful. Although these examples are medium-sized, according to Halpaap, vessels belonging to this group are generally large and were used as storage pots. The all over roughened surface below the shoulder would presumably have made

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[171] Halpaap 1994, 83, Abb.35,2.

[172] Halpaap 1994, 83 with note 342, Abb.33,5.

[173] Halpaap 1994, 83-4, Abb. 35,1.

[174] Halpaap 1994, 83 note 344.

it easier to grip. The form is contemporary with IICi.[175]

5.2.3.5 Form IIE
Characteristic of this jar is its funnel-shape, with an outward-curving neck. The form is again contemporary with Form IICi.[176] Two variants have been identified within this group.

5.2.3.5.1 Form IIEi
From burials: A22 Gr.70 iv¤; A22 Gr.86 i*.
These jar have a flat base.

5.2.3.5.2 Form IIEii
From burials: A14 Gr.2? iv¤; A56 Gr.18? i*.
These jars have a pedestal base.

5.2.3.6 Form IIF
From burials: A22 Gr.43 i¤; A22 Gr.52 iii*.
These jars are high-shouldered, with a short neck and slightly everted, externally-decorated rim.
This vessel form is not easy to place in the Form II series, although Halpaap claims it shares many of the characteristics of the other variants within the group.[177] Certainly this is a more sensible conclusion than that given by von Uslar who attributes vessels in this group alternatively to Form I, III and IV.[178] As with vessels from Soest Ardey, the vessels from Rheindorf (A22) are decorated with *Gruben* around the body and rim.[179]
The form dates from the second half of the second - third century AD.
Halpaap describes the variant as a local Westphalian vessel type concentrating mainly in Münsterland and the Hellweg region.[180]

5.2.3.7 Discussion
The implications of this typological division are clearly limited in relation to the chronology of the Form II group since the majority of the variations are used contemporaneously. Halpaap's division therefore adds little new insight to von Uslar's original dating of

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[175] Halpaap 1994, 80-1, Abb. 34,2.

[176] Halpaap 1994, 80-1, Abb.34,3.

[177] Halpaap 1994, 84-5.

[178] For instance, von Uslar attributes the vessel in A22 Gr.43 to his Form IVa; 1938, 20. See Halpaap 1994, 84 note 351; 85 notes 352-4.

[179] Halpaap 1994, Kat.Nr. 711, 1179.

[180] Halpaap 1994, 85 note 358.

between AD 180-250 for Form II within Rheindorf (A22).[181] It does, however, at least lead to a slightly earlier dating for vessels of Form IIA and IIB.

The division may have functional implications, although this is not directly apparent within the burial contexts within the study area. There are variations in the size of vessels, the rim diameter ranging from 10 cm - 28.5 cm, and the height (were measurable) ranging from 8.1 cm - 18.4 cm. As with the Form I vessels, particularly the vessels with pedestal bases, the primary function of these vessels may have been for drinking. Parallels for their chalice-like form can be found in the ornate bronze and silver chalices, or drinking cups, known to have been imported into Germania from an early date, and incorporated in some of the richer graves and hoards.[182]

As a group, Form II comprises 87 vessels which represents 22% of all diagnostic vessels and 13% of all the Germanic pottery within the study area. The majority (88.5%) can be ascribed to group IIC, especially IICi and IICii. Again, the majority of all the vessels (52; 60%), are from Rheindorf (A22). Almost half of the vessels in this group were found complete or semi-complete, 42 vessels (48%).

Various decorative techniques have been used on 33 of the vessels (38%), including cordons around the top of a pedestal base, zones of 'stabbed' designs, raised squares or grooves, patterns of indented circles, and roughened slicked or rusticated surfaces on the larger vessels (IIB, IIF). Of the complete and semi-complete vessels 25 are decorated. A further 18 are undecorated but have highly burnished surfaces.[183]

The majority of the loose sherds found in graves also had smoothed or highly burnished surfaces. Coupled with the finely graded fabric, this would suggest the use of the majority of vessels in this group as more of a quality ware, since time and care was taken in its production.

Again, the vessels fulfilled various functions within the burial ritual. Of the complete and semi-complete vessels 26 are recorded as having been used as urns (60%) and 2 as lids, both for Form II urns.[184]

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[181] Von Uslar 1938, 65.

[182] For instance, within the Hildesheim hoard containing 70 silver vessels: Pernice 1901.

[183] It is, of course, possible that a greater number of the sherds originally came from decorated vessels. See von Uslar 1938 and Halpaap 1994 for a more detailed discussion of decorative techniques.

[184] Urns: A10 Gr.1; A10 Gr.3; A10 Gr.5; A10 Gr.10; A10 Gr.13; A14 Gr.1; A16; A22 Gr.43; A22 Gr.48; A22 Gr.52; A22 Gr.56; A22 Gr.59; A22 Gr.60; A22 Gr.62; A22 Gr.68;A22 Gr.70; A22 Gr.71; A22 Gr.74; A22 Gr.82; A22 Gr.86; A22 Gr.101; A22 Gr.102; A27 Gr.1 (x2); A30 Gr.2; A64

Single sherds or a number of sherds from the same vessel, possibly representing a *pars pro toto* inclusion in the grave goods. make up 51% of the assemblage.
Of the total number of vessels only 20 (23%) show clear signs of having been burnt on the pyre, including 4 complete and 2 semi-complete vessels.[185]

5.2.4 Form III

Form III vessels are characterized as round-bodied or globular, neckless jars with an externally beaded rim and a flat base. The widest diameter lies within the upper third of the vessel. Whilst von Uslar's initial description of his Form III broadly agrees with this, his classification of vessels from the study area within this group is confused and shows no typological uniformity.[186] A stricter, more logical definition of Form III is given by Halpaap who divides the group into IIIA and B (see below).[187] This has meant that some of the vessels previously attributed to Form III by von Uslar have been reclassified, usually within the Form IV group.

5.2.4.1 Form IIIA

There are three variants within this group, all of which have the general characteristic of a rounded body.

5.2.4.1.1 Form IIIAi

From burials: A5 B i; A22 Gr.95 i✡; A22 Gr.179 i✡.
From settlements: B5; B18; B26; B33.
These jars have a short, upright, internally thickened rim.

5.2.4.1.2 Form IIIAii

From burials: A11 Gr.1? i; A22 Gr.17 iv; A22 Gr.54 i✡; A18 Gr.2 iv; A22 Gr.155 i; A22 Gr.169 i; A22 Gr.190 i; A22 Gr.194 i; A22 Gr.250 i.
From settlements: B9; B12; B32.

Gr.1.
Lids: A14 Gr.1; A22 Gr.102.

[185] A8 Gr.8; A8 Gr.20; A22 Gr.48; A22 Gr.60; A22 Gr.104; A56 Gr.9.

[186] For instance, the following vessels clearly belong to Form IVa rather than Form III as von Uslar proposes: A10 Gr.4; A10 Gr.21; A18; A22 Gr.1; A22 Gr.13; A22 Gr.45; A22 Gr.59; A22 Gr.63; A22 Gr.87; A22 Gr.92; A22 Gr.177; A22 Gr.234; A22 Gr.246. See von Uslar 1938, 17-9, 68-72, 87, Taf.7; 1970, 107f. Also Halpaap 1994, 86 note 361 criticising von Uslar's classification.

[187] Halpaap 1994, 72, 86-9, Abb.28.38.39.

These vessels have a beaded rim.[188]

5.2.4.1.3 Form IIIAiii
From burials: A62 iv.
From settlements: B18; B26.
These vessel have a T-shaped thickened rim.[189]

5.2.4.2 Form IIIB
From burials: A22 Gr.1? i; A22 Gr.26? i; A22 Gr.50 iv¤; A22 Gr.71 ii¤; A62 iv.
From settlements: B18; B26.
This group comprises straighter-walled vessels.[190]

5.2.4.3 Discussion
Form III vessels are present throughout the timespan covered within the study area, being found in first, but mostly second and third-century AD contexts (spanning Eggers' *Stufen* B2-C2). With the possible exception of IIIai, no chronological differentiation can be made between the other variants of IIIa and IIIb.
Form IIIai may well represent the earliest vessels within this group. The short, upright rim is thickened internally rather than being externally beaded. Such characteristics are reminiscent of and, according to Halpaap, could have derived from, the native Elbe-Germanic vessels of the Late pre-Roman Iron Age (Eggers' *Stufe* A). The combination of early rim form and characteristic Rhine-Weser decoration on a vessel from Rheindorf (A22 Gr.179) suggests a first century AD date, although still probably within Eggers' *Stufe* B2 rather than earlier in B1. The wavy combed decoration on the vessel from St. Augustin-Hangelar (A5) may well be of an earlier date, either *Stufe* B1 or even *Stufe* A.[191] Apart from the vessels themselves, however, neither grave with IIIai jars contain other datable grave goods to support this argument.
As a group, Form III comprises 18 vessels which represents only *c.* 4.5% of diagnostic vessels and *c.* 2.5% of all the Germanic pottery within the study area. Again, the majority of all the vessels (12; 66.5%), are from Rheindorf (A22). Only five of the vessels in this

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[188] *Form IIIa mit rundstabartigem Rand*: Halpaap 1994, 86, Abb.38,4a-b.

[189] *Gefäße der Form IIIa mit T-förmig verdicktem Rand*: Halpaap 1194, 88, Abb.38,3a-b.

[190] *Steilwandige Gefäße der Form IIIb*: Halpaap 1994, 88, Abb. 39.

[191] Halpaap 1994 59-62, 66-8, Abb.266, 1d. Von Uslar also notes the similarities between early Rhine-Weser and preceding Elbe-Germanic forms: 1938, 69.

group were found complete (28%).
Decorative techniques have been used on only seven of the vessels (39%), and is limited to grooves, rows of stabbed and fingertip indentations. All the complete vessels are decorated. None of the sherds or vessels show signs of burnishing on the exterior.
Of the complete and semi-complete vessels, three are recorded as having been used as urns.[192] Single sherds or a number of sherds from the same vessel make up over 76% of the assemblage. Of the total number of vessels only one show clear signs of having been burnt on the pyre.[193]

5.2.5 Form IV

The main characteristic of this form is its back-to-front S-shaped profile. The group splits into two main variants, IVA and B.

5.2.5.1 Form IVA

These jars have a wide, rounded body, with the widest diameter being above the mid-point of the vessel. This group, within which four variants can be distinguished, includes vessels that partly fall within von Uslar's Form IVc.[194]
Three of Halpaap's subdivisions can be recognized within this group all of which date to the second - third century AD with IVaiii continuing into the fourth century AD in Soest-Ardey.

5.2.5.1.1 Form IVAi

From burials: A4 Gr.1 i; A18 stray i; A22 Gr.1 i; A22 Gr.45 i; A22 Gr.92 i; A22 Gr.146 i; A22 Gr.234 iii; A22 Gr.246 i.
From settlements: B15; B18; B26; B32; B37.
These jars have a beaded rim.[195]

5.2.5.1.2 Form IVAii

From burials: A10 Gr.21 iv¤; A22 Gr.87 i¤; A22 Gr.140 iv¤; A22 Stray i.
From settlements: B10; B18; B26.
These jars have a square-sectioned rim.[196]

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[192] A22 Gr.50; A22 Gr.54; A22 Gr.71.

[193] A22 Gr.26.

[194] Von Uslar 1938, 20.

[195] *Gefäße der Form IVa mit einem rundstabartig gebildeten Gefäßrand*: Halpaap 1994, 91, Abb.40,5.

[196] *Gefäße der Form IVa mit einem rundstabig gebildeten Gefäßrand*: Halpaap 1994, 91, Abb. 40,2.

5.2.5.1.3 Form IVAiii
From burials: A22 Gr.66 i¤; A22 Gr.116 i.
From settlements: B9; B10; B18.
These jars have a rounded body with a sloping rim. The example from A22 Gr.66 has a pedestal base.[197]

5.2.5.1.4 Form IVAiv
From burials: A22 Gr.3 i; A22 Gr.97 i; A22 Gr.234 iii; A56 Gr.6 i.
These jars are high-shouldered and round-bodied with an upright rim. They are similar to a small group of vessels described by Halpaap as *Singuläre Gefäßformen* that date to the second - third century AD, Eggers' *Stufe* C2.[198]

5.2.5.2 Form IVB
These vessels have a more curved body with the widest diameter around the mid-point of the vessel. Their general date range in Soest Ardey stretches from the second half of the second to the fourth century AD, although on other sites examples are known from the first century AD as well as later into the sixth and seventh centuries AD.[199] There are five recognizable variants within the study area.

5.2.5.2.1 Form IVBi
From burials: A9 Gr.11 i*; A10 Gr.4 i; A22 Gr.4 i; A22 Gr.13 i¤; A22 Gr.63 i; A22 Gr.130 i; A22 Gr.144? i; A22 Gr.177 i; A22 Gr.272 i.
From settlements: B9; B26; B32.
These vessels have an S-shaped profile and a slightly thickened rim.[200] Within Soest Ardey the date range for similar vessels is second-third century AD.

5.2.5.2.2 Form IVBii
From burials: A7 OAD i; A46 iv.
These vessels have a characteristic globular form with a short outward-curving rim. The form is not recognized by Halpaap.

5.2.5.2.3 Form IVBiii
From burials: A18 Stray i; A62 i.
From settlements: B32.

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[197] *Bauchige, rauhwandige Gefäße der Form IVa*: Halpaap 1994, 92, Abb.40, 4.

[198] Halpaap 1994, 99-100, Abb.43, 1.

[199] Halpaap 1994, 93 with notes 390-2.

[200] Von Uslar's Form IVb; 1938, 20. Cf. *Unverzierte Ausführungen der Form IVb*: Halpaap 1994, 95, Abb. 41,4a-b.

Stray find: C8.
These vessels have an S-shaped profile and a beaded rim that is otherwise characteristic of Forms II and III.[201] The given date range is generally late Roman in settlement contexts, from the late second into the third century AD.

5.2.5.2.4 Form IVBiv

From burials: A22 Gr.257 i; A22 Gr.258 ii.
From settlements: B9.
The vessels have an S-shaped profile and slightly cavetto rim and appear in late second to third century AD contexts.

5.2.5.2.5 Form IVBv

From burials: A22 Gr.59 i.
These vessels have an S-shaped profile and slightly tapering rim.[202] Whilst agreeing with the general form described by Halpaap, the rim of this vessel is not decorated, although it does fit within his general third-fourth century AD date range.

5.2.5.3 Discussion

As a group, Form IV comprises 34 vessels which represent 8.5% of all diagnostic vessels and only 5% of all the Germanic pottery within the study area. Again, the majority of all the vessels (23; 68%), are from Rheindorf (A22). Only five of the vessels in this group were found complete and only one semi-complete (18%).
Decorative techniques have been used on fourteen of the vessels (42%), and comprises zones of grooves, raised squares and indentations including fingernail and fingertip impressions. Of the complete vessels, five are decorated. None of the sherds or vessels show signs of burnishing on the exterior.
Of the complete and semi-complete vessels, three are recorded as having been used as urns.[203] Single sherds or a number of sherds from the same vessel make up over 76% of the assemblage. Of the total number of vessels only six show clear signs of having been burnt on the pyre (18%), including three complete or semi-complete vessels.[204]

5.2.6 Form V

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[201] Cf. *Gefäße der Form IVb mit deutlicher Randbildung*: Halpaap 1994, 95-6 with note 400, Abb. 41, 5 a-b.

[202] Cf. *Gefäße der Form IVb mit grubenverzierter Innenrandkehlung a)*: Halpaap 1994, 95, Abb. 41,1 esp.a.

[203] A10 Gr.21; A22 Gr.66; A2 Gr.87.

[204] A9 Gr.11; A22 Gr.66; A56 Gr.6.

5.2.6.1 Form Characteristics

This form is characterized by round-bodied, neckless jars with an inturned rim, with the widest diameter just below the rim, tapering towards the base.[205] The base is usually flat, rarely is a footring found. The stepped base of the Rheindorf (A22) vessel in Gr.148 is an exception. Whilst the basic form stays the same, there are distinct variations in vessel size, the rim diameter ranging from 11.5 cm - 38 cm, and the height (were measurable) ranging from 9.1 cm - 23.1 cm. As with other forms, a link between size and function is possible, but cannot be established.

From burials: A1 Gr.1 i; A2 Gr.1 i; A5 Find B i; A7 Gr.2 i; A7 Gr.5 i; A7 Gr.6 i; A7 Gr.6 iii; A7 Gr.14 i*; A7 OAC i¤; A7 Stray iii; A8 Gr.10 i¤; A8 Gr.12 i¤; A8 Gr.19 i; A8 Gr.19 i; A8 Gr.20 i; A8 Gr.24 i*; A8 Gr.29 i; A8 Gr.29 i; A8 Gr.32 i*; A8 Gr.35 i; A8 Gr.38 i*; A8 Gr.40 i; A8 Gr.40 i; A8 Gr.41 i; A8 Gr.46 i; A8 Gr.48 i; A8 Gr.49 i; A8 Gr.50 i; A8 Gr.58 i; A8 Gr.59 i; A8 Gr.60 i; A8 Gr.61 i; A9 Gr.2 i¤; A9 Gr.5 iv?¤; A10 Gr.2 iv¤; A10 Gr.9 i; A10 Stray iv; A13 Gr.2 iv¤; A14 Gr.3 iv?¤; A18 Gr.2 iv; A18 Gr.3 i; A18 Gr.11 i; A19 Gr.1 iv?¤; A22 Gr.2 i; A22 Gr.3 i; A22 Gr.5 i; A22 Gr.7 iv; A22 Gr.12 i; A22 Gr.13 ii; A22 Gr.21 i; A22 Gr.28 i(x2); A22 Gr.46 i; A22 Gr.47 i¤; A22 Gr.49 iv*; A22 Gr.51 i; A22 Gr.56 ii; A22 Gr.68 i; A22 Gr.70 i; A22 Gr.71 i; A22 Gr.73 i¤; A22 Gr.75 i; A22 Gr.75 i; A22 Gr.79 i¤; A22 Gr.84 i; A22 Gr.97 i; A22 Gr.98 i; A22 Gr.103 ii; A22 Gr.108 i¤; A22 Gr.109 i; A22 Gr.109 iii; A22 Gr.112 i; A22 Gr.116 iii; A22 Gr.117 iii; A22 Gr.117 i; A22 Gr.117 i¤; A22 Gr.121 i; A22 Gr.127 i; A22 Gr.128 i; A22 Gr.131 iii; A22 Gr.142 i; A22 Gr.143; A22 Gr.144 iii; A22 Gr.146 i; A22 Gr.146 i; A22 Gr.148 i¤; A22 Gr.149; A22 Gr.150 i (x3); A22 Gr.160 ii; A22 Gr.161 iii; A22 Gr. 162 iv; A22 Gr.164 i; A22 Gr.166 i; A22 Gr.168 i; A22 Gr.175 i; A22 Gr.180 i; A22 Gr.182 i; A22 Gr.183 i; A22 Gr.192 i; A22 Gr.202 iv¤; A22 Gr.205 i; A22 Gr.208 iii; A22 Gr.210 i; A22 Gr.217 i; A22 Gr.223 i; A22 Gr.225 i; A22 Gr.226 i; A22 Gr.226 ii¤; A22 Gr.233 i; A22 Gr.234 i¤; A22 Gr. 234 iii; A22 Gr.235 i¤; A22 Gr.240 i¤; A22 Gr.242 i; A22 Gr.246 i; A22 Gr.251 i; A22 Gr. 254 i; A22 Gr.260 ii¤; A22 Gr.261 i; A22 Gr.271 i; A56 Gr.3 i*; A56 Gr.9 iv; A56 Gr.10 i; A56 Gr.13 i¤; A56 Gr.18 i*; A57 i¤; A62 iv; A68 Gr.2 iv.
From settlements: B5; B6; B7; B9; B10; B12; B15; B18; B26; B33; B37.

5.2.6.2 Discussion

Form V vessels developed out of late pre-Roman Iron Age forms and first appear in the study area towards the end of the first century AD (Eggers'*Stufe* A). They continue in use, with no apparent chronological developments in either form or decoration, into the later Roman period, with evidence for the form dating until the end of the fourth

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[205] See von Uslar 1938, 21-2, 75-7; Joachim 1987, 11; Halpaap 1994 96-8.

century and possibly into the fifth century AD.
As a group Form V comprises 130 vessels which represents 33% of diagnostic vessels and 19% of all the Germanic pottery within the study area, the largest of all six identified groups. Again, the majority of all the vessels (77; 59%), are from Rheindorf (A22). Of the vessels in this group 24 were found complete and seven vessels semi-complete (24%).
Decorative techniques have been used on 29 of the vessels (*c.*22%) including seven complete and two incomplete vessels. Decoration comprises zones of grooves and combing, burnished vertical stripes, raised squares, indentations including fingernail and fingertip impressions, and roughened or slicked surfaces. Very few of the sherds or vessels show signs of burnishing on the exterior either overall or in zones (8%).
Of the complete and semi-complete vessels nine are recorded as having been used as urns.[206]
Single sherds or a number of sherds from the same vessel make up over 82% of the assemblage. Of the total number of vessels only five show clear signs of having been burnt on the pyre (18%), including two complete or semi-complete vessels.[207]

5.2.7 Form VI

In this form group the widest diameter is characteristically across the mouth of the vessel rather than the shoulder. Three variations have been recognized.

5.2.7.1 Form VIA
From burials: A22 Gr.1 iii; A22 Gr.11 i; A22 Gr.116 ii☼; A22 Gr.140; A22 Gr.158 i*; A22 Gr.187 i; A22 Gr.208 iii; A22 Gr.246 i; A22 Gr.250 i; A22 Stray i; A46 (x2) i; A56 Gr.16 iv.
From settlements: B9; B15; B18; B33.
These bowls are generally low, conical, and wide-mouthed with a flat or footring base.

5.2.7.2 Form VIB
From burials: A15 Gr.1 i☼.
This single example is a chalice-shaped vessel with a high pedestal base.

5.2.7.3 Form VIC

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[206] A1 Gr.1; A7 OAC; A9 Gr.2; A9 Gr.5; A10 Gr.2; A13 Gr.2; A14 Gr.3; A22 Gr.49; A22 Gr.148.

[207] A9 Gr.11; A22 Gr.66.

From burials: A22 Gr.161 i¤; A22 Gr.208 i¤; A22 stray i.
From settlements: B9; B15; B26.
This group comprises taller, straighter-sided vessels.

5.2.7.4 Discussion

As a group Form VI comprises seventeen vessels which represent only *c.* 4% of diagnostic vessels and 2% of all the Germanic pottery within the study area. Again, the majority of all the vessels (11; 73%), are from Rheindorf (A22). Of the vessels in this group four were found complete and one vessel semi-complete (29.5%). Only one vessel is decorated with grooves,[208] the rest are plain with smoothed surfaces. Of the complete and semi-complete vessels only two are recorded as having been used as urns.[209] Single sherds or a number of sherds from the same vessel make up over 67% of the assemblage. Of the total number of vessels only two show clear signs of having been burnt on the pyre (13%).[210]

5.2.8 Unusual Forms (*Sonderformen*)

A number of vessels within graves, due to their unusual form, do not fit into any of the groups described above.
Two complete vessels, both probably used as urns, stand out particularly due to their richness of decoration: A22 Gr. 95 i¤; A55 i¤. The form of these vessels show some similarities with Form IID.
Sherds of biconical vessels are found in the following graves: A9 Gr.11; A9; A22 Gr.93; A22 Gr.234 iii.
A Funnel-shaped vessel was found in A22 Gr.102.
Small square-shaped vessels are found as grave goods in the following graves: A72; A73.
As a group these represent only 2% of all vessels of diagostic form and 1% of all vessels.

5.2.9 Evidence for Dating

Attempts to use Germanic pottery as an independent means of dating soon leads into a circular argument, since von Uslar and Halpaap base the dating of their forms primarily on their association with well-dated provincial Roman imported goods, in particular terra sigillata.[211] There is no evidence that allows for the establishment

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[208] A22 Gr.208.

[209] A15 Gr.1; A22 Gr.116.

[210] A22 Gr.1; A22 Gr.208.

[211] Von Uslar 1938, esp. 151.

of an absolute chronology for Germanic pottery independent of these associated Roman imported goods. In analysing a number of the cemeteries within the study area, however, a development based on the relative chronology of forms, primarily on the presence or absence of Forms I and II, can be identified. The form spectrum within the cemeteries of Niederpleis (A7), Wahn (A9) and Bergisch Gladbach (A18) reflect a predominance of Form I amongst the diagnostic vessels, representing 32%, 31% and 37.5% of the total assemblages respectively (Figs. 5.1-3). The fact that none of Halpaap's earliest examples of Form I are present within the study area indicates that the cemeteries did not begin until later in his sequence, towards the end of the first century or beginning of the second century AD. That being said, variations in the form range on a local level may be the reason for this. Extremely few Form II vessels are found within these cemeteries, only single vessels from Wahn (A9) and Bergisch Gladbach (A18) respectively, and only two vessels from Niederpleis (A7). This suggests that the cemeteries were already going out of use before vessels of Form II had become very widespread in the study area, towards the middle of the second century AD. In contrast, the cemetery at Troisdorf (A8) can be seen to generally date later in the sequence (Fig. 5.4). The cemetery contains almost an equal number of Form I and Form II vessels, although the chronologically undiagnostic Form V is predominant. Still later are Rösrath-Hasbach (A10) and Duisburg-Ehingen (A56) (Figs. 5.5-6). Neither contain any Form I vessels, but a predominance of Form II, and Forms V respectively.

For a better understanding of the situation in Rheindorf (A22), the material has been divided between the different gravefields. The gravefield *Ost* (*O*), the largest, clearly contains some of the earliest graves in the cemetery with Form I predominating at 25.6%, representing 94% of all Form I vessels in the cemetery as a whole (Fig. 5.7). The number of Form II vessels is minimal (4.5%). Part of gravefield *Mitte* (*M*, Fig. 5.8), is of a similar date, although it contains fewer graves. Part of gravefield *West*, W3 appears to begin towards the end of the lifespan of Form I, which accounts for only 2% of the vessels (Fig. 9.9). In gravefields *Sud* (*S*, Figs. 5.10), the remaining parts of *West* (*W1*, *W2*, Figs.5.11-2) and *Mitte* (*M2*, Fig. 5.13). Form II, in contrast, is the predominant vessel form, with higher percentages of Forms III and IV, but no Form I present.

The implications of this pattern for the dating and development of the cemetery is discussed in more detail in Chapter 8.5.

5.2.10 Form Spectrum Across the Study Area

Germanic pottery is recorded on 41 of the burial sites (55% of all sites) and in 387 graves (88% of all graves). The form spectrum across

the whole study area is limited, comprising only six basic forms with very few unusual forms (*sonderformen*). There is no recognisable chorological variation within the assemblage across the study area.[212] There is certainly no significant variation in the form spectrum or decorative techniques within any of the cemetery assemblages recorded. Chronological developments within the material assemblage, for example Form II superseding Form I towards the mid second century AD, also take place across the whole study area, lending support to the hypothesis that we are dealing with an homogeneous group.

The assemblage is part of the larger Rhineland-Westphalian or Rhine-Weser Germanic pottery group. Vessels within the form spectrum are either plain, or simply decorated with elementary designs executed using finger-tipping, stabbing, combing, scoring, stamping, and incising. This pottery can be clearly distinguished, by its forms and the poverty of its ornament, from that of the neighbouring Elbe Germans and the coastal groups further north and north-east of the Lippe. The elaborate incised linear ornament and meander patterns popular in the Elbe basin are almost entirely missing.[213] There is also very little similarity to the preceding La Tène pottery within the area. The pottery of the the two Late Iron Age sites within the study area that continue into the early Roman period (B32 and B41) is also clearly distinguishable.[214]

Such conclusions for the Germanic pottery alone may be used to support the suggestion of the introduction of a new cultural group into the area, whose origins are to be found within the Rhine-Weser tribes, around the end of the first century BC or beginning of the first century AD. Considering the earliest dating evidence recorded for the Germanic pottery, the likelihood is that this change actually took place no earlier than the last decades of the first century AD.[215]

5.2.11 Evidence for Function

Although the material from non-funerary sites does not allow such detailed analysis, it is clear that the form spectrum occurring in settlements is also comparable to that found within the cemeteries. With the possible exception of the *Sonderformen*, none of the more

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[212] That is to say, there is no recognizable variation within the factors that can determine variation between groups in the same temporal zone. See for example, Millett 1987, 104-6.

[213] For more detailed comparisions see, for example: von Uslar 1938; Todd 1975, Chapter 2; Reichmann 1979; Krüger 1988 Chapter X.

[214] See for instance Brand & Hopp 1994, 196-8.

[215] See further Chapters 8, esp. 8.5.4, and 10.

commonly occurring vessel forms can be said to to have been exclusively reserved for use within the funerary ritual, although this does not rule out a preference for the inclusion of certain forms. *Sonderformen*, by their very nature, are unique. All the examples within this category to date have been found in graves. They may well have been specifically intended for use in the funerary ritual.
As has been stated above, the individual forms all fulfilled various functions within different funerary contexts. Forms occur as complete vessels, either used as urns or accompanying grave gifts, or as loose sherds, burnt or unburnt. The inadequate recording of many contexts has meant that it is impossible to state exactly how many of the complete (or semi-complete) vessels were used as urns. The function of these loose sherds is also difficult to assess. Some may represent the *pars pro toto* remains of a complete vessel destroyed by the heat of the pyre (see Chapter 6). Other sherds may have been residual in a particular context. The reuse of inadequately cleared pyre platforms would have led to small sherds left from a previous cremation becoming accidentally included in a new assemblage. The incorporation of numerous undiagnostic sherds within specific burials makes it difficult to ascertain the specific function of the Germanic pottery as a group and the number of vessels *intentionally* present within each grave. Over 42% of the pottery represents undiagnostic vessels. This clearly hinders the reliability of conclusions based on the presence or absence of specific forms, or the number of vessels in specific contexts.
The majority of the Germanic vessels, 57%, are from Rheindorf (A22). This means that any analysis of the material from the study area as a whole, as is the case with all other finds groups (see below), inevitably reflects the situation on the one site. The analysis of the form spectrum within funerary contexts as a whole (fig. 5.14), therefore varies little from the analysis of the form spectrum within Rheindorf alone (fig. 5.15).
The most commonly occurring form within funerary contexts in the study area is the Form V neckless utilitarian jar, 19% of all vessels (20% in Rheindorf, A22). The next most popular forms are jars of Form II, 13% (13.5% in Rheindorf, A22), and Form I, 12.5% (13.3% in Rheindorf, A22).
Whereas Form V vessels occurred throughout the period under study, the earlier Form I was gradually replaced by Form II jars. Complete vessels from the study area are most frequently of Form II, Form V or Form I respectively. Form I and particularly Form II vessels frequently occur in a finer fabric with a carefully finished (highly burnished) if not decorated exterior, and often with a pedestal base. The gradual replacement of Form I vessels by Form II vessels within funerary contexts towards the middle of the second century suggests that the vessels were seen as fulfilling the same, or a very similar,

role, the choice of one form over another being mostly due to chronological rather than functional reasons. If this is the case, the amalgamation of Forms I and II in a functional sense make this the largest group within the study area, 25.5% (within Rheindorf, A22, *c.* 27%).

Whilst bearing in mind the limitations of the evidence, the general picture indicates that most graves contained either one, two, three, or more rarely, four Germanic pots.[216] Where forms can be identified, and where graves contain more than one vessel, there appears to be a preference for the combination of Forms I and V, or subsequently Forms II and V. There is also evidence for the presence of two or three Form V vessels together in Rheindorf (A22). This combination may have had a specific functional purpose, for example as a service comprising a drinking vessel (Form I or II) and a container for mixing drinks, possibly wine or more probably beer (Form V, for instance). The size of the vessels may suggest that they were used communally rather than on an individual basis. Imported pottery and bronze vessels that are known to belong to the repertoire of a provincial Roman drinking service are, however, also included in some graves (see below). This suggests that an originally typically Germanic ritual, became embellished within the Roman period by the addition of Romanized products, possibly as a reflection of a certain status or fashion.[217] Whilst elements of the individual drinking service, especially the tableware such as beakers and flagons, were certainly included in provincial Roman graves, in contrast with the Germanic graves, the vessels used for mixing are noticably absent.

The implications of the choice of particular vessels in individual graves is discussed further below and more specifically in Chapters 9 and 10.

5.3 Roman Pottery

5.3.1 Terra Sigillata

5.3.1.1 General Remarks

Before beginning a discussion of the provincial Roman red-gloss ware vessels within the study area, it is perhaps necessary to give a brief explanation, as with the Germanic pottery above, to the choice of terminology used to describe the ware.

It has long been the case that a division exists in the abundant literature on the subject between 'British' researchers who use the

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[216] The results presented here are based on the detailed analysis of cemeteries A7, A8, A9, A10, A18, and A22.

[217] See Chapter 9.

term "samian ware", and their 'Continental' counterparts prefer "terra sigillata". Even though the generally-accepted standard reference book on the subject, published by Oswald and Pryce in 1920, argues the case for the adoption of the more appropriate title of "Terra Sigillata", the misnomer "samian ware" continues to be the prevalent term used within research in the British Isles.[218] In accordance with Oswald and Pryce, but primarily due to the very nature of this study rooted in Germanic archaeology, the term terra sigillata (more correctly, provincial terra sigillata) is used here.

Terra sigillata represents the largest group of imported Roman pottery vessels within the study area.[219] As is the case with other finds groups, analysis for this research has been primarily based on the occurrence and role of the ware within funerary contexts. Terra sigillata is found on 34 burial sites (46% of all burial sites) and in 211 graves (48% of all graves) in the study area and accounts for 306 vessels recovered from the cemeteries. This represents 24% of all the pottery and over 52% of all the imported Roman pottery (see Fig. 5.16).[220]

As with Germanic pottery, due to the incompleteness of the data, a comparable analysis of material from the recorded settlement sites within the study area is not possible. The research into terra sigillata concentrates on four aspects:

- an analysis of the form spectrum, provenance and date of the material, with a view to confirming or redefining the chronology of specific contexts or findspots;
- the recognition of patterns in the distribution of forms within the study area;
- the functional role of the ware in funerary contexts;
- the significance of the ware within the study area and the evidence provided by the ware for the understanding of Romano-Germanic contact and relations along the *Limes*.

In general, the identification of form posed few problems. Except in the case of small undiagnostic sherds or inadequately described missing vessels, the assemblage could be easily classified on the basis of published form series, such as those of Dragendorff,

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[218] See Oswald & Pryce 1920, 3-4. Webster 1987, for instance, does not refer once to the term "terra sigillata".

[219] The total number of vessels represented by either complete pots or sherds.

[220] The total amount of pottery from cemeteries represents 1276 vessels of which 584 represent imported Roman vessels.

Déchelette, Oelmann, Ludowici and Ricken.[221]
In contrast, however, the analysis of provenance, and subsequently date, could only be achieved with varying degrees of accuracy. The procedure followed included the identification of fabric, form, any mould maker's or potter's stamps, and the identification of the decorative styles of individual potters.[222] The identification of fabric, either by eye or microscopically, proved extremely difficult and very often impossible due to the condition of the material. Of the 306 vessels identified within the funerary goods assemblage, over 62%, at least 191 vessels, showed signs of secondary burning.[223] The process of secondary burning has produced a partially or completely grey, black or brown fabric. This prevents a reliable analysis of the colour and tempering visible in the fracture.
The material was divided as far as possible according to identifiable centres of production. These include La Graufesenque in Southern Gaul,[224] Lezoux in Central Gaul,[225] the centres of La Madeleine, Lavoye, Trier, Rheinzabern, Sinzig, and the Satto and Saturninus factory in Eastern Gaul,[226] as well as later Argonne products.[227]

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[221] See esp. Dragendorff 1895-6; Déchelette 1904; Oelmann 1914. Other useful references for this identification include; Oswald & Pryce 1920; Gose 1984; Webster 1987; Ludowici & Ricken 1948. A comprehensive list of publications on terra sigillata and a discussion on forms and chronology is given by Bridger 1996, 22-53.

[222] For a detailed discussion see Oswald & Pryce 1920; Webster 1987, esp.39-40. I would also like to acknowledge the advice and assistance given to me by Mr. C. Kalee (ROB, Amersfoort) on how to identify the specific production centres and potters.

[223] Of the remaining 115 vessels recorded, 80 records are of vessels that have been lost or were missing when the respective museum was visited (status iv).

[224] General publications include Knorr 1919; 1952; Oswald & Pryce 1920, esp.130-8; Hermet 1934; Oswald 1936-7; Picon *et al.* 1975; Webster 1987, esp.11, 40-1. References to specific parallels are included in the catalogue.

[225] General publications include Oswald & Pryce 1920, esp.139-41; Oswald 1936-7; Stansfield & Simpson 1958; Picon *et al.* 1971; Picon 1973; Rogers 1974; Webster 1987, 11, 41-3. References to specific parallels are included in the catalogue.

[226] General publications include Fölzer 1913; Oswald & Pryce 1920, esp. 141-3; Ludowici 1927; Oswald 1936-7; Oswald 1945; Ludowici & Ricken 1948; Ricken & Fischer 1963; Fischer 1969; Lutz 1970; Huld-Zetsche 1972; Webster 1987, 11, 43-4. References to specific parallels are included in the catalogue.

[227] See Oelmann 1914, 9-10; Chenet 1941; Chenet & Gaudron 1955.

The forms found within the study area are described below. Each form is given a number which is related to parallels in published literature. The examples found within the study area are listed according to production centre. Where more than one vessel of the same form and the same production centre is found in one grave, this is indicated between brackets, e.g. (x2). One or more asterisks, *, after an entry indicates the presence of one or more terra sigillata vessels of the same form but from a different production centre within the same context. A ✡ symbol after an entry indicates the presence of another terra sigillata vessel of a different form within the same context.

5.3.1.2 Vessels of indeterminate form

A number of sherds could not be identified as belonging to a specific form. From burials: *Eastern Gaul* A8 Gr.15 i; A8 Gr.20 i; A8 Gr.23 i✡✡; A8 Gr.27 i; A9 Gr.7 i✡✡; A10 Gr.18 iv; A12 OF1 iv?; A18 Gr.7 i; A18 Gr.11 i; A18 Gr.25 i; A22 Gr.35 ii✡; A22 Gr.55 iv✡✡✡; A22 Gr.64 iv; A22 Gr.78 ii✡; A22 Gr.223 i; A22 Gr.247 iii; A22 Gr.250 i; A22 Gr.254 ii; A22 Gr.255 i; A62 iv.
Trier A22 Gr.60 i✡✡.
From settlements: *Eastern Gaul* B10 Find A 10 i; B15 Find A i; B15 Find B i; B18 Find C i; B22 i; B23 i) or iv)?.

5.3.1.3 Form 1

This group comprises deep, hemispherical bowls of which 6 variants have been recognized in the study area.

5.3.1.3.1 Form 1.1: Dragendorff Form 29

From burials: *Southern Gaul* A9 Gr.20 iv.
From stray finds: *Southern Gaul* C 34 iv?.
Of the two examples found within the study area, the sherd from the grave in Wahn (A9) apparently represents either a bowl of Form 1.1 or an early transitional example of Form 1.2. Rademacher dates the vessel within the early years of the last quarter of the first century AD.[228] The vessel found as a stray find in Mettmann (C34), now lost, apparently corresponds to Ritterling's 17b and could date as early as the Claudian period, being one of the earliest datable Roman imports recorded within the study area.[229]

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[228] Vespasianic (AD 70-80). The sherd is discussed and illustrated in Rademacher 1922, 189 & Taf.IX,1.

[229] Ritterling 1913. See also Oswald & Pryce 1920 Pl.3,2 and Gose 1976, 7 no. 7.

5.3.1.3.2 **Form 1.2: Dragendorff Form 37**[230]

From burials: *Southern Gaul* A22 Gr.187 i.
La Graufesenque A8 Gr.49 i; A22 Gr.111 i; A22 Gr.145 i; A22 Gr.164 i; A22 Gr.201 ii.
Central Gaul Lezoux A22 Gr.176 ii.
Eastern Gaul A4 Gr.1 iv¤; A9 Gr.11 iv; A22 Gr.51 iv*; A22 Gr.57 iv; A22 Gr.194 i; A22 Gr.249 i*.
La Madeleine A2 Gr.1 i; A7 Gr.14 i*; A9 Gr.4 i; A9 Gr.7 i*;A10 Gr.7 i; A10 Gr.8 i; A22 Gr.74 i*; A22 Gr.188 i*; A22 Gr.200 ii; A22 Gr.205 i; A22 Gr.257 i; A22 Gr.263 i; A32 i*****; A63 Gr.1 i; A74 Gr.1 i.
Lavoye A7 OAF i****; A8 Gr.32 i; A9 Gr.6 i; A16 Gr.1 i; A22 Gr.11 iii**; A22 Gr.19 i*; A22 Gr.72 i; A22 Gr.102 i*; A22 Gr.102 ii*¤¤; A22 Gr.242 i.
Trier 1 A8 Gr.35 i; A22 Gr.53 iv; A22 Gr.73 i; A22 Gr.246 iii (x3); A22 Gr.268 i*.
Trier 2 A22 Gr.161 iii; A32 i*****; A56 Gr.13 iv.
Trier A7 OAF i (x2)***; A8 Gr.17 i; A8 Gr.22 i; A8 Gr.23 i*¤; A8 Gr.29 i; A9 Gr.16 iv; A10 Gr.4 i; A10 Gr.5 i; A10 Gr.9 i; A10 Gr.10 i; A10 Gr.11 i*; A10 Gr.15 i**; A10 Gr.16 i; A10 Gr.21 i*; A10 stray i; A22 Gr.9 iv; A22 Gr.11 iii (x2)*; A22 Gr.42 iii¤; A22 Gr.43 iv; A22 Gr.48 ii; A22 Gr.51 iv*; A22 Gr.70 ii**; A22 Gr.77 i; A22 Gr.81 iv*; A22 Gr.81 i*; A22 Gr.84 i (x2); A22 Gr.87 i; A22 Gr.89 ii; A22 Gr.92 i; A22 Gr.98 i¤; A22 Gr.188 iii*; A22 Gr.256 i (x3)*****; A22 Gr.258 i; A22 Gr.271 i**; A45 i; A51 Gr.2 iv?; A55 i*; A56 Gr.2 i; A56 Gr.3 i; A56 Gr.4 iv; A56 Gr.10 i¤; A56 Gr.12 iv; A61 Gr.1 iv.
Sinzig 2 A22 Gr.162 i; A22 Gr.256 i*******.
Sinzig A7 OAF (x2)***; A10 Gr.11 i*; A10 Gr.15 i**; A22 Gr.138 i.
Satto A22 Gr.19 i*; A22 Gr.134 i; A22 Gr.180 i.
Rheinzabern A8 Gr.23 i*¤; A8 Gr.24 i; A8 Gr. 28 i; A8 Gr.30 i; A22 Gr.5 ii; A22 Gr.7 iv; A22 Gr.18 i; A22 Gr.23 ii; A22 Gr.54 iv: A22 Gr.80 iv (x2); A22 Gr.178 ii; A22 Gr.230 i; A22 Gr.256 i (x2)******; A22 Gr.256 i*******; A22 Gr.268 i*; A22 Gr.270 i; A35 Gr.2 iv: A56 Gr.14 i.
Provenance uncertain A2 Gr.4 i; A2 Gr.5 iv?; A7 Gr.12 iv; A7 Gr.14 i*; A7 Gr.15? iv; A7 stray iv; A8 Gr.1 iv; A8 Gr.33 i; A8 Gr.36 i; A8 Gr.38 i; A8 Gr.39 i; A9 Gr.57 i; A9 Gr.7 i¤; A9 Gr.8 i; A9 Gr.10 i; A10 Gr.12 i; A10 Gr.14 i; A10 Gr.15 i**; A10 Gr.21 i*; A14 Gr.2 iv; A17 Gr.1 iv; A18 Gr.2 iv; A18 Gr.3 i; A18 Gr.5 iv (x2); A18 Gr.8 i; A18 Gr.9 i; A18 Gr.22 i; A18 stray i (x2); A20 Gr.2 iv; A22 Gr.1 i; A22 Gr.2 i; A22 Gr.4 i¤; A22 Gr.8 i¤; A22 Gr.12 iii; A22 Gr.21 iii¤; A22 Gr.25 iv¤; A22 Gr.26 iii; A22 Gr.27 ii¤; A22 Gr.30 iv (x2); A22 Gr.31 ii; A22 Gr.44 iv; A22 Gr.55 iv¤¤¤; A22 Gr.56 i¤¤; A22 Gr.58 iv;

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[230] Dragendorff 1895-6; Oswald & Pryce 1920, 95-125; Webster 1987, 32.

A22 Gr.60 i¤¤; A22 Gr.61 i; A22 Gr.63 i; A22 Gr.67 i¤; A22 Gr.68 i; A22 Gr.70 i**; A22 Gr.70 ii**; A22 Gr.71 *; A22 Gr.74 i*; A22 Gr.75 i¤; A22 Gr.78 i¤; A22 Gr.79 ii; A22 Gr.86 ii; A22 Gr.88 i; A22 Gr.90 iv; A22 Gr.91 iv; A22 Gr.94 iv; A22 Gr.96 iv; A22 Gr.97 iv; A22 Gr.101 ii; A22 Gr.104 i; A22 Gr.130 iii; A22 Gr.132 ii; A22 Gr.144 i; A22 Gr.150 i; A22 Gr.163 i; A22 Gr. 205 iii*; A22 Gr.208 ii; A22 Gr.219 iv; A22 Gr.224 i; A22 Gr.235 i; A22 Gr.243 i; A22 Gr.245 iv; A22 Gr.249 iii*; A22 Gr.251 iii; A22 Gr.254 i; A22 Gr.256 i*******; A22 Gr.260 i (x2); A22 Gr.264 iii; A22 Gr.267 i; A22 Gr.271 i (x2); A22 Gr.272 i; A24 iv; A26 Gr.1 iv?; A27 Gr.1 i; A30 1A (x2); A30 1B iv?; A32 iv (x4)**; A33 iv; A34 Gr.1 iv; A35 Gr.1 iv; A35 Gr.3 iv; A35 Gr.4 iv: A42 Gr.1 iv; A44 Gr.1 iv; A55 iv*; A56 Gr.7 iv; A56 Gr.9 iv; A56 Gr.15 iv; A68 Gr.1 iv; A70 iv.

From settlements: *La Madeleine* B42 i

Eastern Gaul B6 i; B9 i.

Provenance uncertain B10 Find A 2) i; B15 i; B18 Find A; B18 Find B; B29.

From stray finds: *Provenance uncertain* Findspot C i; C34 iv?

Complete vessels or sherds representing Form 1.2 make up the largest group within the Roman pottery assemblage from burial sites as a whole. The form is also clearly present, although in unquantified amounts, on the settlement sites within the study area. The form represents 80% (244 vessels) of all the terra sigillata from cemeteries (see Fig. 5.17). Of this amount, 43% (132 vessels) come from Rheindorf (A22),[231] where Form 1.2 represents over 76% of the terra sigillata in the cemetery (Fig. 5.18).[232]

The total number of Form 1.2 vessels in Rheindorf that can be associated with manufacturing centres is presented in Figure 5.19. A limiting factor in an accurate analysis of the relative quantities is the number of vessels that are of uncertain provenance (47%, 114 vessels).

Although only accounting for a very small number of vessels (2.5%; 6 vessels) the bowls identified as of Southern Gaulish manufacture, mostly attributed to La Graufesenque (2%; 5 vessels), are crucial in helping to determine the absolute date of the earliest Germanic burials recorded within the study area. None of the vessels can be

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[231] See Rademacher 1922, 209-16 for a detailed analysis of a large part of the assemblage of Form 1.2 vessels from the study area.

[232] From a total of 173 vessels. This is a revised percentage based on more recent research than that cited in Waugh 1993, 304, where the total of *c.* 98% is given.

reliably dated before the last two decades of the first century AD.[233] Except for one vessel from Troisdorf (A8) all these South Gaulish vessels were recovered from burials in Rheindorf (A22).

Only one vessel, accounting for 0.5% of the assemblage, is of certain Central Gaulish provenance, manufactured in Lezoux and found in Rheindorf (A22).[234]

The vast majority of the identified vessels, 50% (123 vessels), are of Eastern Gaulish manufacture. Of these, 53.5% (66 vessels) were found in Rheindorf (A22). Half of all the Eastern Gaulish vessels can be identified as products of the Trier industry (25.2%, 62 vessels). As a group, the Eastern Gaulish wares are present in small numbers at the beginning of the second century AD. Their inclusion in funerary deposits rises to a peak within the second half of the second century and early third century AD. None of the vessels can be dated after the mid-third century, and it is doubtful whether many of the later vessels were included in graves much later than the early decades of the third century AD, when the form appears to have been at least partly replaced by the later Form 1.3 manufactured by the Argonne potteries.

Of the fourteen recorded complete vessels, only six are recorded as being secondarily burnt on the cremation pyre (14.5%). A further eleven are recorded as semi-complete, all of which show signs of secondary burning. These vessels may well have been originally complete when placed on the pyre, the effects of the heat or the collapse of the pyre itself causing them to break. Of the vessels represented by a single or a small number of sherds, 75% (145 vessels) show signs of secondary burning with 255 (48 vessels) being apparently unburnt.[235] This is discussed further below.

On only one vessel, now lost, from Düsseldorf-Oberbilk (A35 Gr.2 iv), is there an example of graffito: "V" scratched into the edge of the stand ring.[236] Whilst there are six examples of potter's stamps on vessels (see Table 5.1), there is only one example of a cursive inscription which would have been written on the mould on a complete vessel, now missing, used as an urn in Rheindorf (A22 Gr.81 iv). Three other vessels of the same form, all bearing the same inscription and all of Trier manufacture dating around *c.* AD 200, have been published

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[233] Within the date range AD 75-110, which also corresponds to the date given to the bowl of transitional form Dr.29/Dr.37.

[234] Within the date range AD 90-110.

[235] Here again, 25 vessels are recorded as being lost and the condition of a further 3 is uncertain.

[236] Trier manufacture, with retro stamp COMITIA (Antonine - early third century AD).

from sites within the Roman province: from Niederbieber and Mainz in the German Rhineland and a cemetery site in Aardenburg, Province of Zeeland, the Netherlands.[237]
The inscription, in retro on all the vessels found within the province,[238] reads:

INTERCED NOLI VIAT
interced(ere) noli, viat(or)
"He who passes by, do not interfere"[239]

Oxé suggests that such vessels were often used within the Roman province as markers on top of graves, emphasising the sacredness and inviolability of the burial. Since such markers were commonly stolen, the inscription was apparently meant to represent the warning voice of the deceased themselves.[240] Whilst the vessel was used as an urn rather than a grave marker, the specific nature of the inscription was most probably meant to have the same effect, to ward off any potential thieves. Its inclusion within a Germanic grave implies that Latin was understood and read, even if only at a rudimentary level, to either the deceased, or those involved with interring the cremated remains.

5.3.1.3.3 Form 1.3: Oelmann Form 16
From burials: *Eastern Gaul Argonne* A22 Gr.22 i.
Possibly Argonne A8 Gr.47 i; A11 ST6 i; A22 Gr.42 ii¤; A22 Gr.59 i; A22 Gr. 67 i¤; A56 Gr.10 i¤.
These bowls, in form at least, are almost identical to earlier Form 1.2 vessels and are best interpreted as a continuation of the same form and, arguably, functional tradition. Although vessels with grooved decoration had already appeared in the Hadrianic period, the vessel form certainly continued longer than Form 1.2, with examples dating into the third and fourth centuries AD, certainly within the Rheindorf graves. The stamped 'chess board' effect decoration around the lower body is characteristic of the later examples.[241]

5.3.1.3.4 Form 1.4: Dragendorff Form 38
From burials: *Provenance uncertain* A22 Gr.56 iv¤¤.
Plain bowls with a hooked flange approximately mid-way down the wall

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[237] See Oxé 1934, 101-2; Trimpe Burger 1967, 244-6. The examples from Mainz and Niederbieber were complete vessels, the Aardenburg was a sherd.

[238] The inscription on the Rheindorf vessel is not recorded.

[239] My translation.

[240] Oxé 1934, 101.

[241] Oelmann 1914, 24-5 & Taf.I.

emerged in the late Hadrianic period but are most typically found in contexts of the second half of the second century AD. East Gaulish products continued until the mid-third century AD.[242]

5.3.1.3.5 Form 1.5: Dragendorff Form 44
From burials: *Eastern Gaul* A22 Gr.8 ii¤; A22 Gr.13 ii.
Provenance uncertain A22 Gr.4 ii¤; A22 Gr,16 iv; A22 Gr.21 ii¤; A22 Gr.98 ii¤; A22 Gr.223 iv.
From settlements: *Provenance uncertain* B18 Find B i.
These plain bowls resemble Form 1.4 and are possibly a variant of this form, but have a narrow cordon instead of a flange. The date range for the vessel type also agrees with that for Form 1.4.[243]

5.3.1.3.6 Form 1.6: Oelmann Form 19
From burials: *Provenance uncertain* A22 Gr.55 iv¤¤¤; A22 Gr.102 ii¤¤¤.
These bowls have a plain rim with a zone of barbotine decoration around the middle of the body, set between two cordons. These cordons would appear to link the type to Forms 1.4 and 1.5. Oelmann suggests that such barbotine-decorated vessels begin to be produced around the mid-second century, with the technique falling out of use by the mid-third century at the latest.[244]

5.3.1.4 Form 2
Four main variants of shallow dishes or platters have been recognized.

5.3.1.4.1 Form 2.1: Dragendorff Form 18
From stray finds: *Probably Southern Gaul* C22 i?.
Vessels such as this, with a curved wall, usually date to the mid - late first century AD. Within the second century a gradual transition takes place, via the Form 2.2 to the deeper bowls of Form 2.3. Only part of the base of this vessel was recovered, preventing more accurate dating.[245]

5.3.1.4.2 Form 2.2: Dragendorff Form 18/31
From settlements: *Provenance uncertain* B10 Find B Trench 3 iv.

5.3.1.4.3 Form 2.3: Dragendorff Form 31
Form 2.3A From burials: *Eastern Gaul?* A22 Gr.83; A22 Gr.234 iii.

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[242] Oswald & Pryce 1920, 212-4; Webster 1987, 22.

[243] Oswald & Pryce 1920, 203-4; Webster 1987, 27-8.

[244] Oelmann 1914, 5-6,29 & Taf.I.

[245] Oswald & Pryce 1920, 181-4; Webster 1987, 17-9.

Provenance uncertain A22 Gr.60 ii¤¤; A22 Gr.247 i.
Form 2.3B From burials: *Eastern Gaul Trier* A22 Gr.246 i.
Provenance uncertain A22 Gr.267 i.
These vessels appear towards the mid-second century AD, although the rouletted variant (Form 2.3B, equivalent to Dragendorff Form 31R) is almost always later than AD 160. East Gaulish examples continued to be produced until the mid-third century AD.[246] The vessel in Rheindorf (A22) Gr.234 can be more specifically described as being the variant form Ludowici Sa, dating around the end of the second century AD (Rheinzabern product?).[247] The vessel in Rheindorf (A22) Gr.246 bears a stamp: [L]OSSÆ.[248]

5.3.1.4.4 Form 2.4: Dragendorff Form 32
From burials: *Probably Eastern Gaul* A22 Gr.55 iv¤¤¤; A22 Gr.56 iv¤¤; A22 Gr.102 ii¤¤¤.
From stray finds: *Probably Eastern Gaul* C56 i.
The vessel form was mainly of Eastern Gaulish manufacture and dates predominantly between the second half of the second and the mid-third century AD. Cups of Form 3.3 are smaller versions of the same form (see below). Although never found together in a sealed context within the study area,[249] Forms 2.4 and 3.3 are described as a characteristic 'dish' and 'cup' service within provincial Roman contexts.[250]

5.3.1.4.5 Shallow Bowls and Dishes of Indeterminate Form
From settlements and stray finds: *Provenance uncertain* B15 Find A; C11 i.

5.3.1.5 Form 3
Cups are represented by three main variants in the study area.

5.3.1.5.1 Form 3.1: Dragendorff Form 27
From burials: *Provenance uncertain* A8 Gr.5 i.
From stray finds: *Provenance uncertain* C34 iv?.

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[246] Webster 1987, 18-9.

[247] See Oswald & Pryce 1920, Pl.XLVII,2 & 4.

[248] A more accurate dating of this stamp is still necessary.

[249] The combination of Dr. 32 and Dr.40 vessels in Walsum *im Spiek* (C56) must be seen as coincidental, since the finds were dredged out of the harbour area along with other provincial Roman vessels (see Catalogue, Appendix III).

[250] Oswald & Pryce 205-6; Webster 1987, 26.

The two examples of this cup form[251] both have strong double curved walls, a relatively flat-topped rim and an internal groove below the lip. All these features are typical of first-century vessels. The Troisdorf grave (A8 Gr.5) contains no other closely datable material. The form certainly goes out of use by *c.* AD 150-160.[252]

5.3.1.5.2 Form 3.2: Dragendorff Form 33
From burials: *Central Gaul?* A22 Gr.41 iii; A22 Gr.45 iii¤.
From stray finds: *Provenance uncertain* C14 i.
Conical cups with a footring such as these appear in the Tiberian period but were never common in the first century in the Roman province due to the predominance of Form 3.1 cups. This cup form became the most popular form in the mid- and late second century AD, with East Gaul examples continuing into the third century AD.[253]

5.3.1.5.3 Form 3.3: Dragendorff Form 40
From burials: *Eastern Gaul* A11 stray i.
From stray finds: *Probably Eastern Gaul* C56 i.
See Form 2.4 above for dating and discussion.

5.3.1.5.4 Cups of Indeterminate Form
From settlements: *Provenance uncertain* B10 Find A 1) i.

5.3.1.6 Form 4
This group of beakers is represented by two main variants in the study area.

5.3.1.6.1 Form 4.1: Dechelette Form 72[254]
From burials: *Probably Eastern Gaulish* A4 Gr.1¤; A22 Gr.35 i¤; A22 Gr.36 ii; A22 Gr..45 i¤; A22 Gr.264 i.
Apart from the decoration, these globular beakers are basically identical in form and date to beakers of Form 4.2. Of the sherds recovered, only two from Rheindorf (A22 Grs.45 and 264) showed evidence for having been barbotine-decorated. The barbotine method of decoration on sigillata vessels is particularly characteristic of Rheinzabern pottery in Eastern Gaul, with the period of its most intense manufacture falling in the last two-thirds of the second century AD. In general, the beakers can mostly be dated between the second half of the second century and the mid-third century AD. On the

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[251] For illustration see Joachim 1987, Taf.12,1.

[252] Oswald & Pryce 1920, 186-8; Webster 1987, 19.

[253] Oswald & Pryce 1920 189-91; Webster 1987, 20.

[254] Cf. Oelmann 24c, Gose 164.

basis of the seriation of the Rheindorf graves as presented in Chapter 8.5, it may be concluded that the inclusion of these beakers in the graves occurs relatively late, that is in the third century AD. The production of globular sigillata beakers with barbotine decoration clearly had some relationship to the colour-coated industry producing vessels with the same decorative technique, for instance Forms 4 and 5 (see sections 5.3.3.2.5-6).[255]

5.3.1.6.2 Form 4.2: Dragendorff Form 54[256]
From burials: *Provenance uncertain* A8 Gr.4 i; A22 Gr.75 ii¤.
These examples of globular beakers, decorated with an incised or 'cut glass' technique, are generally of Eastern Gaulish production and date between the mid-second and mid-third century AD, corresponding with beakers of Form 4.1.
This beaker form, whilst clearly uncommon in the study area, are also rarely found within provincial Roman burials.[257]

5.3.1.7 Form 5: Dragendorff Form 45
From burials: *Provenance uncertain* A22 Gr.25 iv?¤; A22 Gr.27 i¤.
From settlements: *Provenance uncertain* B10 Find A 2) i; B15 find A i.
This is the only mortarium form that has been found in the study area. These mortaria, with almost upright upper walls, date between the late second and mid-third centuries AD.[258]

5.3.1.8 Form Spectrum and Dating of the Ware Across the Study Area
The distribution of terra sigillata, both chronologically as well as physically, shows a much more marked concentration within the southern half of the study area. This may well be due to the bias in excavation material that is presently available for research as well as the bias in research interests. Terra sigillata is clearly concentrated within the larger cemeteries, particularly in graves of the second - early third century AD. Such sites have been mostly excavated in the southern part of the study area, for instance Troisdorf (A8), Rösrath-Hasbach (A10), and Rheindorf (A22). The only cemetery of comparable size in the north is that of Duisburg-Ehingen (A56). For both the completely and partially recorded settlement sites within the study area, the

[255] Oelmann 1914, 32 & Taf.I; Oswald & Pryce 1920, esp.228 & Pl.LXXIX; Gose 1984, 15 & Taf.10; Webster 1987, 36-7.

[256] Cf. Oelmann 24b, Gose 163.

[257] Oelmann 1914, 31-3 & Taf.I; Oswald & Pryce 1920, 223-4 & Pl LXXIX; Gose 1984, 15 & Taf.10.

[258] Webster 1987, 23-4.

amount of terra sigillata recovered per site cannot be used for sensible statistical analysis. In contrast to the cemeteries, the majority of known larger settlement sites are located in the northern rather than the southern part of the study area. Only future extensive field survey and excavation will be able to show if this recorded bias is in fact real.

The sheer quantity of terra sigillata within the study area compared with other find groups of imported material, has already been discussed (see section 5.3.1 and Fig. 5.16). This quantity, combined with the ability to date distinctive attributes such as form, fabric and decoration relatively closely, means that the assemblage is potentially of great importance when attempting to establish a chronology for the occupation and use of sites within the study area. Despite the fragmentary nature of the pottery recovered, the proximity of the study area to the Roman Lower Rhine province, and thus ease of access to the economic network in which the pottery was distributed, would support a short period of circulation and thereby allow the reliable dating of contexts containing the ware.[259] On analysis of the terra sigillata assemblage from the study area, however, it is clear that, whilst the dates of individual vessels are clearly helpful for the general picture, their meaningfulness for close dating is relatively modest and only becomes relevant when supported by evidence from associated material, for instance other datable grave goods.[260] Figure 5.20 indicates the total quantities of terra sigillata vessels from the different production regions that have been recorded in cemetery sites within the study area. The graph illustrates the presence of very small amounts of terra sigillata in the first half of Eggers' *Stufe* B2, indicated by the small amounts of material of Southern and Central Gaulish production reaching the area (only 3%). The vast majority of the material recovered is of Eastern Gaulish production, dating between the second and early third centuries AD (41.5%). A very small amount of Argonne ware indicates the return to the very modest use of terra sigillata within the third and possibly fourth centuries AD (only 0.5%). Unfortunately, the largest group of material, at 55%, is of uncertain provenance which severely restricts the results to be achieved with the data. The chronological appearance

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[259] For instance, Eggers 1955, 205; Joachim 1987, 10-1. For discussion and further literature, referring also to the dating of glass and bronze vessels, see Kunow 1983, 15-7. See also under 5.5 below.

[260] A point restated by Joachim 1987, 11. Millett 1987 also suggests that reliable terra sigillata dates depend on the overall composition of assemblages and draws attention to the pitfalls of relying on conventional terra sigillata dates for the comparative dating of contexts.

of terra sigillata in burials within the study area is best reflected in the evidence presented by Form 1.2 bowls, by far the largest form group (see Fig. 5.21). Within the small amount of Southern Gaulish and Central Gaulish vessels (3%), none can be dated earlier than the last two decades of the first century AD. Eastern Gaulish wares are clearly predominant (50%), rising in number from the beginning of the second century to reach a peak, particularly with Trier wares (25.2%), in the later second century and beginning of the third century AD. Certainly no vessels of this form have been recovered from contexts dating after the mid-third century. The middle years of the third century AD would appear to mark the latest date for their inclusion in burials.[261] The evidence suggests, however, that Form 1.2 bowls may have been replaced by later Argonne ware bowls of Form 1.3, although these were clearly used on a much smaller scale.

An almost identical picture is presented by the evidence for Form 1.2 bowls in the cemetery at Rheindorf (see 5.3.1.3.2 above and Fig. 5.19), from which by far the majority of all terra sigillata (56.5%), and certainly of Form 1.2 bowls (54%), have been recovered. In the second largest cemetery, Troisdorf (A8), although significantly smaller than Rheindorf (A22) with only 64 excavated graves as opposed to 273, a similar situation is reflected (see Fig. 5.22). Although only sixteen Form 1.2 bowls have been recovered, there is again a clear peak in the second half of the second-early third century AD, with the presence of East Gaulish wares (62.5%), particularly of Rheinzabern and Trier production (56.25%).

On an intra-site level in Rheindorf (A22), the dating of the terra sigillata, independent of its associations with other finds, is important for establishing the date ranges of the different parts of the cemetery. The distribution of wares from different production centres is illustrated in Figure 5.23. The earliest material is found in gravefield *Ost* (O). The inclusion of East Gaulish wares begins gradually, rising to a peak in gravefield *West*, particularly within the largest area, W3. The latest dated Argonne ware is found within the small gravefield *Mitte* (M).[262]

Whilst the small number of settlement finds reflect the same chronological picture as that of burial finds, the stray find evidence

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[261] For further discussion on the presence of fragments of Form 1.2 vessels in later burials and the consequences this has for the chronology of both sites and individual burials, see Chapter 8.3 and 8.5.

[262] See also Rademacher 1922, 209-16. Von Uslar discusses in his *Vorwort* (1938, X, also 185) the research of Prof. K. Stade into the Roman imports, particularly terra sigillata, in Germania. Unfortunately, no copy of this work has been found, if it was ever completed.

contains two of the earliest datable finds from the study area. A Form 1.1 bowl from Düsseldorf-Mettmann (C34) and a Form 2.1 dish from Wermelskirchen-Dabringhausen (C22) could both realistically date to the Claudian period, or at least the earlier part of the last half of the first century AD. Unfortunately, the unreliable nature of the findspots makes the significance of the presence and dating of the two vessels uncertain (see Appendix III).

5.3.1.9 Function Within the Burial Ritual

Throughout the study area the terra sigillata appears to have fulfilled a number of functions within the burial ritual.

As far as the function of Form 1.2 bowls can be determined within the funerary contexts, almost 17% of the assemblage is made up of complete vessels (41 vessels). Of these, sixteen are reliably recorded as having been used as cremation urns and another three as lids, found turned upside down, sealing the contents of another vessel used as an urn. Whilst many of the remaining complete vessels could well have been deposited as accompanying grave goods, the inadequate recording of many contexts does not rule out that a greater number of these vessels were actually used as either urns or lids. The absence of signs of secondary burning on the majority of these vessels implies that they were incorporated into the burial ritual during the depositional phase, after the cremation had taken place.[263] The 62% of vessels showing signs of secondary burning, the majority being represented by sherds, would have been burnt on the cremation pyre alongside the deceased.

As well as arguing for a short period of circulation, the proximity of the study area to the Roman Lower Rhine suggests that the neighbouring Germanic tribes would be fully aware of the functional application of specific vessel types within the province. The quantity of terra sigillata within the study area is clearly significant. This might suggest that Roman provincial culture would have had such influence along the border that the obvious attraction of terra sigillata vessels as an acquisition, by whatever means, would also bring with it a conscious attempt by the natives to adopt the functions and customs, particularly within the burial ritual, deemed appropriate within the province. This is, however, apparently not the case for the majority of terra sigillata vessels recorded within the study area. The function of terra sigillata within the Germanic burial ritual is not easy to explain, but is certainly at odds with that within the province.

Within the Lower Rhine province a very specific form spectrum is presented within the burial evidence. Deep hemispherical bowls,

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[263] For example, of the 41 vessels, 23 are now recorded as lost (status iv).

especially the decorated vessels of Form 1.2, were very uncommon as grave goods. Most popular within late first - early third century burials were the 'service' vessels, combinations of plain platters, dishes and cups, such as Forms 2.1, 2.2, 2.3a, 2.4, 3.1, 3.2.[264] A similar distribution is also represented by the settlement sites. The percentage of terra sigillata compared to other wheelturned pottery on non-military (rural) sites varies between 1-5% of the total assemblage in the second and third centuries AD. Of this amount, decorated vessels (primarily of Form 1.2) never represents more than 20% of all the terra sigillata.[265]

Within the study area, a huge 80% of all vessels found within burial contexts are decorated bowls of Form 1.2. In stark contrast, no other single form represents much more than 2% (see Fig. 5.17). The form spectrum within the study area is otherwise extremely limited. A small range of deep, hemispherical bowls (five or six forms) predominate over an even smaller range of dishes (three forms), cups (three forms), beakers (two forms), and mortaria (one form).

The occurrence of particular forms within individual graves in Rheindorf is in clear contrast to the situation in provincial Roman cemeteries (Fig. 5.24). Of the 125 graves containing terra sigillata, either complete vessels or sherds, the vase majority, 85 graves (68%), contained only a single Form 1.2 bowl. Only seven graves contained two Form 1.2 bowls, only one grave three bowls (A22 Gr. 271) and, exceptionally, only one grave seven bowls (A22 Gr.256). Single examples of Form 1.5 bowls and the later Form 1.3 bowls were present in only five graves respectively. A combination of two or more different bowl forms occurs in only four graves, bowls with dishes in only six graves, dishes alone in only three graves, bowls and beakers or cups in only one grave, and beakers or cups alone in only five graves. On closer examination it may well be the case that a greater number of graves show signs of a more 'Romanized' influence on the burial ritual if one examines closely the function of the various pottery vessels without relying too heavily on the need for parallels in fabric as well as function. Colour-coated drinking beakers for instance, another significant Roman import within the burials in this

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[264] See, for example, the cemeteries in Hees, Nijmegen (Brunsting, 1974); Nijmegen-East (Stuart, 1977b); Hatert (Haalebos, 1990); Nordfriedhof, Worms (Grünewald, 1990); Valkenburg (pers. comm. C. Kalee, Rob, Amersfoort).

[265] In Rijswijk-De Bult (Province of Zuid-Holland, the Netherlands) 20% of the terra sigillata is made up of Dr.37s, that is Form 1.2 (Bloemers 1978, 241-253). See also the sites listed from the Dutch Eastern River Area by Willems 1986, Chapter 5 and 136-157. Hessing (Pers. comm. ROB, Amersfoort, The Netherlands) suggests similar percentages to Rijswijk-De Bult for the completely excavated Dutch River Area settlement of De Horden.

respect, are present in 30 of the graves that also contain terra sigillata. Within Roman contexts, deep bowls of Form 1.2 would have been used as either mixing or serving bowls, most probably for wine, as part of a 'drinking service'. Another pattern visible within the Rheindorf graves in particular, may be evidence for the introduction of a new custom from the Roman province. No complete terra sigillata vessels are found within the earliest parts of the cemetery, gravefields *O* and *S*, only sherds. The complete vessels only begin appearing within the second-century and later gravefields of *W* and *M*. Although this phenomenon may also be linked to increasing availability, it may equally indicate a greater awareness of, and desire to imitate provincial Roman customs. No other finds group, however, shows a comparable change within this period. The inclusion of a 'drinking service' in many graves has already been discussed with regard to the Germanic vessels, in particular those of Form V (see 5.2.11 above, and Chapters 9 and 10). Whether all the vessels identified can be said to represent the Roman custom of wine drinking is arguable. Their inclusion in grave contexts, however, is certainly a Germanic custom rather than a provincial one.

It seems sensible to assume that the decision to use an imported vessel over a native vessel must hold some significance. The wish to reflect a certain level of social status may also have played a role. It is important to note here that 54% of the graves in Rheindorf (A22) did not contain terra sigillata. In can be argued, however, that the more widespread inclusion of terra sigillata within second - early third-century graves could have had less to do with a conspicuous display of status than with the simple fact of increased availability. It may be more true to say that the use of terra sigillata was considered more ostentatious in the late first-century graves, the earliest in the study area, where terra sigillata is less commonly found. Even within the province, Willems shows that in the Nijmegen area the distribution of terra sigillata was restricted to a limited number of sites, mostly military, within the first century AD. Only during the second century does the presence of terra sigillata become quantitatively significant on sites outside Nijmegen.[266]

Whilst providing a contrasting picture to that within the Roman province, the pattern from the study area compares well with research from other regions of Germania. Eggers already noted in the 1950s that, in comparison to the late La Tène, the area between the Rhine and Elbe began to quickly fill with imported finds, particularly terra sigillata and brooches, during the early Roman period.[267] His distribution maps of imports, particularly in his *Stufen* B and C, show

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[266] Willems 1986, 138.

[267] Eggers 1951, 43.

concentrations of terra sigillata along the Lippe, on the North Sea Coast, in the Elbe region, and in Slovakia north of the Danube. Nowhere, however, is the concentration as great as in the Rhineland.[268]

Recent research into the Roman imports reaching Lower Saxony shows clearly the dynamic of the Germanic-Roman relationship. Whilst only small amounts of terra sigillata, mainly within graves, are to be found in the area in the period leading up to the Marcomannic Wars, the later Roman period saw a marked increase, with the peak in terra sigillata occurring in the last third of the second century AD. As in the study area, imports do not appear to have continued much, if at all, after the mid-third century AD. The form spectrum in Lower Saxony also shows similarities. Bowls of Form 1.2 dominate the assemblage.[269] Within settlements and cemeteries studied in Slovakia north of the Danube (the frontier with Pannonia) bowls of Form 1.2 again predominate in the form spectrum of the Southern, Central and Eastern Gaulish production centres.[270] Plain Forms comprise 2.2, 2.3, 2.4 and 3.2 although in much smaller numbers, and only one or two of the later beakers of Forms 4.1 and 4.2 are recorded. Interestingly, the form spectrum is provided mostly by settlement site assemblages (85.8%), rather than cemetery sites (only 7.1%). This brings us directly back to the problem of distribution in relation to the nature of the archaeological evidence as discussed at the outset.

The limited form spectrum cannot satisfactorily be explained by the fact that it was part of only a limited range of goods that were imported into the region. The very proximity of military sites, and therefore markets, such as Bonn, Cologne, Neuss and Dormagen for instance make this improbable. The most likely explanation seems to be that the incorporation of a limited spectrum of imported wares within the burial ritual was based primarily on choice. The general picture from the burial evidence suggests that terra sigillata vessels were treated and used in just the same way as the native Germanic pottery. The vast majority of Germanic pottery vessels incorporated within the burial ritual are medium-sized jars and bowl forms.[271] Shallow dishes or platters are extremely uncommon,[272] and only a very occasional beaker or cup form is found, these usually being modelled on Roman counterparts.

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[268] Eggers 1951, Karte 4, 5, 62, & Beilage 109.

[269] Von Schnurbein & Erdrich 1992.

[270] Kuzmová & Roth 1988, 162-83 (German summary).

[271] Forms I-V. See 5.2.10 & 5.2.11.

[272] Form VI. See 5.2.7.

The predominance of deep bowls of Form 1.2 in the study area cemeteries may simply be explained, therefore, by the fact that they could fulfill the same, rather than a different, role as Germanic jars. In fulfilling the same role, however, their selection may well have been been due to the fact that they were so ostentatiously 'Roman'. As with the colour-coated drinking vessels described below, it remains uncertain whether the complete vessels were ever used in daily life before inclusion in the burial, and whether their use in some instances as urns precluded a further symbolic function as part of a drinking service for the afterlife. Is is also easy to imagine their distinctive red gloss and elaborate relief-decorated friezes, ranging from the erotic to grape harvesting and animal hunting scenes and unparalleled within Germanic pottery, as having been a very important factor in their popularity.

5.3.2 Gallo-Belgic Wares[273]

5.3.2.1 Terra Nigra

From burials: A9 Gr.1 iv; A22 Gr.98 i; A22 Gr.116 i; A22 Gr.143 i; A22 Gr.156 i; A22 Gr. 169 i; A22 Gr. 203 i; A22 Gr. 252 i; A22 Stray Find iv; A65 Gr.1.
From settlements: B5; B15 (x2).
Compared to other imported pottery wares, the number of terra nigra vessels found within the study area is very small. As stated by Willems,[274] terra nigra belongs to the group of pottery known collectively as 'Gallo-Belgic' ware.[275] Whilst its ancestry can be traced back to Iron Age La Tène forms, it was produced by Gaulish potters on the Lower Rhine under the influence of Roman techniques and forms. Certainly by the time of the Augustan campaigns, and possibly earlier, the vessels were being introduced into the Dutch Eastern River Area in order to meet military demands. Terra nigra ware is easily identified by its very fine fabric, in fracture showing a dark-light grey paste, and its highly burnished, black exterior surface. The typology used to describe the forms is based primarily on that published by Holwerda for the large amounts of the ware recorded on kiln sites in and around Nijmegen in the Netherlands.[276] Other vessels are described according to typologies put forward for pottery

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[273] See Waugh 1992 for an earlier article on this group of vessels.

[274] Willems 1986, 159-162.

[275] As Willems states (1986, 159 note 62), the term was invented by H.Dragendorff (1895, 87), who considered Gallia Belgica as the primary area of production.

[276] Holwerda 1941.

assemblages from the early Roman forts along the Lower Rhine *Limes*, for instance Ritterling's publication of the material from the fort at Hofheim.[277]

One of the earliest Roman imports found in the region dating to the mid first century, is the terra nigra platter of Form Hofheim 97b with herringbone decoration, from the cemetery at Wahn (A9 Gr.1).[278] Five more vessels from the study area, all from Rheindorf, are bowls of Form Hofheim 112/Holwerda 50 (A22 Grs.116, 143, 156, and a stray find) and Form Holwerda 50a (A22 Gr.169).[279] These forms were first produced in terra nigra during the second half of the first century AD, but were clearly modelled on Late La Tène predecessors. All five vessels are from contexts that date no earlier than the last quarter of the first century or possibly the early second century AD.

The remaining few diagnostic sherds are from vessels dating to the early or mid second-third century AD. From burial contexts this assemblage includes a complete jars of Form Holwerda 27 from Rheindorf (A22 Gr. 98) and Form Holwerda 55 from Rheindorf and Duisburg-Hamborn (A22 Gr. 252, A65 Gr. 1). From settlement contexts sherds of another Form Holwerda 27 jar have been found at Hangelar (B5), and the remains of two narrow-necked jars from the settlement at Poll (B15).

As stated above, a Roman provincial origin for these vessels is not in doubt. Willems lists a number of military sites in the Lower Rhine province, including Cologne, Neuss and Xanten, that are known to have produced terra nigra Gallo-Belgic wares at least in the first half of the first century AD. Late first and second century AD kiln sites have also been found, in civil or less obviously military contexts.[280]

As far as the function or significance of the terra nigra wares within the study area is concerned, the assemblage is too small to draw detailed conclusions. From the evidence that does exist, the vessels appear to have fulfilled either the same or a similar role within the burial ritual as other contemporary provincial Roman finewares. For instance, whilst the complete vessels from Rheindorf (A22 Grs. 116, 156 and 98) and Duisburg-Hamborn (A65) were used as urns, the rim sherds found in other Rheindorf graves (A22 Grs. 143 and 169) had been subject to secondary burning on the pyre.

In the first and second centuries AD, the use of finewares such as terra nigra and colour-coated ware was clearly overshadowed by the overwhelming popularity of terra sigillata which dominated the

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[277] Ritterling 1913.

[278] the vessel is now lost. For a discussion and illustration see Rademacher 1922, 208 and Taf. VIII.6. Also von Uslar 1938, 244-5.

[279] See Ritterling 1913; Holwerda 1941.

[280] Willems 1986, 160, esp. fig. 35.

spectrum of imported wares within the burial sites (although less so within assemblages from settlement sites).

5.3.2.2 *Planetenvase*

From burial: A8 Gr.2 i.

This individual vessel is unique within the study area and therefore deserves special attention. The vessel shows signs of secondary burning and was found in sherds within the burial, although it was probably originally placed as a complete vessel on the pyre and may have been buried complete (see fig. 5.25). Other examples of such vases are known from sites mainly within Belgium, northern France, with some in the Lower German province, particularly Cologne. The Troisdorf pot is the only example to date found outside the Empire. Bavay has been identified as a major production site for these vessels. The cast of a bust has also been found in Cologne, which could be the provenance of the Troisdorf example.[281]

Interpretations vary as to the significance of the figureheads moulded around the vessel and its function. Several of the vases are decorated with seven figureheads which has lead to the discussion that they represent the planetary gods representing the days of the week. Other examples, however, have fewer than seven figureheads, making this interpretation questionable.[282] The vase from Troisdorf, for example, only has six figureheads. Carmelez suggests that the vessels can be linked to the renewal of native traditions which began to remanifest themselves within the Severan period and in also to the rise in the emperor cult in the eastern part of the Roman Empire, where there are many examples of the gods being dressed as emperors (and vice versa). In Bavay itself, the majority of the vessels have been found in the houses or working areas of the poorer, lower classes of society. A ritual or cult association for the vessels is very likely. Several examples have been found in cemeteries in Bavay. The fact that on some vessels the figures have their mouths and eyes shut has led to their specific interpretation by some as funerary cremation urns.[283]

Dating the vases is difficult. Brulet but gives a date range of second half of second century - beginning of the third century AD. Whilst some examples in Bavay are of Antonine date, the majority date between AD 193-285.[284]

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[281] Joachim lists extensive literature on the subject in his catalogue (1987, 20). See also Brulet 1973 and 1967 and J. Carmelez 1987 for other parallels and discussion.

[282] See Brulet 1973.

[283] Carmelez 1987, 94-5.

[284] Brulet 1973, 190; Carmelez 1987.

5.3.2.3 Late Roman Terra Nigra-Like Wares

All the terra nigra-like vessels from the study area are wheelmade, in some instances showing faint turning ridges, especially on the interior surface. The fabric can vary from containing very little visible tempering to containing fairly coarse sand and sometimes grit. In fracture the colour of the paste can vary between dark grey to greyish-white. Since the majority of the sherds found in cremation graves are burnt, it is often difficult to determine their original surface colour or finish. The original surface colour can, however, vary between different shades of grey, including light grey, grey-black or a blueish-grey. The surfaces of the vessels are smoothed and in some instances burnished on the exterior. Two general form groups have been identified in th study area and are described below.

5.3.2.3.1 Chenet 342-like Vessels

From burials: A8 Gr.32 i; A10 Gr.20 i; A18 Gr.15 i; A22 Gr. 25 i; A22 Gr. 27 i; A22 Gr. 35 i (x2); A22 Gr.36 i; A22 Gr. 244 iv; A22 Gr. 252 i; A22 Gr. 254 i; A22 Gr. 255 i; A22 Gr.258 i; A58 Gr.1 i; A72 Gr. 1 i.

From settlements: B18 i; B33 i (x4+).

Although most of the terra nigra-like vessels found in the study area are very fragmentary and are represented by only a few sherds, it is nevertheless possible to see that, in form, most of the vessels appear to belong to the same basic type of pot; a footed jar or cup with a curving S-shaped profile. An exception to this is the vessel from Troisdorf (A8 Gr.32) which appears to have more beaker-like affinities. The remaining rim and base sherds within the group, because of their small size, remain unidentified, although may well have belonged to the same general jar type.

Whilst the vessels share the same basic characteristics, however, there are a number of differences within the group. The first of these is the variation in size. Although most of the vessels are medium-sized, there is at least one particularly small, goblet or cup-like vessel within the group (from Essen-Überruhr-Hinsel, B33) and two much larger, thicker-walled jars (A22 Gr.252, A22 Gr.254, although A22 Gr.258 may also belong in this category). The form of the base can also differ, ranging from a low, footed base (for example, A22 Gr.244, A22 Gr.258, A22 Gr.252) to a high, narrow, clearly-defined pedestal base (for example, A72 Gr.1). Whilst most rims are fairly curved, others (for instance A8 Gr.32), have a more upright standing rim. Some vessels remain undecorated, but others have shallow grooves around their base. The two large jars (A22 Gr.244, A72 Gr.1) are the only vessels complete enough to show that they had grooves around their girth. Some vessels have narrow cordons around the top of the base. Where the body of the vessel is decorated, it is only ever roller-stamped, although the decoration appears in various zones and in

different combinations on different vessels.
Within the study area, this vessel type is encountered both on cemetery and settlement sites. The largest single assemblage recorded from a cemetery site comes from Rheindorf. According to Mildenberger, the assemblage from the settlement site of Essen-Überruhr-Hinsel (B33) contained many more vessels of this type, with more than half of them decorated with roller-stamped grooves. The site, however, remains unpublished, so actual numbers are uncertain.[285]
Whilst sources generally agree on the date range of the vessels and agree that the ancestry of the vessels traces in part to Late La Tène forms, opinion appears split as to the degree to which this influence can be recognized. Both provincial Roman and Germanic provenances are variously proposed for the vessels.
Von Uslar describes the vessels from Bucholtswelmen-Spellen (A72) and Troisdorf (A8) as being of third-century AD date and belonging to his Holzhausen-Oldendorf vessel type which he describes as having a distribution area covering Westphalia and the Lower Rhine.[286] Although von Uslar does admit similarities between his Westphalian-Lower Rhine group and certain terra nigra forms found in the Roman fort at Alzey,[287] any associations for his group with provincial Roman forms are discounted. He regards the similarities in his group with certain forms of Late La Tène 'Celtic' or Celtic-influenced pottery as being evidence of a revival of these forms in the late Roman period, which took place independently both within and outside the province.[288]
Although unable to cite a precise provenance, Von Uslar stresses the similarities and links with the late Roman period wheelmade Germanic pottery tradition that existed further to the north as far as the North Sea coast, in eastern Germany and even southern Russia.[289]
The remaining terra nigra-like goblets from the study area are described by Von Uslar as being a *Vorform*, or precursor, of Unverzagt's Alzey form 24/26.[290] According to Koch, this is the

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[285] Mildenberger 1972, 114 note 39. Because of time constraints whilst recording material for this research, the complete assemblage from this site couldn't be made available to the present author. The vessels published here should therefore only be seen as representative of the actual site assemblage.

[286] Von Uslar 1935, 254; 1938, 84.

[287] Unverzagt 1916, Abb.2, 2, 8. & 9.

[288] Von Uslar 1935, 255.

[289] Von Uslar 1935, 253.

[290] For example, his description of vessels from Rheindorf: Von Uslar 1938, 220-38.

limes area[291] and also appears to have been the predominant form in the area between the rivers Rhine, Main and Neckar.[292] The vessels from the study area, however, bear only a slight resemblance, if any, to the Alzey forms, which are much squatter, thicker-walled vessels. More recently, Mildenberger has listed several more examples of these so-called *Fußschalen*, or footed cups, from Nordhessen and the eastern Ruhr and Lippe regions,[293] and cites evidence from mineral analysis that may suggest an origin for the vessels in the Duisburg-Wesel area.[294] Germanic antecedents can also be argued on typological grounds as the goblet form shows strong similarities with the earlier native forms, most especially von Uslar's Form II.[295]

In contrast, several authors support a provincial Roman origin, whilst admitting the evidence to be ambiguous. Van Es notes that the Germanic ware found in Westphalia and Central Germany shows a close resemblance to the provincial Roman pottery. Whilst an influence from within the empire cannot be discounted, he states other factors such as local traditions and impulses from the east that may also have played an important role in the development of the forms. That being said, he also sees strong reminders of first- and second-century provincial Roman prototypes in the forms, in addition to noting that roller-stamped decoration has not been found on vessels in Central Germany.[296]

Vessels of either parallel or very similar form to those found in the study area have been discovered in the Netherlands, for instance on the native Germanic sites of Wijster[297] and Bennekom[298] as well as in the eastern river area.[299] These have been described as Chenet 342 goblet or cup forms, first identified in the Argonne region of northern France.[300] The dates for the vessels range from the third to the fifth century. As van Es notes, however, the necks and rims of the

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[291] Koch 1981.

[292] Bernhard 1984/5.

[293] Mildenberger 1972, 104-6.

[294] Mildenberger 1972, 123 and note 111.

[295] Mildenberger also remarks upon this similarity: 1972, 121.

[296] Van Es 1967, 163.

[297] Van Es 1967, 158-68.

[298] Van Es *et al.* 1985, 589-94.

[299] Willems 1986, 164-5.

[300] Chenet 1941, 91-4.

Argonne vessels are usually straight whereas the Dutch examples are more curving, which he interprets as suggesting that the Dutch vessels are of a slightly later date.[301] Most of the vessels from the study area have curving rims except for one example with an upright neck from Rheindorf Grave 33 (fig. 1.31).
Chenet states that the type continues a Late La Tène Gallic tradition, although he does not indicate the intermediary links. As for the date, Chenet sees the foot as an addition of the Constantinian period, with cups of this type (one still with a flat base) being found in *Sépulture* A which dates to *c.* AD 360. Chenet assumes that the occurrence of a 'waster' among the assemblage implies local production.
Whilst no actual kilns have been found to date to prove any Gallo-Belgic (or Argonne region) origin for the vessels, analysis of the fabric from certain groups of late terra nigra vessels in north-eastern France[302], has shown important similarities between it and the earlier, traditionally accepted Gallo-Belgic wares.[303] Willems assumes the vessels were of provincial Roman manufacture, but also discusses the possibility of Chenet 342 cups being produced in the border region.[304] In discussing the settlement site of Soest-Ardey in Westpalia, Halpaap dismisses any notion of a Germanic origin for the terra nigra-like wares, describing them as provincial Roman fineware, noting that their roots are clearly in the Gallo-Roman tradition, with variations in the form possibly indicating the products of different potters.[305] He recognizes a similarity in their roller-stamped decoration to that of colour-coated ware beakers.[306] Halpaap notes the relatively common appearance of terra nigra-like vessels on fourth-century sites in wide areas of Germania, in particular the late Roman period settlements along the Hellweg (i.e. the route into Germania along the Lippe). Of the seven variants Halpaap distinguishes in Soest-Ardey, material from the study area corresponds with three of these, and conforms with Halpaap's dating. The first variant, footed

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[301] Van Es 1967, 163.

[302] The so-called terra nigra *tardive*.

[303] Pers.comm. M.Tuffreau-Libre.

[304] Willems 165 and note 106.

[305] For his criticism of Mildenberger's earlier conclusions, see 140 note 668.

[306] Halpaap 1994, 138-140.

cups with grooved decoration and foot-ring bases[307] which he equates with Holwerda form 54 No. 538,[308] includes most of the vessels of a recognizable form from the study area. The type is mainly Constantinian in date, with some examples continuing late into the second half of the fourth century AD. The second of Halpaap's variants, a single bowl with profiled walls and grooved decoration, is also extremely similar to the two large vessels from Rheindorf and Bucholtswelmen-Spellen (A22 Gr.244, A72), and dates to the late third or fourth century AD.[309]
In form, the large vessel from Rheindorf (A22 Gr.144) is very similar to that found in grave 1273 from Krefeld-Gellep.[310] This vessel, which dates to the middle third of the fourth century AD, has a short pedestal base and a slightly outward curving neck, with all over roller-stamped and grooved decoration. Such forms possibly date slightly earlier than the example from Spellen-Bucholtswelmen (A72), which has a rounder body and higher pedestal base.

5.3.2.3.2 Footed Cups with Pedestal Bases
From burials: A52 Gr.1 i; A66 Gr.1 i.
From settlements: B34 i.
The last of Halpaap's variants to be recognized in the study area, footed cups with conical pedestal bases,[311] appears to account for only three vessels in the study area.[312] Halpaap dates these undecorated types to the last decades of the fourth and the beginning of the fifth centuries.The form finds a parallel in Krefeld-Gellep form 131a, which dates to the end of the fourth-mid fifth century; Bohner's Late Antique *Stufe I*.[313] This date agrees with that proposed

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[307] *Fußschalen mit Kerbbandverzierung und abgesetztem Fuß*; Halpaap 1994, 142.

[308] Holwerda 1941.

[309] *Schale mit eingeschnürter Wandung und Kerbbandverzierung*; Halpaap 1994, 143, although he states there are no parallels for his vessel.

[310] Pirling 1974, 10 and Taf.7,4.

[311] *Fußschalen mit konisch einziehendem Fuß*; Halpaap 1994, 142-3.

[312] The vessel from A66 does not have a pedestal base, but otherwise fits the general description given here.

[313] For the form see Pirling 1966, 128-130; Typentafel II, 131a. Bohner's *Stufe I* lasts until *c.* AD 450/80: see Ament 1976, 336.

for the example found in the Beekstraße, Duisburg (B34).[314] Examples are also known of similar date from other sites within the Lower German province, for instance from Cologne, St.Severin and Rhenen.[315] Van Es argues that these footed-cup types have an association with, or at the very least were influenced by, the pottery he refers to as 'black wheelmade pottery' from the northern Netherlands.[316] The striking similarities between these forms and earlier Germanic styles should also not be overlooked, in particular, comparison with Von Uslar's Forms I and I/II.
The small quantity of terra nigra-like wares found within the study area might indicate that its functional role was only minor within Germanic society, or that it was a relatively scarce commodity. A specific ritual use cannot be excluded. It may well be the case, however, that these late fineware vessels partly filled the ever-growing gap caused by the ending of the terra sigillata industries in the third century AD, and therefore the diminishing number of terra sigillata vessels available on the market. Where terra sigillata was still available, for instance roller-stamped Argonne ware, this was included in the graves.

5.3.2.3.3 Conclusions

In Rheindorf, on the basis of the seriation presented in Chapter 8.5, late terra nigra-like vessels almost only occur in the last phase of the cemetery. This theory would agree with Willems' opinion of events in the Dutch eastern river area. He states that alongside Argonne sigillata, late terra nigra wares are the only later Roman vessels exported in any quantity to the area. He suggests that this fact may have given the vessels a special importance, especially since normal kitchen wares were scarce in the region. The apparent rarity of Chenet 342 vessels within the Empire itself is seen as further evidence to suggest that it was a prestige item both inside and outside the frontier, since the vessels would have been costly to acquire.[317] Argument still continues as to the production sites of these vessels. Whilst a provincial provenance is still assumed for the vessels, more research into identifying kiln sites and their products, by means of fabric analysis, is necessary before such suggestions can be presented

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[314] Early - mid fifth century: see Krause 1987, 98-100; 1988, 38-40, and Abb. 2,9.

[315] For a more detailed discussion of parallels see Van Es 1967, 165.

[316] Van Es 1967, especially figs. 82-83.

[317] Willems 1986, 164-5. However, as Willems notes Van Es & Verlinde (1977, 24-5) argue to the contrary.

more confidently.
When comparing the products of both the provincial Roman and the Germanic industries, it seems clear from a stylistic point of view that, from an early stage, the development of new Belgic and Germanic vessel forms was heavily influenced by one another. This intermingling of traditions would have further been affected by the increasing number of Germanic migrants crossing the Rhine and settling within the province during and after the third century. This situation would have meant that at least some, if not all, pottery made within the Roman provinces after the third century AD would have been heavily influenced by Germanic ceramic tradition and may well have even been made by German settlers themselves. The fourth and fifth-century forms discussed above are often seen as the precursors to later Frankish forms which does suggest that post-Roman potters could successfully continue their industry after the end of the Roman period.

5.3.3 Colour-Coated Wares

5.3.3.1 General Remarks

Although accounting for only a relatively small number of vessels, the colour-coated wares are the second largest group of imported pottery (after terra sigillata) within the study area.[318] The term colour-coated ware is used here to describe a range of vessels made of a fine fabric whereby the overall, dark 'colour coat'[319] is achieved by dipping the pot completely into a slip. Variations of the ware were produced at different centres in Central and East Gaul from the first until the fourth century AD. The vessels found within the study area were produced at sites in East Gaul and the Rhineland.
The first distinction between the different vessels is made on the basis of the colour and quality of the fabric and colour coat. These relate to the specific 'technique' of manufacture. To some extent the various techniques represent a chronological development and certain forms are more representative of a certain colour and fabric than others, although a high level of overlap does exist.
Some problems do exist in identifying the technique attributable to certain vessels. Whilst the recognition of the various colours on unburnt vessels is relatively straightforward (except in the case of 'misfired' examples), the vessels burnt on the pyre tend to become a uniform grey, the colour coat having been partially or completely burnt away.
The form spectrum from the study area is most readily described and

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[318] That is, the number of vessels represented by sherds. See under 5.3.3.6 below.

[319] The colour coat is described as a 'varnished' finish in German and Dutch, i.e. *Firnisware* and *geverniste waar* respectively.

dated by referring to the types published by Oelmann from the German *Limes* fort of Niederbieber (AD 190-259/260) in Rhineland-Pfalz, Gose's catalogue of Rhineland pottery, and the well-dated material published by Brunsting, Stuart and Haalebos from cemeteries in and around Nijmegen in the Netherlands. More recent publications include those of Symond and Künzl.[320] A complication arising from these publications, however, is their use of three different systems of fabric classification.[321] In the English language, the different forms and fabrics have been summarized by Anderson, and have more recently been the subject of a doctoral thesis by Symonds.[322]

Three basic fabric types are found in the study area. Rather than devising yet another classification, for the purposes of this research these fabrics are described according to Oelmann's 'Techniques' A, B and D. These fabric descriptions are necessarily general since no detailed fabric analysis was undertaken on the assemblage from the study area. The fabric spectrum described by Oelmann from Niederbieber, for instance, situated as it is in the Middle Rhineland, is more likely to include the products of other more local kiln sites, e.g. those in the Wetterau and around Rheinzabern (see below).
In the descriptions below, the corresponding classifications used by Brunsting, Stuart, Haalebos and Anderson are given in brackets:

Technique A usually a fine, white fabric (sometimes slightly grey) with no visible inclusions. The colour coat varies from a brown-black , red-brown to olive green colour and is usually glossy but can be matt (Brunsting/Stuart Tech. B; Haalebos Tech. C; Anderson Lower Rhineland Fabric 1)).

Technique B a red fabric with a high iron content, sometimes with a grey core. The colour coat is brown-black, sometimes dark red or sometimes olive green in colour and is usually more matt than glossy (Brunsting/Stuart Tech.C; Haalebos Tech.D; Anderson Lower Rhineland Fabric 2/Mosel Valley Trier).

Technique D a hard-fired red fabric, no visible inclusions, often with fine grey layers just under the colour coat giving a 'sandwich effect'. A glossy, black colour coat (deep green

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[320] Oelmann 1914, 35-8; Brunsting 1937/74, 70-2; Stuart 1962/77, 20; Gose 1976; Haalebos 1990, 135-7; Symonds 1990; Künzl 1997.

[321] Brunsting, whilst referring to Oelmann, produces a new classification which is also adopted by Stuart. Haalebos again produces a new classification, but without clear reference to previous publications.

[322] Anderson 1980; Symonds 1990. Anderson only discusses in detail the material from the late first and second centuries AD. Symonds covers the first-fourth centuries AD in Gaul and the Germanies.

or brownish-red may be the result of faulty firing), sometimes with a more metallic appearance: so-called 'Rhenish wares' and *Qualitätsware*. Many beakers, particularly motto beakers were usually manufactured in a samian fabric (Brunsting/Stuart Tech.D; Haalebos Tech. E; Anderson Mosel Valley Trier).

Within the Lower Rhineland, generally speaking, vessels in a white fabric usually associated with Technique A were products of the Cologne kilns (Rudolfplatz) sites. On a small scale this fabric was also produced in Xanten.[323] Reddish fabrics, such as Technique B, are known from Xanten, Colonia Ulpia Traiana, where it predominates over white wares, on a small scale in Cologne, and mostly Trier.[324] Oelmann states that the presence of his Technique A, produced in a number of centres, is limited to the first part of occupation at Niederbieber, i.e. the end of second century to the beginning of third century AD.[325] Anderson gives the date range for her Fabric 1 as late first-end second/beginning of third century AD.[326] Oelmann attributes his Technique B to local manufacture. Anderson's Fabric 2 dates until the end of the second and probably into the early third century AD, whereas the Trier industries began producing colour-coated beakers at the same time as terra sigillata, i.e. AD 120-130.[327] Symonds states that Cologne has produced clear evidence for pottery production in the first, second and fourth centuries, but little for the third century when the production of *Qualitätsware* (Technique D) in Trier was at its peak.[328] He suggests that Cologne was probably a very important market for Trier vessels rather than the source of the red fabric wares. Dark colour-coated wares were probably being produced in Trier by the mid second century, but they did not achieve wider distribution until the end of the century. Production of colour-coated fine wares continued in Trier into the fourth century AD, large numbers being exported to sites along the Rhine.[329]

The forms found within the study area are described below.

Under each form, the number of examples found within the study area is given. an asterisk (*) after an entry indicates the presence of

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[323] Anderson 1980, 18.

[324] Anderson 1980, 20-1.

[325] Oelmann 1914, 36.

[326] Anderson 1980, 14-5.

[327] Anderson 1980, 20-22.

[328] Symonds 1992, 47, esp.note 50.

[329] Künzl 1997, 113.

another colour-coated vessel, of a different form or fabric, within the same grave.

5.3.3.2 Beakers

5.3.3.2.1 Beakers of Indeterminate Form

From burials: *Tech. A* A7, Gr.14 i; A11 *Stelle 1/2 1, Planum* i; A18 Findspot A stray finds i; A18 C Gr.24 i; A22 Gr.1 iii; A22 Gr.35 i; A22 Gr.246 i; A22 Gr.249 i.
Tech. B A22 Gr.3 i; A22 Gr.248 i*; A22 Gr.254 I*; A22 Gr.264 i; A22 Gr.265 i; A22 Gr.272 i.
Tech. D A22 Gr.9 i.
Tech. ? A12 A Gr.1 iv?(x2); A12 D Gr.1 iv?; A22 Gr.40 iv; A22 Gr.70 iii; A22 Gr.99 i (x2); A22 Gr.104 i; A22 Gr.107 i; A22 Gr.182 i; A22 Gr.187 i; A22 Gr. 230 i; A22 Gr.235 i; A22 Gr.253 i; A22 Gr.271 i; A56 Gr.11 iv; A62 iv.
From settlements or stray finds: *Tech. A* B10, (roughcast); B14 (barbotine); B15, (barbotine); B29 (roughcast); B18.
Tech.B B3; B6; B26; C1; C23.
Tech.D? B10; B18.
Tech.? B10.

5.3.3.2.2 Form 1: Bag-Shaped, Cornice-Rimmed Beakers[330]

From burials: *Tech. A* A8 Gr.32 i; A22 Gr. 168 i; A56 Gr.10 i (x2).
Tech. ? A12 F Gr. 1 iv?.
From settlements: *Tech. A* B15.
The large beaker from Troisdorf (A8 Gr.32) with roughcast decoration and the two small, plain beakers from Duisburg-Ehingen (A56 Gr.10) represent common variants of the type which is characterized as having a fine cornice rim, high foot and a sagging,'bag-shaped' body, where the widest point is towards the base. The slightly convex walls slope outwards immediately below the rim and turn inwards again towards the base, at a point usually equivalent to a third of the height of the vessel. After AD 70, the beaker type became the dominant form in fine ware beakers in the Rhineland, East and North Gaul as well as Britain, and remained so until the second century.[331] According to Haalebos, this beaker form is the most commonly found vessel form in the cemetery at Hatert. Production of this form is known from Cologne and Remagen, amongst other sites. Brunsting dates their appearance to

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[330] Brunsting Type 2a, Stuart Type 2A, Gose nos. 188-9, Anderson Form 2, Haalebos Types 2011 and 2020, Symonds Group 29. See Brunsting 1937, 73-5 & Pl.3; Stuart 1966, 20-3 & Pl.1 3-6; Gose 1976, 17 & Tafel 12-3; Haalebos 1990, 138-41 & fig. 81, 5-8; Symonds 1992, 43-5 & fig. 21, 429.

[331] Anderson 1980, 6.

around AD 100, Stuart puts it at around AD 80. Haalebos gives a general date range of AD 90-180 for the form, stating that its absence from the fort at Niederbieber suggests it had gone out of use well before AD 190. As well as changes in the shape of the cornice rim, Anderson describes the variations in the shape and size of the beaker as being chronological indicators. The earliest short, broad profiles were gradually replaced by narrow, more elongated vessels with a more angular profile and, consequently, an accentuated foot.[332] The beaker from Troisdorf (A8 Gr.32) with a simple cornice (Anderson Type 1) and rounded body, rather than angular probably dates to the early-mid second century. The beakers from Duisburg-Ehingen (A56 Gr.10) probably date to the mid or third quarter of the second century.
The beaker from Rheindorf (A22 Gr.168) does not much resemble beakers more usually associated with this category, for example, Stuart's Pl.1.3-4 but is most similar to Stuart's Pl.1 nos.5 and especially 6, where the main difference is a rounder rather than a sagging body. This Rheindorf beaker also has a slightly beaded, more everted rim rather than a cornice rim which is a characteristic of the type. Haalebos specifically questions Stuart's inclusion of these vessels within his Type 2. He suggests that they rather belong to a a separate intermediate form, i.e. his 2011, between Stuart's Type 1A (Gose 180 = Ritterling Form 25[333]) and Type 2A. In Stuart's Type 1A (AD 40-110), whilst variations occur in the height of the base, its important characteristics are a short rim which is sharply everted and slightly hollowed out on the inside, and a rounded body, with the maximum girth either above or around the mid-height of the vessel. Whilst this beaker's exact classification is uncertain, a production date around the end of the first century AD or the early part of the second century AD seems most likely.

5.3.3.2.3 Form 2: Bag-Shaped, Simple-Rimmed Beakers[334]

From burials: *Tech. A* A22 Gr.97 i; A22 Gr.100 i; A56 Gr.3 i.
Tech. D A22 Gr.41 i.
Tech. ? A25 Gr.1 iv.
From settlements: *Tech. A* B10; B15.
Tech. D B26.
Except for its simple rim, this beaker type has the same form as the

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[332] Anderson 1980, 6.

[333] Ritterling 1901.

[334] Oelmann Type 30, Brunsting Type 3, Stuart Type 3, Gose nos. 185/186, Anderson Form 2, Haalebos Type 2030, Symonds Group 28. See Oelmann 1914, 38-9 & Tafel II; Brunsting 1937, 75-6 & Pl.3; Stuart 1966, 23-4; Gose 1976, 16 & Tafel 12; Anderson 1980, 6; Haalebos 1990, 141 & fig. 81, 10-11; Symonds 1992, 43-5 & fig. 21, 423-4, 427.

cornice-rimmed beaker described above. Four of the beakers can be classified as Oelmann Type 30a/Brunsting 3a, i.e. small, plain beakers, up to a height of *c.* 9.5 cm. The beaker from Duisburg-Ehingen (A56 Gr.3) has a groove just under the rim which Brunsting notes is quite common. The beaker from Hilden (A25 Gr.1) is now missing, but apparently fits more closely with the larger beakers (since it was large enough to be used as an urn) which are classified as Oelmann Type 30b/Brunsting 3b, with rouletting over the surface.
According to Oelmann and Brunsting, the beaker type came into use at the same time as cornice-rimmed beakers, i.e. *c.* AD 100. The Type 30a beakers are, however, found almost exclusively in contexts dating to the second half of the second century into the third century, which in general, is after the disappearance of the cornice-rimmed beakers. Anderson states that the type was not introduced until the Antonine period and continued to be produced into the late fourth century, so precise dating is difficult. Stuart gives their general date range as AD 150-260, with some outliers earlier (after AD 100) and later (until AD 300). Symonds dates his Group 28 to the mid/end of the second century into the beginning of the third century. Haalebos notes their inclusion in mid-second century graves in Neuss and Dormagen.
Distribution of this beaker type covers the Rhineland, Belgium and Britain. Kiln sites producing them have been identified in Cologne (Rudolfplatz), Xanten (*c.* AD 200) and Soller near Düren. A single, small sherd from the settlement at Lülsdorf (B10) comes from a folded 'Gladiator beaker', i.e. decorated with scenes, *en barbotine*, of humans and animals in gladiatorial combat. The sherd depicts two running dogs in harness, possibly pulling a chariot. Such vessels were very rare and, in Germany, were only made in Cologne around the mid second century.[335]

5.3.3.2.4 Form 3: Globular, High-Shouldered Beakers[336]
From burials: *Tech. B* A8 Gr.9 i; A22 Gr.252 i.
Tech. ? A8 Gr.38 i.
Three vessels belong to this group. All three have barbotine decoration, which distinguishes them from the plain beakers of Oelmann Type 29a. Oelmann describes his Type 29 as being one of the earliest beaker forms found at Niederbieber. Gose's nr. 184 (with a glossy black colour coat) dates between the end of the second and first half of the third century. Symonds notes that the type was never as popular as his Trier Form 1 vessels (see below) which he dates generally to the third - fourth centuries AD. Künzl dates the appearance of white

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[335] Anderson 1980, 16.

[336] Oelmann Type 29b, Gose no. 184, Symonds, Trier form 2, Group 42. See Oelmann 1914, 38 & cf. Tafel II; Gose 1976, 16 & cf. Tafel 12; Symonds 1992 & fig. 33-4, 636-8.

barbotine on these vessels to after *c.* AD 255.[337]

5.3.3.2.5 Form 4: Globular High-Shouldered, Everted-Rim Beakers[338]
Within this group four variations can be identified according to permutations in decoration on the vessels:
Beakers with roughcast decoration below the neck (Oelmann Type 32a) From burials: *Tech. ?* A22 Gr.66 v; A56 Gr.9 iv (x2).
Beakers with barbotine decoration, often with wide bands of rouletting around the lower body (Oelmann Type 32b) From burials: *Tech. A* A22 Gr.102.
Tech. ? A22 Gr.66 iv; A68 Gr.1 iv.
Beakers with wide bands of rouletting beginning under the neck (Oelmann Type 32c) From burials: *Tech. A* A10 Gr.21 i; A22 Gr.79 ii; A56 Gr.10*.
Fromsettlements: *Tech.B* B15?; B26?.
Folded beakers (Oelmann Type 32d) From burials: *Tech.B* A22 Gr.77 i.
The general characteristics of this beaker form are a high-shouldered, globular body with a slightly angular profile, resulting in a long, slender foot and sharp shoulder. The almost straight neck slopes in from the shoulder to an everted, pointed rim. In Niederbieber, Types 32a-b disappear before the end of the second century, with type 32c continuing certainly until the abandonment of the fort (*c.* AD 259/260). Type 32d is dated as beginning around the mid-second century. Haalebos gives a general date for the type of AD 150-270 with roughcast decoration not appearing after AD 200. Production is known from Cologne (Rudolfplatz).

5.3.3.2.6 Form 5: Round-Bodied, High-Necked Beakers[339]
Within the general group of beakers from the study area, three main variations can be identified on the basis of permutations in the beaker decoration.
Beakers without folds or barbotine (Oelmann Type 33a, Symonds Group 32) From settlements: *Tech.A* B15.
Beakers without folds, but with barbotine decoration (Oelmann Type 33b, Symonds Group 36, Künzl Group V, Type 1.6.2) From burials:

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[337] Künzl 1997, 129.

[338] Oelmann Type 32, Gose nos. 196-9, Anderson Form 4, Haalebos Type 2050, Symonds Group 27. See Oelmann 1914, 39-40 & Tafel II; Gose 1976, 17 & Tafel 13; Anderson 1980, 7; Haalebos 1990, 142 & fig. 81, no.16; Symonds 1992, 43-4 & fig. 20, 412-20.

[339] Oelmann Type 33, Brunsting Type 8, Stuart Type 6, Gose nos. 200-11, Haalebos Type 2060, Symonds Trier Form I, Groups 32-8. See Oelmann 1914, 40-2 & Tafel II; Brunsting 1937, 80 & Pl.3; Stuart 1966, 25 & Pl.1; Goes 1976 18 & Tafel 13-4; Haalebos 1990, 142 & fig. 81.17-8; Symonds 1992, 49-53 & figs. 24-32.

Tech. B A22 Gr.248 i; A22 Gr.251 i.
Tech. D A10 Gr.19 i; A22 Gr.5 i; A22 Gr.6 i; A22 Gr.10 i; A22 Gr.12 i; A22 Gr.25 iv; A22 Gr.27 i; A22 Gr.28 i; A22 Gr.31 i; A22 Gr.41 i*; A52 Gr.1 i.
Beakers with folds and barbotine decoration (Oelmann Type 33d, Symonds Groups 37-8) From burials: *Tech.A* A22 Gr.14 i.
From settlements: *Tech.D* B26.
A number of sherds from beakers within this group could not be more closely identified. From burials: *Tech. A* A22 Gr.52 i.
Tech. D A4, Gr.1 i; A22 Gr.4 i; A22 Gr.33 i; A22 Gr.34 i. *Tech. ?* A22 Gr.53 i.
The general characteristics of this group are a round body with a high, straight neck and beaded rim. The vessel base is carefully finished on the wheel. There are noticeable variations in the forms of beakers, i.e. some are tall and narrow, others short and round, some have short necks and others long necks, the shape of the base can be plain or disc-shaped with rounded or bevelled edges.
Symonds considers the use of rouletting on all colour-coated beaker types as primarily functional rather than decorative, it being used to cover joins where the different sections of a vessel were stuck together at the leather-hard stage of drying before firing. It is not clear exactly what significance can be attached to variations such as the presence or absence of indentations or white barbotine. Barbotine occurs on the vessels as either an abstract design made up of scrolls, dots, horizontal bands, and wavy lines. Three vessels, all in Tech. D, are recorded as having 'mottos'. Only two of these are readable. From Rösrath-Hasbach (A10 Gr.19): AMO TE ('I love you'). From Rheindorf (A22 Gr.31): VIVAS ('good wishes' or 'long life').[340]
Oelmann states that the beaker form, especially his Type 33b, is characteristically produced in Tech. D, thus dating after AD 200. Symonds suggests that specific chronology for Trier vessels cannot be advanced beyond a general *c.* AD 200-276+. Künzl, however, on the basis of an analysis of the stratigraphical deposits in the Trier kilns, is able to date her Group 5 motto beakers between AD 255-355. Her Type 1.6.2, to which both the vessel from A10 Gr.19 and A22 Gr.31 belong, is dated more precisely to AD 300/310-355.[341] A religious significance for motto beakers is discussed below (see 5.3.3.7).

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[340] For a discussion and comparative material for AMO TE, see Loeschke 1931, 50; Symonds 1992 Appendix 2, 112; Künzl 1997, 97. For VIVAS, see Loeschke 1931, 44 note 110, 48 note 130; Symonds 1992, Appendix 2 119-20; Künzl 1997, 97.

[341] Künzl 1997, 129, 152, 208.

5.3.3.2.7 Form 6: Variant Beaker Form[342]

From burials: *Tech. A?* A42 Gr.1 i/iv?.

This beaker variant does not have an exact parallel in any other form. The illustration in the catalogue was copied from a sketch since the original vessel was not available for consultation. The vessel may also have been incorrectly restored. The application of evenly spaced bands of rouletting around the body and the absence of a defined rim are clearly similar to Brunstings Type 7b and Symonds Group 43. Brunsting compares his Type 7 with his cornice-rimmed and shoulderless beakers Types 2 and 3 (see above). An important difference between this vessel and those of Brunsting and Symonds, however, is that rather than being characteristically bag-shaped, its maximum girth lies above the mid-height of the vessel on the shoulder. It also has no foot. A second-third century date seems most likely.

5.3.3.3 Form 7: Wide-Mouthed Carafe[343]

From burials: *Tech.C* A22 Gr.254 i*.

According to Symonds, such carafes are of Trier manufacture, are rarely undecorated, and date to the third century AD.

5.3.3.4 Form 8: Hemispherical Cup[344]

From settlements: *Tech.A* B10.

This small cup has a groove under the rim and a narrow band of rouletting around its girth. The original form of foot, whether flat or pedestal, is uncertain. Symonds, whose examples are all in a reddish Trier fabric, states that his Form 10 is the most common of the cup forms, although cups as a whole are relatively rare in comparison to the ubiquitous beaker. Oelmann states that cups in Technique A have been found in both Cologne and Nijmegen. Haalebos gives a general date for the type of second half second century-third century and notes their production in Cologne (Rudolfplatz), Xanten and Soller.

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[342] Cf. Brunsting 2,3,7b, Symonds Trier form 3, Group 43. See Brunsting 1937, 79 & Pl.3; Symonds 1992, 54 & fig.35.

[343] Symonds Trier form 7, Group 49-51. See Symonds 1992, 56 & figs. 38-40.

[344] Oelmann Type 38, Brunsting Type 25a, Stuart Type 17, Haalebos Type 2251, cf. Symonds Group 55 Trier form 10. Oelmann 1914, 44 & Tafel II; Brunsting 1937, 88; Stuart 1966, 31 & Pl.2, 44; Haalebos 1990, 145 & fig.82.21; Symonds 1992, 59.

5.3.3.5 Form 9: Shallow, Concave-Sided Dish[345]

From settlement: *Tech. A* B10.

As the sherd is now lost, the precise form remains uncertain. Such dishes are characteristic of the second century although, according to Haalebos, they continued to be produced, i.e. in Cologne (Rudolfplatz), Xanten and Soller, into the third century.

5.3.3.6 Form Spectrum Across the Study Area

Although the evidence from settlement contexts is limited, a comparison can nevertheless be made with the material from burial contexts. The presence of colour-coated vessels has been recorded on only 8 of the 40 settlement sites and on only 2 of the 58 stray find sites. Whereas the form spectrum from the settlements includes cups and plates as well as beakers, only vessels associated with drinking are found in the cemeteries. At least 77 vessels have been recorded from over 69 graves. These graves are, however, within only 13 of the 74 sites (*c.* 18%). By far the greater number, 48 graves, are from Rheindorf (A22). With a minimum vessel count of 53, Rheindorf accounts for 69% of the total assemblage from all burials.

5.3.3.7 Evidence for Function

Within the Roman province, colour-coated wares were considered as an auxiliary class of table ware, in no way inferior to terra sigillata products, with a specialized function as drinking vessels. Both Symonds and Künzl discuss the production of miniature, small, medium and large vessels as representing a deliberate standardization in form size. The smaller vessels would have been used for drinking, the medium and larger-sized vessels (as well as the carafes) as jugs or flagons for serving, and the largest vessels for mixing wine. The middle-sized beakers of Form 5 (Künzl's Type 1.6.2) would typically have been used, at least in a provincial Roman context, for serving.[346] As was argued for terra sigillata vessels (see 5.3.1.9 above)), the proximity of the study area to the Roman province would imply that this function was clearly apparent to the native population. Certainly within the Germanic funerary context, drinking vessels were chosen to the exclusion of other forms which are known to have been present in the settlements. Whether the choice of a particular form may well have been based purely on chronological considerations. On the other hand, the function of the vessel,

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[345] Oelmann Type 40, Brunsting Type 17a, Stuart Type 10, Gose no.232, Haalebos Type 2100. See Oelmann 1914, 44-5 & Tafel II; Brunsting 1937, 83 & Pl. 3; Stuart 1966, 26 & Pl.1, 18-9; Gose 1976, 20 & Tafel 16; Haalebos 1990 143 & fig. 82.1.

[346] Symonds 1992, 47; Künzl 1997, 123.

especially relating to its size as discussed above, may have been the overriding factor determining its inclusion in the burial.
Certainly the colour-coated beakers appear to fulfil more than one function in the burial ritual. Only two graves contained two vessels (A22 Gr.99; A22 Gr.248), and another two contained three vessels (A22 Gr.254; A56 Gr.10). The majority of graves contain only one beaker. Many of the vessels show signs of having been burnt on the funeral pyre. These vessels may well have been placed on the pyre containing drink as a gift for the deceased in the afterlife. Most graves only contained a small number of sherds, collected from the burnt pyre as a *pars pro toto* of the original vessel.
As with terra sigillata vessels, whether the complete vessels were ever used in daily life before their selection for funerary use is uncertain. In two graves, a beaker had been used as a repository for cremated remains (see above). Complete beakers, presumably deposited as grave goods (originally containing drink?), were found in twelve other graves (see above). It is equally unclear, as with the terra sigillata, whether the use of a complete vessel as an urn precluded a more symbolic function of the vessel, as part of a drinking service for the afterlife.
Looking at the actual number of vessels in terms of the chronological development of the cemeteries raises another important detail. Compared to provincial Roman cemeteries that commonly contain a high percentage of colour-coated wares in the late first and second centuries, e.g. Bonn, Cologne, Xanten, Nijmegen,[347] the Germanic cemeteries in the study area contain extremely few vessels within this period. Only in the third century AD (especially the second half) and later does the number of vessels rise significantly with the inclusion of round-bodied, high-necked beakers of Form 5 within the graves. It would appear that what was a tradition or fashion that manifested itself early within the province, was only adopted on a relatively widespread scale at a later date across the Rhine. The proximity and presumably ease of access to the Rhineland markets such as Cologne, as well as the presence of other late first and second century imported wares within the graves, especially sigillata, tends to preclude the notion that colour-coated wares were a luxury item and therefore difficult to acquire before the third century AD.
It may simply be that, apart from the adoption of a particular Roman custom, the later ornate barbotine decorated vessels, and the unusual forms of the beakers that are not paralleled in Germanic pottery, became more popular because of their pure ostentatiousness, in much the same way as put forward above for decorated terra sigillata bowls of Form 1.2.

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[347] Stuart 1966, Haalebos 1990.

5.3.4 Smooth Ware

5.3.4.1 Fabric and Form

From burials: A7 Gr.9 i; A7 Gr.14? i; A8 Gr. 4 i; A8 Gr.17 i; A8 Gr.19 i; A10 Gr.9 i; A11 ST1/2 i x4?; A11 stray i; A18 Gr.24 i; A18 stray i; A22 Gr.1 i; A22 Gr.95 i*; A22 Gr.115 i; A22 Gr.115 ii; A22 Gr.115 iii; A22 Gr.140 i; A22 Gr.141 iii; A22 Gr.181 i; A22 Gr.182 i; A22 Gr.200 i; A22 Gr.200 ii; A22 Gr. 215 iii; A22 Gr.223 i; A22 Gr.244 ii; A22 Gr.247 i; A22 Gr.252 i; A22 Gr. 253 i x2?; A22 Gr.254 i x2?; A22 Gr.255 iii; A22 Gr.257 ii; A22 Gr.258 i; A22 Gr.261 i; A22 Gr.272 i; A23 iv; A38 i? x4*; A62 iv.
From settlements: B3; B5; B6; B7; B10; B11; B16; B19; B21; B24; B28; B29; B32; B34; B35; B36; B39.
Stray finds: C1; C12; C17; C32; C37; C39; C53; C54; C55; C56.
Smooth ware represents only 8% of all Roman imported pottery within cemeteries, the majority being from Rheindorf (see fig. 5.16). The small group of vessels within the study area categorized as smooth ware, mostly represented by sherds, are almost exclusively flagons, with a very limited form range being represented, including Oelmann Forms 62a & b, 64, 67b, and 97, and Stuart Form 110b. Flagons were very much a new introduction from the Roman world, travelling north with the Roman army. Their use rapidly became widespread in the military districts along the Rhine and in England. The vessels found in the study area were probably produced within the Cologne area. The fabric is characterized as a smooth pipeclay that can vary slightly in fineness and colour. White-fired clay predominates, although sherds of yellow, yellow-brown and brown-red do occur. Secondary burning has altered the original colour of many of the sherds.[348]

5.3.4.2 Function and Dating

As well as their use as tableware, flagons are one of the most commonly occurring vessel forms to be incorporated in provincial Roman grave good assemblages, particularly along the *Limes*. Second and third-century assemblages more than often contain two or three one- or two-handled flagons, as well as jars.
In the majority of cases in the study area, graves appear to contain fragments from a single vessel. The possibility of more than one vessel being present occurs in only a small number of cases, where a variation in sherd colour or condition, or a difference in find circumstances cannot give a conclusive picture. The presence of four complete flagons in a Düsseldorf cemetery (A38) is apparently an exception to the general situation, although the documentation for the site is incomplete. Only one fragment of a lid has been recorded from

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[348] For a more detailed description of smooth ware fabrics see, Brunsting 1974, 90-1; Haalebos 1990, 155-8.

Poll (A11 ST1/2).
No vessel can be reliably dated earlier than the first quarter of the second century. This is in contrast to the Roman province itself, where the flagon's popularity became firmly established early in the first century. The use of terra sigillata and other fine ware vessels in the burial ritual certainly precedes and exceeds the use of flagons in the study area. The majority date to the second century and late second-third centuries. The vessels decorated with red-brown painted stripes in graves A22 Gr. 254 and A22 Gr. 247 date to the first half of the third century and the third - fourth century AD respectively.[349]

Within the Roman world the flagon functioned as utilitarian tableware. Within a funerary contexts, complete flagons were deposited in graves either filled with liquid, wine or water for the deceased, or as empty vessels representing this function. The function of the flagons within the Germanic burial ritual is unclear: are they to be seen as part of the gifts deposited in the grave, or are they the remains of vessels used during the funerary ritual? Certainly their rarity in graves distinguishes the study area from the province. An interesting example is the complete, miniature two-handled flagon in A22 Gr.95 which may be associated with a child burial.[350] If the function of the vessels was the same as provincial examples, one may at least conclude that this function was either not very popular, or alternatively only relevant to a small group in society, considering the small numbers found.

5.3.5 Grey Ware

From burials: A7 Gr.14 i; A9 Gr.7 i; A10 Gr.9 i; A12 OF1 iv; A22 Gr.5 i; A22 Gr.6 i; A22 Gr.11 i; A22 Gr.271 i.
From settlements: B13 i or iv.
Stray finds: C35 i.
Grey ware sherds are scarce within the study area, making up only 1% of all imported wares. The condition and size of the sherds from the study area makes any comparison or discussion of fabric very difficult. Grey ware as a collective group of pottery is also apparently scarce within the adjoining Rhineland. It only becomes more common in the North Sea coastal area with the occurrence of the so-called *blauwgrijs aardewerk* (blue-grey pottery) found within the Maas

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[349] See von Petrikovits & von Uslar 1950, 174 with note 18 and 177 with note 25a respectively.

[350] See catologue entry in Appendix I, also further discussion in Chapter 9.

and Rhine delta regions of the Netherlands.[351] It is possible that the assemblage from the study area contains at least some examples of this blue-grey pottery. No forms can be identified in the assemblage. In only one grave from Wahn (A9 Gr.7) did the sherds show signs of having been burnt.

5.3.6 Coarse Ware

5.3.6.1 General Remarks

Only 12% of all the Roman pottery found in cemeteries can be categorized as coarse ware. This assemblage represents the third largest imported Roman pottery group in the study area (see fig. 5.23). Over half of all the graves containing the ware are in Rheindorf (34 graves, 56%).

The fabric is characterized as having a hard-fired fabric, tempered with abundant, fine (sometimes coarser) quartz sand or grit that makes the surface rough or 'granular' to the touch. The fabric varies in colour from a dirty white, to yellowish-brown or beige-light grey. Although the ware is commonly known as *Eifelkeramik*, referring to its known production in the Eifel region, the vessels are also known to have been produced in other areas of the Germanic province, particularly within the Lower Rhine and Maas regions.[352] Without a petrological analysis the provenance of the material from the study area cannot be conclusively proved. Haalebos, who identifies thirteen different fabrics in the cemetery of Hatert near Nijmegen, notes that the absence of any detailed studies to date limits the evidence available for the precise dating and provenancing of fabrics and forms. A general distinction places the greyish coarseware in the first century (Haalebos' fabrics a-h), whereas the second century showed a preference for off-white, yellow and brown colours (Haalebos' fabrics j-k). All the coarse ware in the study area can be placed in this category. The so-called 'Urmitzer ware', introduced around AD 200, with a very hard-fired and often sintered light grey fabric, has not been identified in the study area.[353]

The forms encountered within the study area are described below. Form descriptions are brief since detailed descriptions can be found in the

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[351] Described by Brouwer 1986, 81-5. No reliable provenance is given for the material.

[352] See Oelmann 1914, 70-80; Stuart 1977, 71-85; Haalebos 1990, 164-170; Bridger 1996, 100 note 502, 102 note 513. Bridger suggests the kilns near Soller, Kreis Düren in the Rhineland, as the provenance for some of the vessels within the cemetery at Tönisvorst-Vorst (see esp. Haupt 1984, 445-457).

[353] Haalebos 1990, 164.

summarized literature. An ¤ after an entry indicates the vessel was complete when found, one or more asteriks (*) indicate the presence of another (or more) coarse ware vessels of a different form in the same context.
Typologically indeterminate sherds make up approximately 50% of the assemblage.
From burials: A8 Gr.5 i; A8 Gr.29 i; A8 Gr.32 i; A11 St1/2 i; A11 stray i x3; A18 Gr.8 i; A18 Gr.25 i; A18 stray i; A22 Gr.1 ii; A22 Gr.1 iii; A22 Gr.2 i; A22 Gr.6 i; A22 Gr.10 i; A22 Gr.22 i; A22 Gr.58 iv; A22 Gr.59 i; A22 Gr.60 i; A22 Gr.70 ii; A22 Gr.97 i*; A22 Gr.124 i; A22 Gr.132 ii*; A22 Gr.174 ii; A22 Gr.177 i; A22 Gr.197 i; A22 Gr.213 i; A22 Gr.217 iii (check); A22 Gr.253 i; A22 Gr.264 i x2; A22 Gr.267 i; A23 iv¤ check; A34 Gr.2 iv¤ (urn); A56 Gr.17 iv; A68 Gr.1 iv.

5.3.6.2 Beakers

From burials: A42 Gr.1 i or iv?¤.
This single vessel, similar to Oelmann Form 118[354], has not been seen by the author and could only be identified from an archive sketch. A similar straight-sided, neckless beaker found in Niederbieber is described by Oelmann as being an imitation of colour-coated beakers of Oelmann Form 30. On this basis, an approximate date within the second half of the second century or the first half of the third century is given for the grave.

5.3.6.3 Jars

5.3.6.3.1 Oelmann Form 87[355]

From burials: A8 Gr.34 i; A11 St4 i*; A22 Gr.105 i¤; A22 Gr.184 i.
These four vessels have a yellowish to greyish-yellow coloured fabric. Only one of the graves (A22 Gr.105) has a complete vessel, the function of which cannot be ascertained.
The neckless jar with a horizontal or flat rim is one of the earliest provincial Roman forms and is very long-lived. Examples range in date from the first to the fourth century AD. In the Lower Rhineland in particular, the form is mostly of second-century date, although it is certainly made until the mid-third century. In general, the vessels

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[354] Oelmann 1914, 79 & Taf.IV.

[355] Also Gose 538, Stuart 201/201B, Haalebos 6012, Cf. Bridger Type 502). See Oelmann 1914, 70-1 & Taf.III; Gose 1976 45 & Taf.54; Stuart 1977, 72-3 & Pl.19; Haalebos 1990, 166; Bridger 1996, 100 & Abb. 33.

date slightly earlier than Oelmann Form 89.[356] Within the study area, an association with an Eggers Form 162 ladle in A22 Gr.184 suggests a late first or second-century AD date, the latter being more probable. In two graves from Troisdorf and Rheindorf (A8 Gr.34 and A22 Gr.105 respectively) the vessels are the only datable artefacts within the assemblage. In Poll (A11 St.4) an association with an Oelmann Form 104 bowl suggests a date in the second half of the second century AD. The form belongs to the group of most commonly found settlement pottery within the mid-Roman period.[357]

5.3.6.3.2 Oelmann Form 89[358]

From burials: A11 St6 i; A11 stray i; A22 Gr.46 i¤; A22 Gr.53 iv¤; A22 Gr.80 i¤; A22 Gr.95 i ¤?; A22 Gr.242 iii; A51 Gr.1 i¤*.

From settlements: B5, B9, B10, B30.

The neckless, lid-seated jar with heart-shaped rim profile is the most commonly occurring coarse ware jar form in the study area (eight vessels).

Although Oelmann dates the introduction of the lid-seated jar to the first half of the second century AD,[359] similar vessels are known, in the early Roman fort at Hofheim for example, dating from the late first-century-early second century AD.[360] Attempts to provide a typochronological division of the vessels based on variations in the rim form have met with little success. The standard type of lid-seated jar is therefore globally dated from the later second to the early fifth century AD. Along the Lower Rhine, the Oelmann Form 89 jars appear from the Hadrianic period (mid-second century AD) until the Dominate (late third - fourth century AD). By the end of the second century AD, the form had completely taken over from earlier types, such as Oelmann Forms 87 and 88.[361] On the basis of the seriation of the

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[356] Wasters found on the kiln site at Soller have been dated to the second half of the second or beginning of the third century (Haupt 1984, 448). For a discussion of the date range see Halpaap 1994, 124; Bridger 1996, 106 with note 542.

[357] See Bridger 1996, 100 note 501 where a list of relevant literature for the Rhineland is given.

[358] Gose 542-5, Stuart 203, Haalebos 6030, Bridger Type 511. See Oelmann 1914, 72 & Taf.III; Gose 1976, 46 & Taf.55; Stuart 1977, 74-5 & Pl.20; Haalebos 1990, 167 & Fig.90; Bridger 1996, 101-2 & Abb.33.

[359] Oelmann 1914, 72.

[360] Schoppa 1961, 55 nr.98.

[361] Halpaap discusses previous attempts to establish a typochronology (Halpaap 1994, 120-2). See also Bridger 1996, 101 note 511 and 107 note 544.

Rheindorf cemetery presented in Chapter 8.5, Oelmann Form 89 jars are especially present in the graves dating to the last phase of the cemetery.
The lid-seated jar is very commonly found within settlement and cemetery sites along the whole length of the *Limes*, right up to the Ratiaen frontier, as well as within the whole of Gaul.[362] It is the most popular cooking pot form of the mid- and later Roman periods within the Germanic province, dominating the assemblages in the forts of Niederbieber and Alzey.[363] The vessels are known to have been manufactured on almost every coarse ware-producing kiln site.[364] Whilst the form presumably functioned as a cooking pot on the settlement sites, its function within the Germanic grave ritual is uncertain, although its form and size alone probably encouraged its use as an urn. At least three examples have been found used as urns (A22 Grs.46, 53, and 80).

5.3.6.3.3 Form Gose 546?[365]

From burials: A11 St6 i.
Lid-seated jars with sickle-shaped rims, of which only one was found in a cemetery context, are later products of the coarse ware industry and probably date to the fourth century.

5.3.6.4 Lids

5.3.6.4.1 Oelmann Form 120a[366]

From burials: A22 Gr.97 i*; A22 Gr.115 ii.
The development of lids is discussed by Gose.[367] The lid in A22 Gr.97 dates to the end of the second - first half of the third century AD and may well be associated with the remains of a jar (indeterminate form).

5.3.6.5 Flagons and Jugs

Only two vessels are of identifiable form. Vessel of indeterminate

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[362] In Britain, although *Eifelkeramik* examples are found, the form is commonly found in the imitation fabric known as 'Verulamium ware'.

[363] Oelmann 1914; Unverzagt 1916 34f for Type 27.

[364] Wasters found on the Soller kiln site, for instance, date to the second half of the second and beginning of the third century (Haupt 1984, 448-9).

[365] Gose 1976, 46 & Taf.55.

[366] Gose 561; Haalebos 6375. See Oelmann 1914, 80 & Taf.III; Gose 1976, 47 & Taf.57; Haalebos 1990, 171 & Fig.91.

[367] Gose 1976, 47 nrs.555-565.

form are found within two burial contexts:
A11 stray i; A12 OF1 iv x2¤;

5.3.6.5.1 Form Oelmann 96?[368]
From burials: A22 Gr.35 i.

5.3.6.5.2 Form Oelmann 97-98[369]
From burials: A22 Gr.254 i.
Both these vessels represent late forms within the assemblage dating to the third and fourth centuries AD.

5.3.6.6 Bowls and Dishes

5.3.6.6.1 Oelmann Form 104[370]
From burials: A11 St4 i(x2)*; A11 stray i; A22 Gr.201 i; A25 Gr.2 iv?¤; A51 Gr.1 i¤*; A55 i¤; A62 iv (x2).
From settlements: B5, B9, B10, B20, B29, B30
These vessels, with an internally thickened and rounded rim, are the most commonly occurring bowl form in the study area. The form dates from the first until the fourth century AD on sites within the province and along the *Limes*.[371] It is the most common bowl form found in the fort at Niederbieber. Variations within the form cannot be reliably dated. Haalebos gives a date range of AD 120-180. Bridger dates them already from the third quarter of the first century in the Lower Rhineland, with a general date in the second century AD, but still occurring in the second half of the third century AD.[372] Stuart and Gose both give a date range from the mid-second into the fourth century, whereas Haupt dates examples from Soller as late as the first half of the fourth century AD.[373]

5.3.6.6.2 Cf. Oelmann Form 110[374]

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[368] Oelmann 1914, 74-5 & Taf.IV.

[369] Oelmann 1914, 75 & Taf.IV; Brunsting 1974, 100-2 & Pl.4, Type 13-15; Haalebos 1990, 170 & Fig. 91, Type 6350.

[370] Gose 488; Stuart 211, Haalebos 6110, Bridger Type 521. See Oelmann 1914, 76-7 & Taf.IV; Gose 1976, 42 & Taf.47; Stuart 1977, 79 & Pl.21; Haalebos 1990, 169 & Fig.90; Bridger 1996, 103 & Abb. 34.

[371] See Bridger 1996, 103 note 521 for literature.

[372] Bridger 1996, 107 with note 548. See also Halpaap 1994, 128-9.

[373] Haupt 1984, 450-1.

[374] Stuart 216, Haalebos 6160-1. See Oelmann 1914, 77; Stuart 1977, 83; Haalebos 1990, 170.

From burials: A22 Gr.228 i.
This vessel, with a moulded flange, was not a popular form within the province. In general, the form appears to be most common after the mid second century AD.

5.3.6.6.3 Oelmann Form 113/114?[375]
From burials: A22 Gr.14.
Sherds from a single vessel, possibly a dish with slightly flaring walls, dates to around the third century AD.

5.3.6.7 *Tazza*
From burials: A22 Gr.132 i*.
A single small sherd may have belonged to a *tazza*, or incense cup. The sherd, decorated with an applied, wavy cordon, was recovered from a late first or second century grave. The chronology of such vessels remains a problem, spanning the whole Roman period. They most commonly occur in smooth ware rather than coarse ware. Within the Roman province, *tazze* were commonly included in graves associated with military, urban and villa contexts. Their occurrence in rural burial contexts is far less common. Such vessels may have been used for ritual functions during the burial ceremony itself, such as for burning incense at the funeral pyre during cremation, for containing offerings of food or wine, or pouring libations, or to illuminate the darkness of the underworld or the passage to it. *Tazze* may have been placed on the pyre where they were burnt. Philpott notes the occasional occurrence of *tazze* in association with lamps, suggesting a possible ritual function.[376]

5.3.6.8 Evidence for Function
Cooking and utilitarian vessels were produced in coarse ware. This is reflected in the assemblage from the study area, comprising mostly jars and bowls. The general form spectrum within the settlements does not appear to vary considerably from that in the cemeteries.
Only approximately 13% of the assemblage shows obvious signs of having been secondarily burnt on the pyre, although none of the complete or semi-complete vessels show signs of having been burnt. Five vessels were clearly used as urns (A22, 46, A22 Gr.53, A22 Gr.80, A34 Gr.2, A51 Gr.1). This latter grave from Duisburg-Serm (A51 Gr.1) is interesting in that a second complete coarse ware vessel, form Oelmann 89, functioned as a lid, having been placed upside down on top of the urn. The remaining complete or semi-complete vessels, not recorded as

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[375] Oelmann 1914, 78-9 & Taf.IV; Gose 1976, 41 nr.477 & Taf.46; Stuart 1977, 84-5 Type 218 & Pl.23.

[376] Haalebos 1990, 202; Philpott 1991, 193.

being used as urns, appear to have functioned as grave gifts. None of the coarse ware appears to predate the second century, with the majority appearing in graves that date after the mid-second century AD. Terra sigillata and other fine wares, on the other hand, do begin to appear in graves much earlier, at least from the last decades of the first century and was clearly more frequently incorporated in grave assemblages (see above, especially 5.3.1 and 5.3.3). This suggests a much more subordinate role for the coarse ware, the preference going out to highly decorated, and presumably more costly, vessels. It can be argued, however, that the inclusion of any imported Roman material at all in a grave assemblage can be seen as an overt display of a certain social ranking (see Chapter 9.2).

5.3.7 Mortaria and Amphora

Mortaria From burials: A7 Gr,14? i; A23 iv.
From settlements and stray finds: B10; B15; B18; C56.
Amphorae From burials: A18 Gr.10.
From settlements and stray finds: B6?; B9; B15; B18; B24; B31; B35; B38; C56.
Dolia From burials: A74 iv.
From settlements: B5.
This group of finds is clearly rarely found in burial contexts, compared to other imported Roman material. Its function within the graves is uncertain. Mortaria and amphorae (mostly Form Dressel 20 vessels) are more commonly found in settlement contexts, perhaps not surprisingly. Whilst the small number of amphorae and mortaria might be indicative of the actual finds distribution in the study area, it could also reflect the inadequate level of settlement research in the area. The presence of Dressel 20 amphora at least attests to the importation of wine into the study area.

5.4 Glass Vessels

5.4.1 Problems of Identification

From burials: A4 Gr.1 i; A8 Gr.2 iv; A8 Gr.32 i; A10 Gr.19 i; A10 Gr.20 i; A22 stray; A22 Gr.1 i; A22 Gr.6 i; A22 Gr.14 i; A22 Gr.21 i; A22 Gr.24 iii; A22 Gr.31 ii; A22 Gr.33 i; A22 Gr.35 i; A22 Gr.36 i; A22 Gr. 46 i; A22 Gr.49 i; A22 Gr.59 i; A22 Gr.60 iii; A22 Gr. 62 i; A22 Gr.68 i; A22 Gr.69 i; A22 Gr.80 i; A22 Gr.87 i; A22 Gr.95 i; A22 Gr. 125 i; A22 Gr.214 i; A22 Gr.249 i; A22 Gr. 254 i; A22 Gr. 264 i; A44 Gr. 1 iv; A56 Gr. 10 i (x2).
Stray Finds: C36 i; C37 i.
The presence and significance of imported glass vessels, including

phials, within both the study area and Germania as a whole have already been discussed in a number of publications.[377] Relevant interpretations and assumptions shall be summarized in the discussion below.

Within cremation burials molten glass fragments from vessels, beads and gaming counters have been recorded. In order to distinguish vessel glass from the rest, a first division in the material was made on the basis of form, where the cremation process had not distorted the original shape beyond recognition. Secondly, the material was divided on the basis of colour. Coloured, multi-coloured, and opaque molten glass fragments have been almost exclusively identified as beads and gaming counters, translucent beads being exceptional occurrences.[378] Vessel glass is distinguished as being either colourless, green-blue or blue-green. The number of glass fragments within an individual context was also a useful indicator for identification, helping to distinguish vessel remains from the rest.

The remains of glass vessels account for only a very small part of the total finds assemblage from the study area, occurring within only six of the burial findspots and two stray findspots. No vessel glass was as yet been recorded from settlement assemblages. This may be, in part, due to the inadequate documentation available for excavated settlement sites, since it is clear from recent research on Roman imports into Germania that glass vessels are a component, however small, of settlement remains. Most recent evidence comes from Erdrich's research into Roman imports into the Netherlands north of the Rhine, Lower Saxony and Schleswig-Holstein. Erdrich suggests that inappropriate excavation techniques (no sieving) combined with unsuitable soil conditions (e.g. acid soils) are the main reasons why glass is so seldom found on settlement sites.[379]

The vessels are listed in Table 5.2. Except where otherwise stated, only fragments of vessels survive, and with the exception of the three complete vessels, all have been burnt on the cremation pyre.

The majority of vessels, 71%, have been recorded from 24 graves and one stray find, probably from a disturbed grave, in Rheindorf (A22). 'Glass graves' represent 9% of all the graves in Rheindorf.[380] The small number of fragments found, coupled with their molten condition

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[377] Von Uslar 1938, 132-3; Eggers 1951, esp. 30-2, 50, 59, 61, 126-8, Karte 62 & 61; Kunow 1983; esp. Lith & Randsborg 1985.

[378] See sections 5.13 (Beads) and 5.21 (Gaming Pieces).

[379] Erdrich 1996, 68.

[380] This is in accordance with Lith & Randsborg, although they cite only 23 glass graves within the cemetery (Lith & Randsborg, 1985, 528).

means that almost no forms can be identified with any degree of reliability. Eggers only identifies two vessel forms, both from Rheindorf, Eggers Form 214 being a stray find beaker probably from a disturbed grave,[381] and possibly Eggers Form 189 from A22 Gr.62.[382] The small fragments with lattice decoration in A22 Gr.254 and A56 Gr.10 may both represent 'cage-cups' with lattice-like casing, such as on Eggers' Forms 199 and 200.[383] Eggers dates all these forms to the later Roman period, his *Stufe* C.

5.4.2 Evidence for Dating and Function

The lack of identifiable fragments means that the glass vessels are of very little help in dating the burial assemblages. Moreover, as Kunow states, Roman vessel types were as a rule produced over more than one Germanic period even when (until now) there is only evidence for them within one *Stufe* or period in Germania. Roman forms in bronze and glass vessels were much more long-lived than the more quickly changing bronzes such as fibulae.[384] On the basis of datable associated finds within the grave assemblages, the majority of the glass vessels are found in graves dating to the later Roman period (*Stufen* C1-3). Only three graves (A22, Gr.1, Gr.24, Gr.125) can apparently be place in Eggers' *Stufe* B2.[385]
The undiagnostic nature of the glass assemblage as a whole hinders any useful analysis of the function of the vessels within the graves. Within the Province storage vessels and ungentaria are commonly found in the early Roman period. Tableware was also popular, especially during the late Roman period, with assemblages including bowls, dishes, beakers, cups, flasks, jugs, and bottles.[386] This picture is clearly not reflected in the Germanic graves just across the Rhine and beyond. In contrast to the Province where phials, or *ungentaria*, dominate in early Roman cremation graves, none are found within the

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[381] Eggers 1951, 59, 127, Tafel 15, Karte 57. A list of publications that discuss this beaker is given under the catalogue entry for Rheindorf in Appendix I.

[382] Eggers 1951, 127, Tafel 14. Karte 52 shows the distribution of these beakers but doesn't include Rheindorf.

[383] Eggers 1951, Tafel 15, Karte 53.

[384] Kunow 1983, 28.

[385] This conforms with Lith & Randborg's hypothesis that most graves containing glass in Germania date after AD 200 (Lith & Randborg 1985, 490-1).

[386] Lith & Randborg 1985, 508-15, 463.

study area (or beyond). Almost no *ungentaria* are known from graves in Germania for any period. Within the study area the identification of fragments as an *ungentarium* in A44 Gr.1 is questionable and the two examples from C36 and C37 are not from known burial contexts. Where identifiable, drinking vessels completely dominate in early and late Germanic graves, as well as Frankish.[387]

Although it appears that glass was arriving in Germania at the same time as bronze ladles, strainers and buckets (and possibly even the wine), to argue for the wholehearted adoption of the Roman drinking service is very difficult. Even services so far recovered within the province vary greatly in content and are largely dependent on wealth. It is therefore almost impossible to reliably reconstruct what the components of a Roman drinking service should be. Clearly the adoption of a Roman drinking service, or even only one or two elements of it, by the Germans does not inevitably mean that the drinking ritual itself was also adopted.

Kunow argues that the more widespread occurrence of glass vessels within Germania reflects the visible extension of trading contacts in the later Roman period, directly facilitated by the proximity of the production centre at Cologne. The paucity of vessels associated with the burial rite, he argues, does not mirror the true situation. This hypothesis had been earlier put forward by Eggers who suggested that lack of glass should be put down to the destructive nature of the rite of cremation itself, since more vessels are found in areas of Central and Eastern Germany, Poland, Slovakia and Scandinavia where the rite of inhumation was practised.[388]

Glass vessels were a luxury product within the finds spectrum in Germania. In general, graves with glass contained considerably more artefacts than graves without glass, and therefore glass can be viewed as an indicator of wealth. That being said, however sparse a burial assemblage may appear, the presence of imported bronze and glass vessels within graves should be seen as evidence of higher social status, the graves belonging to the upper echelons of Germanic society.

According to Lith and Randsborg, in their study of glass in the Roman north-western provinces, the amount of grave goods in an assemblage, the 'burial investment', should be seen as a product of both social wealth and social competition or 'stress', not the wealth factor alone, which led to a burial investment in glass. The richness of a burial is not an absolute indicator of the wealth of a particular society. It is important first to study the structure of a particular burial population, and in this respect glass attains a new and special

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[387] Kunow 1983, 36 note 284; Lith & Randsborg 1985, 454, 463.

[388] Kunow 1983, 37; Eggers 1951, 59.

significance.[389]

5.5 Bronze Vessels

5.5.1 General Remarks

Fragments from at least 115 bronze vessels have been found within the study area.[390] With one exception, all the vessels have been found within cemeteries. A total of 81 graves contained metal vessels, of which 62 graves were within the cemetery at Rheindorf (A22). All the vessels found in graves were burnt on the funeral pyre before deposition. The burnt and deformed nature of most of the fragments means that the original form is not often readily identifiable, making the actual number of different forms represented difficult to determine. Nevertheless, it is clear that the form spectrum is very limited and is confined to certain forms of pans, dippers and strainers, buckets and bowls. For the purposes of this research, after describing the various vessel types, the discussion on the bronze vessels concentrates on two main elements, that is the usefulness of the assemblage as a dating tool as well as the function of the vessels within the burial context. Within the form groups below, one or more asterisks (*) after a grave number indicate that at least one other metal vessel, of a different form, is found within the same grave. Undiagnostic fragments were found in the contexts listed below. It is not clear in many cases whether the fragments represent one or more vessels.

From burials: A4 Gr.1; A5 Gr.1; A7 Stray; A8 Gr.13; A8 Gr.19; A8 Gr.21; A8 Gr.33; A8 Gr.36; A8 Gr.38; A8 Gr.40; A9 Gr.6; A10 Gr.15; A10 stray; A22 Gr.4; A22 Gr.5; A22 Gr.6; A22 Gr.8; A22 Gr.12; A22 Gr.18; A22 Gr.19; A22 Gr.21; A22 Gr.25*; A22 Gr.37; A22 Gr.41; A22 Gr.54; A22 Gr.55; A22 Gr.80***; A22 Gr.81 (iron); A22 Gr.102?; A22 Gr.103; A22 Gr.104; A22 Gr.119; A22 Gr.129; A22 Gr.130*; A22 Gr.146; A22 Gr.150*; A22 Gr.174; A22 Gr.183; A22 Gr.219; A22 Gr.246*; A22 Gr.249; A22 Gr.253; A22 Gr.256; A22 Gr.270; A22 Gr.272**.
From settlements: B18 B i.

5.5.2 Form 1: Cooking Pans

Cooking pans of indeterminate form were found in five burial contexts: A7 Gr.9; A8 Gr.39; A22 Gr.125; A22 Gr.186, A65 Gr.1.
For the rest, two main form variations could be distinguished.

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[389] Lith & Randsborg 1985, 438, 441, 445. See also Chapter 9 below for further discussion.

[390] The actual number of vessels present is difficult to determine due to the fragmentary nature of the remains in graves.

5.5.2.1 Form 1.1: Cooking Pan with Handle Ending in a Disc Pierced by a Crescentic Hole[391]

From burials: A22 Gr.169***.

Complete examples of this type of cooking pan have a handle that slightly narrows in the middle and terminates in a disc with a moulding on the upper side and a crescentic suspension hole in the centre. The rather steep wall of the pan curves slightly outwards and has a projecting rounded bead rim. The exterior surface has ribbing under the rim. The base is almost flat, with faint turn marks on the outside.

The vessels are probably products of the south Italian metal industry centred in Capua. They were produced all through the first and during part of the second century AD.[392] Kunow gives a date range of 7 BC/AD 9-mid third century AD for the form, with many or most examples occurring in the first and second centuries AD in Germania (mostly Eggers *Stufen* B1, B2), only a few have been found in third-century contexts (Eggers *Stufe* C2).[393]

5.5.2.2 Form 1.2: Cooking Pan with a Handle Ending in a Disc Pierced by a Round Hole[394]

From burials: A22 Gr.87; A22 Gr.94x2; A22 Gr.124*; A22 Gr.130*; A22 Gr.150*; A22 Gr.153; A22 Gr.169***.

Complete examples of this type of cooking pan have handles that narrow in the middle and are moulded on the upper side, terminating in a disc also moulded on the upper side and pierced by a round suspension hole. Like the Eggers Form 137, the pan has a rather steep wall which slightly curves outwards and a projecting rim below which is a broad, flat rib between two narrower ones. The characteristic base has pronounced moulded concentric rings (a feature that aided the rapid and even heating of the pan's contents) and a central stud.

Den Boesterd attributes these vessels to the Capuan industry, probably being produced from the early first century AD, although it was more common in the second half of the first century AD, and was in use throughout the second century AD.[395] Kunow states that the vessels certainly begin to appear in the first or second third of the first century AD, being found in Claudio-Neronian deposits within the Roman

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[391] See Eggers 1951, Form 137 & Pl.12; den Boesterd 1956, 4-5 nr.12 & Pl.1.

[392] Radnóti 1938, 49; den Boesterd 1956, 4-5.

[393] Kunow 1983, 25-6.

[394] See Eggers 1951, Forms 142-143 & Pl.12; den Boesterd 1956, 7-8 nos 14-19 & Pl.1.

[395] Den Boesterd 1956, 7-8.

province. The vessels continue into the second century AD (being present within Eggers' *Stufen* B1, B2 and C1), although no end date is certain. He criticises Eggers' classification of the group into an earlier (Eggers' Forms 139-141) and later (Eggers' Forms 142-4) version of the form (based on their association with other datable Roman imports), stating that there is no evidence to support such a clear chronological division, especially since the observations are based only on fragments and not on complete vessels.[396]

5.5.2.3 Discussion

The cooking pan is commonly found as part of Germanic grave good assemblages. Pans with a round suspension hole in the handle (Form 1.2) are most commonly found in northern Germanic Europe, for instance Denmark, rather than further east, although examples have been found in Flaming and the Thüringer Wald. In general, they apparently cover a longer time span than vessels with a crescentic suspension hole (Form 1.1).[397]

Within the Roman Empire, the function of the cooking pan, variously known by the latin names *patera* and *trulleus*, was multi-purpose. Antique authors and certain archaeological finds, e.g. depictions on grave stones, describe their use as cooking, eating and also drinking vessels.[398] It is presumably precisely because of their multiple use that cooking pans are often found in military contexts. All soldiers had access to a wide range of vessels, but the cooking pan was a standard issue piece of military equipment, along with a spit, cup and bucket, to be used as a cooking and eating vessel, especially on campaign when pottery was too cumbersome and fragile.[399]

According to Kunow, the wide range of possible uses for this multi-purpose pan meant that it was widely distributed in Germania, especially in Eggers' *Stufe* B1. He attributes the complete disappearance of this vessel form in the later Roman period to the decline in the Campanian bronze industry within the second century. This decline meant a clear reduction in the vessel types appearing on the market. Either Gallic imitations never captured the same market, or there were never enough made to become distributed extensively outside the frontier.[400]

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[396] Kunow 1983, 26.

[397] Eggers 1951, 47. See also Laser 1988, 312.

[398] Hilgers 1969, 291.

[399] Bishop & Coulston 1993, 105; Davies 1989, 203. Kunow (1983, 75) mentions its depiction as part of the soldier's military equipment on Trajan's column.

[400] Kunow 1983, 37.

5.5.3 Form 2: Dippers and Strainers

The exact form of a number of vessels from burial contexts cannot be further identified.
Strainers: A22 Gr.1; A22 Gr.49; A22 Gr.161; A22 Gr.246*; A22 Gr.53?; A22 Gr.67; A22 Gr.272**; A30 Gr.1.
Dippers: A7 Gr.8; A22 Gr.124*.
Both: A9 Gr.7; A22 Gr.57?; A22 Gr.164; A22 Gr.188.
For the rest, three main variations in this form have been identified in the study area.

5.5.3.1 Form 2.1: Dippers and Strainers with a Hemispherical Bowl and Plain Handle Ending in a Biconcave Grip[401]

From burials: A22 Gr.159* (strainer); A22 Gr.169 (x2: dipper and strainer)**; A22 Gr.194 (dipper).
Complete examples of this form have an almost hemispherical bowl. The handle, which widens in the middle into rounded, projecting points, is flat and undecorated. The top part of the handle is cut out biconcavely and terminates in a more or less fan-like shape. Eggers and Kunow describe this handle form as being rudder-shaped.[402] The projecting, slightly sloping, rim is vertically flattened on the outside and undercut.
Earlier examples of the form are of Campanian manufacture, whereas later examples, from the first century onwards, were made in Gaul and Lower Germany. Den Boesterd states that the form was still in use in the third century AD.[403] Kunow confines the form to the mid first-second centuries AD in Germania (Eggers' *Stufen* B1, B2 and C1). He states that an end date for the form remains uncertain (although is probably around the middle of the second century AD), since the hemispherical bowl shape changes almost unnoticeably into the more angular, flatter base of the subsequent Eggers type 161 form.[404]

5.5.3.2 Form 2.2: Dippers and Strainers with Oar-Shaped Handles[405]

From burials: A22 Gr.184 (dipper).
The term 'oar-shaped' is used here to describe the handle type in

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[401] See Eggers 1951, Form 160 & Pl.13; den Boesterd 1956, 19-20 no.53 & Pl.III.

[402] Eggers 1951, for example Karte 45; Kunow 1983, 27.

[403] Den Boesterd 1956, 20.

[404] Kunow 1983, 27.

[405] See Eggers 1951, 48 Form 162 & Pl.13; den Boesterd 1956, 18 no.48 & Pl.III.

accordance with den Boesterd[406] but in contrast to Radnóti, Eggers and Kunow, where they are described as narrow-shafted (*schmalschaftige Kellen*).[407] In complete examples it can be seen that the wider part of the oar-shaped handle ends at the bowl. The top part of the handle is built like a hilt with a round knob at the outer end. The handle is flat and smooth on the upper side and hemispherical beneath. The bowl of the vessel is hemispherical. The projecting rim is vertically flattened, with two narrow ribs below it on the outside.
This form was originally made in Italy, but was later also manufactured in the provinces of Gaul and the Rhineland. Kunow states that the form, which is mostly contemporary with Eggers Form 160, dates from the Claudio-Neronian period into the second century AD. The precise date of the end of production remains uncertain.[408]

5.5.3.3 Form 2.3: Dippers and Strainers with a Curved Base, Vertical Wall and Flat, Plain Handle Widened in the Middle[409]
From burials:
Dipper: A22 Gr.13; A22 Gr.32?.
Strainer: A8 Gr.4**; A22 Gr.62*; A22 Gr.69?**; A22 Gr.80***; A22 Gr.95.
Both: A22 Gr.84.
Complete examples of this form have a bowl with a slightly curved base with turning grooves. They have an almost vertical wall, inclining inwards only slightly. The vessel has a projecting rim, below which are two grooves round the bowl. The handle, widening in the middle with narrow, projecting points, is flat and plain. The lower part of the handle is shaped concavely on both sides as is the top part, which terminates in a more or less fan-like shape.
According to Willers, the vessel type is of Capuan manufacture of the late second and early third century AD, when this type was at its most popular.[410] According to Ekholm, this form was possibly made in Gaul or in the Rhineland, and then mainly in the third century AD.[411] Both Werner and Radnóti agree to their manufacture within Gaul or the Rhineland, Radnóti dating it between the mid-second and mid-third

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[406] Den Boesterd 1956, 18, who bases it on the description given by Willers 1907, 83 & fig.51.

[407] Radnóti 1938, 77; Eggers 1951, 48 & Karte 47; Kunow 1983, 27-8.

[408] Kunow 1983, 27-8.

[409] Eggers Form 161, den Boesterd no. 58. See Eggers 1951, Pl.12; den Boesterd 1956, 21-2 & Pl.III.

[410] Willers 1907, 84 & fig.52.

[411] Ekholm 1934, 33 & fig. 9.

century AD.[412] Eggers dates it to his *Stufe* C (*c.* AD 150-300).[413] On the basis of the seriation of the Rheindorf graves (Chapter 8.5), these dippers and strainers were mainly included in graves of a relatively late date (probably third century AD ?).

5.5.3.4 Discussion

In attempting to describe the function of the dipper and strainer, antique authors provide little help since they do not mention this specific vessel type, at least not in combination. That the vessels were made to be used as a pair is clear from their form; the bowl of the strainer fits exactly inside that of the dipper and the flat handles were shaped so that they could both be picked up as one vessel.

Kunow states that the closest latin name for the strainer, although not entirely correct, would be the *colum* or *cribrum* (colander) and for the dipper the *cyathus* or *simpulum*.[414]

In the Roman world, at least, it seems likely that the pair of vessels had many uses. Two main points of view exist as to the function of the vessels. They were either used as part of a 'cooking service', or alternatively as part of a 'drinking service'.[415]

In support of their use for cooking, Radnóti proposes that the pair of vessels were used over a fire in a similar way to a modern-day deep fryer for cooking with oil. After cooking, the strainer was taken out to allow the oil or water to drip out.[416] Bridger suggests that the proportionally overlong handles, which were therefore bad conductors of heat, could be used for scooping smaller pieces of food out of hot fat. The vessels could also be used for serving at table.[417] Kunow, generally rejects this idea since the rounded base of the vessels prevented them being left to stand in the fire as flat-bottomed saucepans and buckets could do, and no tripods have been found in which the vessels could be stood. The length of the handle would still

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[412] Werner 1936, 400; Radnóti 1938, 77.

[413] Eggers 1951, 55 & Karte 46.

[414] Kunow 1983, 75. Although as den Boesterd states (1956,xxii) the name *simpulum* is more accurately used to describe the ladle with a handle that rises vertically from the bowl.

[415] Nuber 1972 179 ff and note 1085 for earlier literature. Kunow (1983, 75-7) also summarizes much of the earlier literature discussing the pros and cons of both functions.

[416] Kunow 1983, 76.

[417] Bridger 1993, 77.

not have allowed the vessel to be held in the heat for very long.[418] Within the Roman province, general opinion views these sets of dipper and strainer as having been part of the 'wine service'.[419] Within the Republican period, Fitzpatrick argues that they may have been adopted in Celtic areas to strain beer as well as wine. A strainer could have been needed to catch additives such as fruit. The Germans also drank beer that could have needed straining.[420] Kunow cites archaeological evidence from Germania that supports the association of these vessels with drinking. For example, a Germanic inhumation grave (Grave 1) from Juellinge, Lolland,[421] in which an Östland type bucket (Eggers Form 40) was found at the head of the body containing the residue of a native berry wine as well as a dipper (Eggers Form 162). The strainer belonging with the dipper was found grasped in the hand of the skeleton. Two glass beakers completed the grave goods. Another inhumation grave from UggelÝse, Seeland dating to the late Roman period contained a bucket (Eggers Form 25-6) with a dipper and strainer (Eggers Form 161) and three glass beakers.[422]
An argument against their use for drinking is that the horizontal, flat handle is not appropriate for use as a ladle, since it is not easily used to ladle liquid out of a relatively narrow-mouthed bucket. It is possible however that the dipper was not designed to be used for this purpose, but functioned simply as a receptacle to place a dripping strainer in after the drink had been filtered.
The dipper and strainer appear earlier in Celtic regions than in Germany. They first appear in the early years AD in Germany. Only after their production began in Gaul did they make significant inroads into the Germanic market (during Eggers' *Stufen* B1-B2). Nearer production meant cheaper manufacture and transport costs. In addition, the building up of the wine trade with the Germans made for a greater distribution of drinking vessels and the increasing popularity of the dipper and strainer.[423]

5.5.4 Form 3: Paterae[424]

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[418] Kunow 1983, 75.

[419] For example, den Boesterd 1956, xxi.

[420] Fitzpatrick 1989, 37; Kunow 1983, 75-7.

[421] Eggers 1956, Find no. 247.

[422] Kunow 1983, 76.

[423] See Kunow 1983, 37.

[424] See Eggers 1951, Form 155 & Pl.13; den Boesterd 1956, 25-6 no.68 & Pl.IV; Nuber 1972, 45-54 Service Type E: Millingen.

From burials: A29 Gr.1.
Complete examples of this form (in German, *Griffschalen*) have a characteristic low foot ring and a flat, thick base with fine, shallow grooves on the outside. The base is flat on the inside, having grooves but no *umbo*. The vessel wall is curved and has a narrow, projecting rim thickened and rounded on the inside. The shaft-shaped handle is fluted along its length, terminating in a ram's head. The handle is cast separately from the bowl and then soldered on, unlike the cooking pan (see above) where the handle is cast in one with the rim of the bowl.
The latin term for the vessel is often argued about and there is clearly some intermixing of terminology with that used to describe the cooking pans.[425] For example, in the literature (e.g. den Boesterd) the vessel is often described as a *patera*, although according to Kunow, antique authors understood a *patera* to be a dish with no handle. The term *trulleum* is also used.[426]
The vessels are all of Italian manufacture. Although Eggers only finds them dating to his *Stufe* B1 (AD 0-50), production actually continued from around *c.* AD 50, or perhaps earlier, until at least the first half of the third century.[427] A distinction is made between types without an *umbo*, which are thought to be earlier ones, and the supposedly later vessels with an *umbo*.[428]
Within provincial Roman contexts, there are several suggestions as to the probable function of the patera. Nuber discusses the fact that the vessel is characteristically found in graves and depicted on grave stones together with a small jug forming a set.[429] He states that the vessel had various uses. The combination of patera and jug in his long-lived Service Type E is seen as the most commonly used 'standard service' within the whole Roman period, being found in nearly every province of the Empire as well as Germania and the Black Sea coast. Only within the third century was the two-piece combination more uncommon, although fourth-century contexts with them are known.[430] For sacral or ceremonial use, the two-piece service is described as being used to serve wine offered as a libation. In profane use, the service is commonly described as a 'wash service', for washing the hands at

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[425] This confusion also extends to the English terminology.

[426] See Kunow 1983, 75.

[427] Eggers 1951, 48; den Boesterd 1956, xxii-xxiii; Kunow 1983, 26.

[428] See for example, Radnóti 1938, 83.

[429] Nuber 1973, 21.

[430] Nuber 1973, 45-54.

table, during or after a meal.[431] Separated from the jug, the paterae are described by various authors as being used for cooking (e.g. as a frying pan), serving, eating or drinking.[432]

5.5.5 Form 4: Buckets

Two different bucket forms have been identified in the study area.

5.5.5.1 Form 4.1: Östland Type Bucket (Tingvoll Type)[433]

From burial: A22 Gr.85* i.
From stray finds: C48 x2.
This bucket form is of Italian manufacture and dates from the first century BC into the second century AD (Eggers *Stufen* A, B1-2). It has a flat base, an oval body, a curved wall and a shallow, everted rim (shaped to take a wooden cover). Examples have been found in all regions of Europe.
The description of the vessel as a bucket is confusing, since although they were made to carry liquid (*situla*) they were also commonly used as a pot, especially for cooking (*aula/olla*).[434] Eggers states that the Östland type bucket would have been used as a mixing vessel during the preparation of wine.[435] Finds in forts give evidence that the bucket was part of a soldier's equipment, used as a cooking pot as well as for eating and drinking, particularly whilst on the march (pottery cooking vessels would have been more commonly used in the forts). Bridger notes that the bucket is the most commonly found vessel form within the western provinces.[436]

5.5.5.2 Form 4.2: Hemmoor Type Bucket[437]

From burials: A8 Gr.4**; A22 Gr.69**; A22 Gr.80***; A22 Gr.185*; A22 Gr.272**; A22 Find B.
Complete examples have a rounded base continuing as an almost vertical wall either on a separate low or conical foot stand soldered onto the

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[431] For example Kunow 1983, 80.

[432] See Nuber 1973, 11-28, for a detailed discussion of function, where most of the earlier literature is cited.

[433] Eggers 1951 Pl.5, Form 38; cf. Boesterd 1956, 40-1 & Pl.V, nos.118-136.

[434] See Hilgers 1969, 77-9; Kunow 1983, 71.

[435] Eggers 1951, 44.

[436] Bridger 1993, 66.

[437] Eggers 1951 Form 58; den Boesterd 1956 Pl.VI, nos 146-9 (xxv).

base, or on a foot executed by beating from below. The vessel usually has triangular 'ears', with suspension holes for the handle, which are cut out and cast in one piece with the bucket as part of the rim. Although a great variety exists in handle types, none have been identified within the study area. Except for one complete example from Rheindorf that is now lost (A22 Find B), all the remaining vessels were identified from fragments, secondarrily burnt on the pyre. Erdrich's most recent article on these vessels sums up current opinion so far as to their provenance, distribution and dating.[438] The main distribution area for the buckets within the Roman province lies in the region between the rivers Seine and Rhine. They may have been manufactured in or around Gressenich near Aachen. In the province these ornamental buckets were used as either kitchen or tableware, possibly as storage vessels, but most probably as part of a drinking service used for mixing wine. Precise dating of the vessels in difficult, since very few have been found in the province in reliably-dated contexts. Within Germanic contexts, Erdrich suggests its introduction shortly after the mid second century AD (Eggers' *Stufe* C), going out of use around or shortly after the mid third century AD.[439] This particular bucket form is not discussed by Kunow in his thesis, which suggests that its occurrence in Germania generally postdates the Marcomannic Wars (AD 166-75).

5.5.6 Form 5: Bowls and Basins

Indeterminate fragments occur in four burial contexts: A22 Gr.85*; A22 Gr.121; A44 Gr.1(x2); A68 Gr.1.
The rest of the group can be divided into four main form variations.

5.5.6.1 Form 5.1: Eggers Form 82

From burials: A8 Gr.2; A8 Gr.4**; A22 Gr.25?*; A22 Gr.80***; A38.

5.5.6.2 Form 5.2: Eggers Form 83

From burials: A22 Gr.62*; A22 Gr.69**.

5.5.6.3 Form 5.3: Eggers Form 99-106

From burials: A22 Gr.126.
Stray Find: C57.

5.5.6.4 Form 5.4: Eggers Form 100

From burials: A22 Gr.159*.

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[438] Erdrich 1995, including references to earlier literature. See also Schnurbein & Erdrich 1992, esp. 23-24.

[439] Erdrich 1995, 76.

5.5.6.5 Discussion

The majority of the bowls and basins from the study area are medium-sized, have a footed or pedestal base and a handle. Within the province the basins, known by the latin name *pelvis*, were a part of a 'wash service', often being found together with jugs and paterae. Kunow argues that such a use may have been too specialized for German tastes, allowing almost no other use. A suitable alternative function is, however, not given.[440]

Kunow dates Eggers Form 99-100 bowls from the Augustan period to the end of the second century AD, and Eggers Form 102-4 between the end of the first - end of the third century AD.[441]

5.5.7 Evidence for Dating

Returning to the primary considerations of the usefulness of the vessel remains as a dating tool, a number of factors arise for discussion.

Close dating of the remains found within the study area is difficult for several reasons. Firstly, simply because the form of very few of the vessels recorded can be reliably identified. Neither does the identification of form necessarily allow a close dating. Unlike pottery, where forms were far more susceptible to change due primarily to aesthetic considerations, the forms of metal vessels were dictated far more by function. They therefore remained more constant over a longer period. The identification of the provenance of vessels, and thereby a production date range, is also difficult to determine. Typological and technological distinctions between the Italian and the later Gaul and Rhineland industries are not readily apparent. The most reliable indication of date is given by stamps, but within the study area, only one stamp has been identified on the handle of a vessel from Duisburg-Hamborn (A65 Gr.1).

Where metal vessels are not the only datable artefact within the assemblage, the majority of graves containing metal vessels fit within a date range of late first-early/mid second century AD. A much smaller number of graves date to the later second or third centuries AD.

5.5.8 Evidence for Function

The function of the vessels within the grave raises several points. Firstly, there is the possibility that fragments were included in the graves for their metallic value alone, rather than for the original vessel's functional significance. Metal always retained its value, be

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[440] Kunow 1983, 36; 72.

[441] Kunow 1983, 22-3.

it precious metal, bronze or iron. At any time it had the property that it could be melted down and cast in another form. Eggers describes this as being the 'normal' end for a metal object, recycling being a necessity for the production of new objects. All finds within a burial context have, for specific reasons, not been given their 'normal' end.[442] The presence of such fragments in graves, would then appear to be a reflection of a specific Germanic cultural ritual or custom. There was certainly no reason for the Germans to treat their metal, and glass, vessels any differently to the provincial Romans, since they themselves also had the capabilities to recycle the material perfectly well.

Secondly, in almost every grave the vessel is represented by only a part of the vessel, more often fragments of the rim or base, for instance, or part of the wall. The majority of these fragments appear to have been deliberately 'cut' off vessels, rather than being the incidental remains collected after the vessel was burnt on the pyre. Eggers discusses a similar phenomena in Bohemia, where basin forms (his Forms 91-2) were deliberately broken up as part of the burial ritual.[443] This *pars pro toto* inclusion of fragments, as well as representing the function of a vessel within an assemblage appears to be a cultural distinction within specific Germanic tribes. The inclusion of metal fragments can also be seen as an indicator of the high value of metal, whereby most of the vessel not included in the grave could then be reused. Whilst one could argue that it is in order to reflect function that elements most diagnostic of a particular form, such as the rims and bases (and perforated walls from strainers, for example) were incorporated in assemblages, it has already been stated above, that a large number of fragments, including rims and bases, remain unidentifiable.

If metal fragments are meant to represent vessel types, it needs to be ascertained what their function was within Germanic society, or more specifically within the burial ritual where they are best represented and which may not be the same, and did this attribution differ significantly from the vessels known function within the Roman province.

Table 5.3 clearly shows that the most commonly found metal vessel forms within the graves in the study area are, in order of popularity, dippers and strainers, cooking pans, basins, and buckets (primarily Hemmoor). Only one patera has been found.

Nuber makes several points about the presence and absence of certain vessel types in Germania. Firstly, forms such as the cooking pan, the

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[442] Eggers 1951, 26.

[443] As opposed to further north in Denmark where complete vessels were included in the cremation and inhumation graves. See Eggers 1951, 58.

dipper and the strainer are commonly found in Germania whereas they are rarely found, or are completely absent in the provinces. Secondly, the types of vessels that are associated with the Germanic burial ritual are extremely different to those associated with provincial burials. In Germania the bowl, bucket cooking pan, dipper, and strainer are the dominant forms. In the province, the cooking pan, dipper and strainer are pushed well into the background. Buckets are also uncommon, occurring in the same numbers as bowls. Whereas bronze jugs are often found in the provinces, they hardly ever occur in Germania. Thirdly, Nuber notes that the dipper, strainer and cooking pan are generally seen as part of a 'drinking service' in Germania. As in the provinces, a drinking beaker is present in almost every Germanic grave.[111]

In support of the metal vessels being part of a 'drinking service', Table 5.3 shows that at least one imported beaker or cup is present in 24 of the graves containing metal vessels in the study area. Decorated terra sigillata bowls of Form 1.2, and less commonly Forms 1.3 and 1.5, are also found in half of all the graves containing bronze vessels (in 30 graves).

Returning to the earlier discussion of metal vessels being part of the standard military equipment, Table 5.3 also shows that there is evidence for the presence of militaria in 16 of the graves containing metal vessels.

The dipper and strainer, either found as a pair or singularly within the graves, is the most commonly found metal vessel type within the study area. Except for in A22 Gr.124 and Gr.169, it is noticeable that cooking pans do not occur in graves already containing either a dipper or a strainer, suggesting that both types of vessel may have fulfilled the same role.

The role of metal vessels in reflecting the gender or status of the buried individual is discussed in Chapter 9. Regarding status as opposed to function, i.e. providing 'richer' graves with at least one metal vessel, there may well be an added significance to the fact that some graves contain a pair of rather than a single vessel. It may also be significant that metal vessels very often occur in graves containing terra sigillata form Drag. 37 bowls: in 32 graves within the cemetery at Rheindorf, and 8 graves from other sites.

5.6 Coins

From burials: A12 Gr.1 iv? (x2); A22 Gr.35 i; A22 Gr.84 ii; A28 Gr.1 iv?; A40 iv.
From settlements: B5.
Stray finds and hoards: C4 (x2); C6 iv? (x3); C15 iv; C18 iv; C19 iv;

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[111] Nuber 1973, 179.

C43 i; C44 i (x11); C45 iv?; C46 i?.
Details of the 29 coins found within the study area have been set out in Table 5.4.[445]
Only six of the coins come from funerary contexts. Of these, only three coins are useful for the absolute dating of the graves. The coin from Düsseldorf (A40) although now missing, was dated in 1888 to the Neronian period. If true, however, the date of the coin coincides with the earliest influx of other Roman material into the study area (namely, terra sigillata).
Within the Province, the inclusion of coins in graves within military, urban or villa contexts, indicates a level of Romanization, particularly in the second and third centuries. The number of coins in more rural or native contexts remained noticeably lower. Very few conclusions can be drawn about the function of the small number of coins within the Germanic graves from the study area. Whilst certainly not being a regular practice, their inclusion may well be an indicator of status.
The picture emerging from the settlement sites in the study area also indicates a very low number of coins. Half of the coins classified as stray finds come from the post-Constantinian hoard of gold coins discovered in Duisburg-Großenbaum (C44). All the coins were minted within sixteen years of each other. The almost mint condition of the latest coins suggest only a very short period of circulation and thus a date of *c.* AD 354/355 for burial. One explanation for the hoard suggests it was 'war booty' from the Frankish invasions of AD 353-5 into the province. Alternatively the hoard has been described as representing the tribute or payment made to foederati troops on the right hand bank of the Rhine.[446]
The remaining stray finds have no reliable context. It cannot be ruled out that some of these coins found their way by one means or another into the study area from original provincial Roman contexts at a later, post-Roman or even more recent date. It is possible that some of the coins are from disturbed funerary contexts. Such graves would not necessarily need to be Roman in date, since fourth century coins are known from later fifth- and six-century burials.
A similar problem is attached to the Augustan As found in Duisburg-Großenbaum (C45). Whilst this coin may well be one of the earliest

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[445] For many of the coins, especially the Solidi from C44, there exists detailed published discussion as to dating, provenance, manufacture and condition. A repetition of this information was not felt necessary here. References to the most relevant literature are given under the appropriate findspot within the catalogue entries in Appendices I-III.

[446] For a description and discussion of the hoard see esp. Hagen, 1938/39 & Mayer 1972.

Roman imports known in the study area, its exact provenance is uncertain.
The scarcity of numismatic material within the study area also means that there is little evidence to support Erdrich's supposition for distribution in north-western Germany, in particular his hypothesis for an increase in bronze coinage around or after the mid-third century.[447]

5.7 Military Equipment

5.7.1 General Remarks

Within the study area, military equipment has been recovered exclusively from burial contexts. Whilst von Uslar and Rademacher provide a fairly detailed discussion of the majority of weaponry found within the study area, more recent publications necessitate a revision of the material.[448]
The catalogue includes a large number of small objects, rings, fittings and nails. Whilst they may well have been part of one of the groups described below, their original function remains uncertain. As far as the clearly identifiable objects are concerned, the remains of at least 57 objects have been recorded from 53 graves, that is 12% of all graves within the study area.
All the surviving fragments show clear signs of either scorching or burning, indicating they were burnt on the pyre with the deceased.
In the text below, a functional division has been made between defensive equipment (shields), offensive equipment (spears, *pilum*, archery equipment, sling shot) and other more personal or decorative equipment (scabbards, horse gear, belt fittings). Such an apparently clear-cut division does have its problems, since shields, for instance, could also be used as offensive weapons when supplied with spiked bosses. Although no evidence for boss forms exists within the study area, associated fittings from shields could suggest that a number may originally have been equipped with them.
Although mentioned in the catalogue, the sword apparently found in Mondorf (A6 Gr.2) and the so-called axe from Cologne-Deutz (A12 OF1) are not discussed below. Apart from now being lost, no reliable description of their form or date exists. both may well date to the post-Roman period.
An asterik (*) after a grave number indicates that more than one type of military equipment is represented in the grave assemblage.

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[447] Erdrich links this increase to the increased amount of bronze coinage being minted during the period of the Gallic Empire by the Gallic and Roman emperors (1996, 91-6).

[448] Von Uslar 1938, 114-7, 164; Rademacher 1922, 233.

5.7.2 Defensive Equipment

5.7.2.1 Shield

From burials: A7 Gr.8; A8 Gr.54; A9 Gr.5; A9 Gr.6; A18 Gr.1; A22 Gr.78?; A22 Gr.102; A22 Gr.107; A22 Gr.109; A22 Gr.115; A22 Gr.130; A22 Gr.136; A22 Gr.150; A22 Gr.156; A22 Gr.159; A22 Gr.160; A22 Gr.164; A22 Gr.175; A22 Gr.183; A22 Gr.187; A22 Gr.192; A22 Gr.193; A22 Gr.217; A22 Gr.234; A34 Gr.1.

Shields are the most commonly-represented weapons within the graves in the study area. All show signs of having been burnt on the pyre. None of the shield bodies remain, only metal nails or fittings. Shield fragments have been found in 25 graves, comprising 47% of all graves containing any sort of weaponry (see Table 5.5). Sixteen of the graves contain the remains of other types of military equipment as well as remains from a shield. The majority of shield fragments were found within the cemetery of Rheindorf (A22), that is within nineteen graves. The significance of the occurrence of shield fragments in graves is discussed in section 5.7.5 below.

One of the most important publication on Germanic shield fittings (700 BC - AD 200) is still that of Martin Jahn published in 1916.[449] Jahn's typological classifications are used by von Uslar and are also referred to in this study since many of his conclusions are still valid. A more recent and comprehensive reassessment of Jahn's material, as well as all other published evidence for Germanic shields within Free Germany up until 1985, has been published by Norbert Zieling and is referred to extensively below.[450]

Based on typological arguments, all the shield fittings from within the study area have been described by Zieling as being of Germanic rather than provincial Roman manufacture. That being said, the identification of small fragments as Germanic rather than provincial Roman, such as shield edging found unassociated with other shield fittings, would appear to be almost impossible considering that, visibly at least, the two types are apparently indistinguishable.[451]

Evidence suggests that bronze was used in the manufacture of Germanic

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[449] Jahn 1916.

[450] Zieling 1989, esp.3, note 1 for a summary of the most useful earlier literature on the subject. Although Zieling incorporates the findspots within the present study area in his catalogue (those published before 1985), his reliance on only published accounts and illustrations rather than reassessing the material at first hand, means that the present research is, albeit only in a few cases, at variance to his conclusions on matters such as presence of material or quantity and identification.

[451] See, for example, illustrations of Roman shield edging in Bishop & Coulston 1993, fig. 46.

weaponry since the later pre-Roman Iron Age. The use of bronze, especially for shield handgrips and rim edging, reached its floruit in the early Roman period and rapidly declined in use in the late Roman period.[452]

Most Germanic shields had a thin wooden body made from a single layer of planks, either nailed or stuck together. Others were made of wickerwork. A hole was made in the centre of the shield in order to fit a wooden handgrip. This handgrip was often reinforced by the attachment of a metal, usually iron, band (in German, the *Schildfessel*). On the exterior surface. The hand holding the shield would have been protected by a shield boss, usually of metal. A narrow, thin band of U-shaped edging was often nailed around the rim of the shield to give extra strength.

Tacitus discusses various aspects of the Germanic shield of the first century AD, including its construction, use and significance for the warrior's status in Germanic society on several occasions.[453]

Depictions in Roman art indicate that the Germanic shield could be of various shapes including round, oval, rectangular, or hexagonal, and could have been richly decorated with symmetrical patterns. Some may have been covered in leather, for extra strength, or decorated in blue or red paint.[454] Whilst archaeological research has found evidence to suggest a number of different shield forms did exist, there is as yet no evidence for decoration. By reconstructing the archaeological evidence, primarily on the basis of the shape of the surviving shield rim edging,[455] Zieling suggests that there were several forms of Germanic shield; oval and round being the most commonly recorded form, but also angular shields and other more unusual transitional forms, such as hexagonal. Zieling suggests oval and four-sided shields were the most commonly occurring forms in the Late La Tène and Early Roman period, with round shields being introduced towards the beginning of the Late Roman period This is, however, by no means a general picture, since differences in shield form were very much local developments.

As with other find groups the incomplete nature of the metal shield fragments suggest a *pars pro toto* selection from the pyre remains for inclusion in the graves. Only a percentage of the fittings from each

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[452] Zieling 1989, 311-5.

[453] For example, in his *Germania* 6,5; 6,7; 6, 19-21; 13, 4; 43, 25, and in his *Annals* II, 14.

[454] On triumphal sculpture such as Trajan's column, sarcophagi, gravestones, gemstones and terracottas, for instance. See Zieling's discussion of more recent literature on this subject: Zieling 1989, 371-4.

[455] Particularly in inhumation graves were the various preserved remains were found *in situ*.

shield were collected, for instance only part of the shield rim edging, only some of the nails and, with one exception (A22 Gr.159), none of the shield bosses. Organic remains, such as the wood or wickerwork of the shield itself, or any leather fittings, binding or covering, for instance, have not survived in the archaeological record.[456] Table 5.6 gives an overview of the various metal fittings from shields found within each grave.[457] The different fragments of shield fittings found within the study area are described below.

5.7.2.1.1 Shield Boss

From burials: A22 Gr.159.[458]

Only one grave in Rheindorf contained a fragment of a shield boss. The form is indeterminate. The early dating of the shield is based on the associated shield fittings in the grave (see below). The shield boss would have been attached to the wood of the shield by the nails of Zieling's Form H (see section 5.7.1.2.4 below). Although no other shield bosses have been found in the study area, Zieling's discussion indicates that specific shield handgrip forms were associated with specific shield boss forms. Whilst this may give a clue to the type of shield boss used on a particular shield, it may equally be the case that some shield bosses were made of perishable materal, such as leather.

5.7.2.1.2 Shield Handgrip

From burials:

Zieling Form I3 A8 Gr. 54 (I).[459]
Jahn Sonderform, Zieling Form E2 A22 Gr. 107 (I).[460]
Jahn indeterminate, Zieling Group 1 A22 Gr.109 (B).
Jahn Form 6, Zieling Form G1 A22 Gr. 115, A22 Gr. 187 (both I).[461]
Indeterminate Forms A22 Gr. 130, A22 Gr. 150, A22 Gr.159 (all B).
Jahn Form 6 or 7 A22 Gr. 164 (B).
Jahn Form 5, Zieling Form B1 A22 Gr. 183 (I).[462]

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[456] See von Uslar 1938, 116.

[457] Also listed by von Uslar 1938, 116 note 23.

[458] Zieling 1989, 570, Cat. no. 437.

[459] Zieling 1989, 198-9 & Taf. 25,5-6.

[460] Zieling 1989, 172 & Taf. 21,2.

[461] Zieling 1989, 186-7 & Taf. 23, 1-2.

[462] Zieling 1989, 165-6 & Taf. 20,3.

Jahn Form 6, Zieling Form F7 A22 Gr. 193 (B).[463]
Eleven complete or fragmented handgrips have been found within graves in the study area. Five of the handgrips listed above are made of iron (I) and six of bronze (B). Except for the example from Troisdorf (A8 Gr.54), all other handgrips have previously been discussed by Jahn and reiterated by Zieling so only a summary of the conclusions is necessary here.[464] A comparison of the two classifications, based primarily on the central grip section, is given below.
As far as the distribution of these handgrip types is concerned, the picture corresponds well with that indicated for other finds groups, especially the Germanic brooches (see section 5.8). For the two most commonly found handgrip forms, Zielings's Form B1 and G1, examples are particularly concentrated in cemeteries in the Lower and Middle Elbe region with others being found between the Middle Oder and Weichsel and in East Jutland (Form B1), and along the Middle Rhine as well as Poland (Form G1). The more uncommonly occurring forms, for example, Zieling's Forms E2, F7, and I3, are too few in number to show concentrations, but are certainly found within the same regions as Forms B1 and G1.
According to both Jahn and Zieling, all the handgrips found within the study area date to the Early Roman period. Zieling dates his Forms B1, E2 and F7 to within Eggers *Stufe* B1, whilst his Forms G1 and I3 occur in Eggers *Stufe* B2 as well as B1. Within the present study area, however, there is no reliable evidence to suggest that any of the cemeteries, including Rheindorf, actually began before the beginning of Eggers' *Stufe* B2.[465] The shield handgrips of Forms B1, E2 and F7, therefore, more likely date to at least the last quarter rather than the beginning of the first century AD in the study area, or even the early second century AD.

5.7.2.1.3 Shield Edging
From burials:
Zieling Form C[466] A7 Gr.8, A22 Gr.130, A22 Gr.159 iii, A22 Gr. 187 i.
Zieling Form E[467] A22 Gr.164.
Both forms are narrow U-shaped strips, made of bronze, with semi-circular shaped lobate expansions through which the nail or rivet was

[463] Zieling 1989, 184-5 & Taf. 22,7.

[464] Jahn 1916; Zieling 1989, 569-71, Cat. nos. 431-443 (Rheindorf, A22).

[465] See Chapter 8.

[466] Zieling 1989, 231-2 & Taf. 32,3.

[467] Zieling 1989, 233 & Taf.32,5.

hammered into the shield. The only difference is that whilst Form C is undecorated, Form E is decorated with parallel, incised grooves crossing between the front and back lobate expansions.
Zieling suggests that the original size and shape of the shield can be predicted from the shape of the surviving edging. Many of the shield fragments from the study area do not include metal rim edging, so their original form or size cannot be guessed. Unfortunately, the fragmentary state of the shield edging in the graves prevents any prediction of the original form.[468]
The distribution of this group of fittings once again concentrates around the Elbe region as well as being found in Central Poland (Form C), the Middle Rhine (Forms C and E), South Jutland (Forms C and E), the Middle Danube (Form E), Mecklenburg and Brandenburg (Form E).
According to Zieling, Form C edging can occur in Late La Tène contexts and Eggers' *Stufe* B1. On the basis of associated grave goods, the fragments in A22 Gr.130 can be dated to Eggers' *Stufe* B2 or the transition from B2/C1.[469] Form E is in general contemporary, occurring in Late La Tène, *Stufe* B1 and B2 contexts, with A22 Gr.164 dating within *Stufe* B2.

5.7.2.1.4 Shield Nails and Securing Nuts

A large number of nails were found within the graves in the study area. It is, however, rarely possible to determine the provenance of loose nails and their function remains uncertain. Nails identified as part of a shield were either found still attached to other shield parts, or are of a very characteristic form.
Individual or groups of nails, some with securing nuts, belonging to shields have been recognized in eighteen contexts in the study area. Except for one stray find, all are found in graves, and the majority from Rheindorf (A22). Two different types of shield nail can be identiifed. From burials:
Zieling Form C A22 Gr.164; A22 Gr.217.
Zieling Form H A9 Gr.5; A9 Gr.6; A22 Gr.102; A22 Gr.130; A22 Gr.136; A22 Gr.156; A22 Gr.159; A22 Gr.160; A22 Gr.175; A22 Gr.183; A22 Gr.187; A22 Gr.192; A22 Gr.193; A22 Gr.234; A22 Stray Find: A34 Gr.1.
Zieling Form C nails are undecorated, with a more or less dome-shaped or hemispherical head. Such nails were used to attach either the metal handgrip or the boss to the wood of the shield. According to Zieling, such nails are predominantly found in the Elbe region, although examples are known throughout Germania. Dates conform to Egger's *Stufe*

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[468] See Zieling 1989, 352-3, Abb. 22 & 353-60 for a discussion of the various shield forms, their findspots and chronologies.

[469] See catalogue entry in Appendix I.

B1 and B2.[470]
The most commonly found shield nail, Zieling Form H, has a high, cylindrical or conical, undecorated head and is usually referred to as being 'thimble shaped'. The form occurs in fifteen graves, with one stray find. Again, the nails are known to have been used to attach both the handgrip and the boss to the wood.[471] In graves A22 Gr.130 and A22 Gr.187[472] at least one of the nails was used to secure the handgrip. As well as the handgrip, Form H nails were also used to secure the boss in A22 Gr.159.[473]
This nail type is predominant in the Lower Elbe cemeteries, dating to the early Roman period, Egger's *Stufe* B2.[474]
In four graves Form H nails were associated with securing nuts. These would have been attached to the part of the nail shank protruding through the face of the shield and were as much ornamental as practical. Three main variations in form can be identified in the study area. From burials:
Zieling Form C A22 Gr.136 and A22 Gr.234[475]
Zieling Form D A22 Gr.187[476]
Zieling Sonderform A22 Gr.193 (x2)[477]

5.7.2.1.5 Other Shield Fittings
From burials: Bergisch Gladbach 1935?, A22 Gr.78, A22 Gr.185?
A fragment of a reinforcement strip, used for nailing together the wooden boards making up the shield, was found in A22 Gr.78. Parallels for this piece have been found in the Thorsberg bog find where the strip was still attached to the wooden board.[478] The fittings found in Bergisch Gladbach and A22 Gr.185 may also have been used to fasten the shield boards together. The narrow plates on either side of the boards would have been secured using the nails at each end. Again, parallels for such a function have been found in the Thorsberg bog find.

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[470] Zieling 1989, 258-9 & Taf.34,5-6.

[471] Zieling 1989, 265-7 & Taf. 35, 3-4.

[472] Zieling 1989, 569-70, Cats. no. 434 & 440.

[473] Zieling 1989, 570, Cat. no. 437.

[474] Zieling 1989, 267.

[475] See Zieling 1989, 277-8 & Taf.36,5-6 as well as 569, Cat. no. 435, 571, Cat. no. 442.

[476] Zieling 1989, 278 & Taf.36,7 as well as 570, Cat. no.440.

[477] Zieling 1989, 571, Cat. no.441.

[478] Raddatz 1987, Taf. 30, esp. 19, 20 & 37.

5.7.3 Offensive Equipment

5.7.2.1 Spear

From burials: A6 Gr.2 iv*; A8 Gr.3(x2); A12 OF1 iv*; A22 Gr.164; A44 Gr.1 iv; A53 Gr.1? iv.

Of the seven examples listed, all are made of iron. The three remaining spearheads that are not either lost or missing are all relatively small.

The two long-bladed examples found together in Troisdorf (A8 Gr.3) are so corroded that precise identification is no longer possible. These were deposited together with a disc brooch that dates after *c.* AD 100 (see section 5.8.2.6.4 below). The spearhead from Rheindorf (A22 Gr.164), with a wide, leaf-shaped blade[479] and circular-sectioned socket, was deposited together with fragments of shield edging and is dated by von Uslar to the early Roman period.[480] This is supported by the presence of terra sigillata sherds dating to the end of the first century in the same grave.

All three spearheads correspond with Tacitus's description of the Germanic carrying spears known as *frameae*.[481] These apparently had relatively short, narrow blades but were sharp and easy to handle, and were to be used either at close quarters as thrusting weapons, or in long range fighting as missiles.[482] An alternative provincial Roman origin for the weapons cannot, however, be ruled out. Bishop and Coulston discuss the difficulty in establishing the specific purpose of a particular weapon, especially since analysis traditionally relies on the form and size of the head alone.[483] Only in north German and Scandinavian bog finds are wooden spear shafts preserved, the differing lengths and diameters of which may suggest variations in function. Clearly, however, extreme conditions of warfare may have necessitate the use of a single type of weapon for both thrusting and

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[479] Although this description is used here, there are clearly problems when attemting to define an unambiguous terminology for spearheads. For discussion, see particularly Bishop & Coulston 1993, 69.

[480] Von Uslar 1938, 115. See further Jahn 1916, 80 with Abb. 86.

[481] Distinguishing a Roman spearhead from allied or enemy weapons is extremely difficult, especially when examples are so corroded.

[482] Tacitus, Germania 6.

[483] Bishop & Coulston (1993, 69) suggest that the diameter of the shaft may be a better clue to its function. Alternatively, the ratio between the length of the spear blade and its broadest point can be compared, the distance from the tip of the blade to this broadest point being termed the 'length of entry'. See also Tejral 1994, 33.

throwing.
Although Tacitus implies that the spear was exclusively used by the cavalry whilst the foot-soldier used javelins, it is much more likely that all first-century warriors, whether on horse or foot, would have been equipped with at least one spear, which would have been their main, or only, weapon.[484]

5.7.2.2 *Pilum*

From burial: A22 Gr.57.
The identification of this iron artefact as a *pilum* remains questionable because of its extremely corroded condition.
Identification of the artefact is further complicated by the fact that it is not listed by von Uslar in his catalogue, suggesting that it was either not originally found within this grave, or that von Uslar simply did not list the find because he could not identify it.[485] The grave in which it was found dates to the second century AD on the basis of associated grave goods. In form, the artefact shares some of the characteristics of the tanged Roman *pilum*, having a square-sectioned, pyramidal head and a square-sectioned shank, the greater length of which is broken off.[486]
Pila were commonly used by the Roman legionary army in the first and second centuries AD, primarily as an armour-piercing missile for penetrate an enemy shield, for instance. They continued in use into the third century, although by then they had ceased to be as significant a weapon for legionary troops as they had been in earlier periods.[487]
There is no evidence of the *pilum* being manufactured by the Germans for their own use,[488] although its function was matched to some degree of success by German javelins and spears.

5.7.2.3 Archery Equipment

From burial: A22 Gr.49.
Only one diamond-shaped, iron arrowhead has been identified within the

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[484] See Tacitus, *Germania* 6; also Thompson 1965, 112.

[485] Von Uslar 1938, 227.

[486] See Bishop & Coulston 1993, 65-7, 109, 123.

[487] See Bishop & Coulston 1993, 48-51, 65, 109, 123.

[488] A lack of iron for its production may have had something to do with its absence. This is not to say that some Roman *pila* were not plundered as booty or 'spoils of war' by Germanic warriors for their own use.

study area. The artefact is, however, not listed by von Uslar.[489] Associated goods date the grave to the third century AD.
Raddatz notes that the bow and arrow was first introduced in the later Roman period, during the third century AD. Whilst being used for sport as well as warfare, their appearance marks a new, more effective, phase in the development of Germanic armament. The Germanic bow and arrow were specially designed to imitate Roman fighting methods and to be used as long-range weapons which could pierce the Roman body armour.[490]

5.7.3.4 Sling Shot

From burial: A22 Gr.37.
The spherical sandstone object in this grave, with a diameter of 3 cm, is the only object recovered from the study area that might be interpreted as a slingshot. Reliable dating evidence for the grave is lacking.

5.7.4 Other Fittings

5.7.4.1 Sword Scabbard Fittings

From burials: A22 Gr.52; A22 Gr.55; A22 Gr.62; A22 Gr.73; A22 Gr.81.
Scabbard fittings have only been found in the cemetery of Rheindorf. All the fragments are of provincial Roman manufacture. In no grave have any remains of the scabbard sheath itself been recovered. Examples surviving in Danish and North German bog contexts were made of thin wooden laths bound with an overall leather covering.[491] The different scabbard fittings found in the study area are described below:

5.7.4.1.1 Scabbard Slide

From burials: A22 Gr.52 i.
This single example of a scabbard slide (in German, *Schwertreimenhalter*) is made of bronze. The introduction of both these forms of slides and the scabbard chapes as described below, can be related to major changes in the use of swords within the Roman army that took place in the later second and third centuries AD. During this period, the shorter 'Pompeii' type of *gladius* was replaced by the longer *spatha* for all troops. The older form of ring suspension was completely replaced with the so-called scabbard slide. The new method of fastening the scabbard and the baldric together involved the belt

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[489] Von Uslar 1938, 227.

[490] Raddatz 1967,9; Thompson 1965, 116.

[491] Engelhardt 1863, Pl. 10; 1869, Pls. 6, 10.

passing through a vertical slide which was mounted on the scabbard facing away from the wearer.[492]
On the basis of associated grave goods, the slide from A22 Gr.52 can be dated to the second half of the third century AD.
Parallels have been found in the Roman fort at Niederbieber, and similar types are commonly found in other northern Roman provinces as well as the *Limes* forts.[493] Kaczonowski states that, in northern European contexts, both the Novaesium type chape (below) and the scabbard slide are found in association with Illerup type swords.[494] His distribution map shows similar slides to that from Rheindorf being found exclusively in Illerup, Denmark and Vimose on Fünen on Germanic territory. The distribution of the relatively few bronze scabbard slides to be found in Germania as a whole is concentrated in northern Europe, from the Elbe to northern Germany, Jutland in Denmark and in Norway. Most of these are to be dated in Eggers' *Stufe* C1b. Rheindorf is the only recorded findspot within Germanic territory along the frontier.[495]

5.7.4.1.2 Scabbard Chapes

From burials: A22 Gr. 62 iii), A22 Gr.73 i), A22 Gr.81 i).
Fragments of three semi-circular sword chapes (in German, *ortsbänder*) with pelta-shaped cut outs on the front face and all with their backs broken off, have been recovered from graves within Rheindorf (A22). All are examples of Raddatz's Novaesium type.[496] Von Uslar notes that the example from A22 Gr.73 is somewhat smaller than is usually found.[497] The chape would have been either pushed, stuck or nailed onto the end of the sword sheath. The introduction of this type of chape, in association with the scabbard slide, has been described above (section 5.7.4.1.1). The distribution of this type within Germania is concentrated in north-west and northern Germany as well as Jutland, and particularly in the bog finds from Vimose, Thorsberg and Illerup as well as in the region north of the Danube. Its presence in areas west of the Elbe is highlighted by its absence to the east, in the Oder or Weichsel regions, in contexts dating to Eggers' *Stufe* C1.

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[492] Bishop & Coulston 1993, 112, 126, 130. Oldenstein 1976, 96, 104-5 also gives a detailed description.

[493] Von Uslar 1938, 115 note 2; esp. Oldenstein 1976, 96-99, Taf. 12-13, nos. 35 & 55.

[494] Kaczanowski 1994, 219.

[495] Kaczanowski Abb. 6.

[496] Raddatz 1957, 147.

[497] Von Uslar 1938, 116.

Along the Roman frontier numerous examples are known from the Upper German-Raetian border region as well as from the provinces of Britain and Dacia.[498]
Find circumstances date the pieces almost exclusively to the second half of the second century, i.e. the Antonine period, and particularly to the period around AD 200, falling within Eggers' *Stufe* B2-C1/2. A second-century date for the finds from Rheindorf corresponds with the dating of associated terra sigillata between *c.* AD 180-220.[499] The actual length of its use is uncertain, but this type of chape certainly continued in use until the mid third century AD. Oldenstein gives an absolute *terminus ante quem* for its use as the fall of the *Limes* under Gallienus in AD 259/60.[500]

5.7.4.1.3 Sheath Edging
From burials: A22 Gr. 62 iii.
Fragments of narrow U-shaped bronze edging in this grave may well be edging or guttering from a sword (or dagger?) scabbard rather than from a shield (section 5.7.2.1.3). This hypothesis is supported by the presence of a scabbard chape in the same context, but is complicated by the fact that von Uslar lists neither of the pieces in his catalogue.[501]

5.7.4.2 Horse Gear
5.7.4.2.1 Horse Gear of Germanic Provenance
It is very difficult to assign much of the decorative fittings found in the study area to equine regalia rather than to military belts or other items. An attempt has nevertheless been made here.
In her catalogue of Germanic horse gear found in Germania during the Roman period, Wilbers-Rost only lists a single object from the study area, the figure-of-eight link in A22 Gr. 225. She ascribes this to her Form Z1, a relatively uncommon form found across the whole of Germany and Denmark as well as Poland and Lithuania. Rheindorf clearly lies on the edge of the distribution area. An exact parallel is to be found in the cemetery at Glane-Visbeck, Landkreis Osnabrück.[502] Whilst

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[498] For instance, Oldenstein 1976, 112 and Taf. 19 nos. 112-116; Raddatz 1987, Taf.9 nos. 12-19; Bishop & Coulston 1993, 112, 130, fig. 90 no.8; Kaczanowski 1994, 208, Abb. 5; Tejral 1994, 32.

[499] See catalogue entries, Appendix I.

[500] Raddatz 1957, 147; Oldenstein 1976, 121-2; Bishop & Coulston 1993, 112, 130; Kaczanowski 1994, 208; Tejral 1994, 32.

[501] Von Uslar 1938, 228. This may suggest that none of the fragments actually come from this grave.

[502] Wilbers-Rost 1994, 93-5, 166.

the link may well have been part of a horse's bridle,[503] supported by the presence of a decorative pendant in the grave, Wilbers-Rost also suggests that it could have been part of a woman's belt fittings, worn presumably as part of a chateleine. The further presence of a key and possible latchlifter in A22 Gr.225 may add support to the latter hypothesis.

Wilbers-Rost dates the Form Z1 link to within the first half rincipleof Eggers' *Stufe* B2 (B2a).[504] The absolute dating of associated goods in A22 Gr.225 corresponds with this, placing the grave in the early second century AD. In discussing the status of individuals buried with such objects, Wilbers-Rost concludes that whilst a particularly high status cannot be automatically ascribed to a grave on the basis of the single artefact, such artefacts are not known to occur in poor graves. The possession of an artefact made of such a relatively large amount of such a costly and scarce commodity as bronze, by implication indicates the burial of an individual of higher than average rank.[505]

5.7.4.2.2 Horse Gear of Provincial Roman Provenance

The remaining horse gear found within the study area appears to have more parallels with objects of provincial Roman rather than Germanic manufacture. The assemblage of studs and mounts from A22 Gr.80, dating probably to the third century AD, were all probably originally fitted to the same object. Parallels for the individual decorative pieces, although mostly associated with horse gear, are also found amongst personal armour or weaponry equipment.[506]

An ornamental piece reminiscent of a *tutulus* fibula was found in A22 Gr.83. The object consists of a bulging disc upon which several ornamental discs and a spherical terminal have been applied. A similar object, described as horse gear, has been published as part of an assemblage dating to probably the first half of the third century AD from a Roman villa in Wange, Central Belgium (from a civilian rather than military context).[507]

Examples of mussel-shaped fittings, such as those found in Bergisch

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[503] See also the Thorsberg assemblage: Raddatz 1987, 79, Taf.101 nos. 1-3.

[504] Wilbers-Rost 1994, 53-4.

[505] Wilbers-Rost 1994, 96-7.

[506] Pelta-shaped mounts: Oldenstein 1976, Taf.53 nos. 622, 626, 628, 629; Bishop & Coulston 1993, fig.112 no.9 (third century). Mounts with fleur-de-lys terminals: cf. Oldenstein 1976, Taf.34 nos.262, 264-6.

[507] Lodewijckx *et al* 1993, fig. 9, 4.20.

Gladbach (A18 D), Rheindorf (A22 Gr.25) and Düsseldorf (A38), have been found in the Roman fort at Niederbieber dating to the third century AD. Oldenstein lists ther examples from a horse's brow band in a burial in Celles-les-Waremmes and from an assemblage of horse's fittings found at Zugmantel dating to the first half of the third century. A *terminus post quem* of AD 180/190 can be given for Niederbieber based on the foundation of the fort. Whether this was their only function is, however, uncertain, since mussel-shaped fittings are relatively widely distributed in Gallo-Germanic areas.[508] Another decorative pendant, with a stud on the back for punching through a leather strap, was found in A22 Gr.261.

Todd points out that the lack of suitably large and fast horses in northern Europe imposed serious limitations on the development of cavalry warfare. The use of the chariot was not taken up by the Germans, unlike their Celtic neighbours. The cost of maintaining a mount was also restrictive. The cavalrymen appearing in the historical and archaeological record were mainly chiefs and their immediate retinues. According to Todd, in general, because of their size and physical strength, the Germans were more effectively employed in the infantry.[509] Whilst this was certainly the case, it should, however, also be noted that some of the best known auxiliary cavalry regiments, as well as the imperial horseguards in Rome, were recruited from the Germanic peoples living in the border areas, for instance, the Batavi, the Cugerni, the Ubii, and the Tungri.[510] As mentioned in Chapter 3.3, among the tribes living on the right bank of the Rhine, it were the Tencteri who provided the best horse-riders in Germania Libera.[511]

5.7.4.3 Belt Fittings

From burials: A22 Gr.36; A22 Gr.51; A22 Gr.53; A22 Gr.71; A22 Gr.108; A22 Gr.235; A22 Gr.251; A22 Gr.270; A59.

As with the horse gear, it is very difficult to identify the precise function or origin of many of the loose studs and fittings within grave assemblages. All the pieces compare well with other examples of provincial Roman manufacture. For some artefacts, classification as either belt or horse gear fittings remains uncertain.

Except for the fittings in A22 Gr.36, all other belt fittings are from graves that can be dated to the second half or late second - early or mid third century AD. The assemblage, all of bronze, includes belt stiffeners, decorative mounts, fungiform studs, and plates with

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[508] Oldenstein 1976, 187.

[509] Todd 1992, 37.

[510] Bellen 1981; Roymans 1995c, 55-62.

[511] See also Todd 1992 (1995), 36; Kunow 1987b, 67-68.

suspension loops.
The plain belt plates and suspension ring attached to a small, circular rosette plate found together in A22 Gr.36 are of a later date. Such rosette plates are usually dated to the second half of the fourth and first two decades of the fifth centuries AD.[512] Böhme dates them to the first half of the fifth century AD.
What appears to be a small annular buckle was recovered from Duisburg-Wedau (A59). The context and date of the piece is uncertain.

5.7.5 The Significance of the Military Equipment Within Graves

Several conclusions can be drawn on the military equipment from the study area from the discussion above.
The shields and spears are the earliest military artefacts to be recovered from graves in the study area, dating to either the end of the first century or early-mid second century AD, Eggers' *Stufe* B2. Two pieces of horse harness also date to the same period. This early group of finds comprises almost 60% of all the military equipment, the majority being shields. The majority of graves containing shield remains often contained a combination of the various fittings, no grave contained all the fittings together. The standardized nature of the shield fragments, albeit found in various combinations, indicate that a similar type of shield is represented in all graves.
All the early pieces of military equipment are most probably of Germanic manufacture (see Fig. 5.26). The remaining material all dates to either the second or third century AD, Eggers' *Stufe* C1/2, with a single grave containing belt fittings dating to the fourth century AD. Except for the single arrowhead, all these finds are probably of provincial Roman manufacture.
For the early Roman period the evidence from the study area reflects the general assumption that the most commonly used military equipment was the spear, the shield and the sword. Only two of the graves within the study area contain more than one of these items together, however, a spearhead and apparently a sword in A6 Gr. 2 and a shield and spearhead in A22 Gr.164. The importance of the spear dated back to the pre-Roman Iron Age.[513] The barbarian forces of the first and second centuries AD were largely equipped with javelins, lances, shields and, to a notably lesser extent, swords. Less than one in ten warriors would have possessed a sword.[514] The same probably accounts for the irregular-serving Germanic troops in the Roman army of the first

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[512] Bishop & Coulston 1993, 174-8, fig. 125, 10-12: Böhme 1986, 492-501.

[513] Raddatz 1966.

[514] Raddatz 1967, 5.

century AD, and even for some of the lightly armed auxillary units in the later periods. According to Thompson, only a handful could afford a sword as well as a spear. The German sword was also found wanting, being in many ways unsatisfactory against the Roman method of warfare, quite apart from the fact that the majority of Germans owned no sword at all.[515] Todd states that the sword was so valuable to their owners that they were probably consigned to burials and votive offerings much less commonly than other weapons. The rank and file would have rarely possessed a sword. Even in the later Roman period, spearmen greatly outnumbered warriors carrying swords.[516] The choice of weaponry was based on local differentiatons in custom and the scarce availability of metal as well as being a clear reflection of social status. The fact that the number of graves within the study area containing military equipment is so small, certainly sets them apart as a group, even if it does not necessarily reflect the existence of an elite. Except for in A6 Gr.2 where a sword was apparently found, no other swords have been recovered from the study area.

The rarity of weapons in graves should not be seen as generally reflecting a general rarity of weapons, considering the warrior-like character of historical accounts. Raddatz notes that in older periods, except for in a few areas of Germany, the warrior was often buried with his weaponry. At beginning of the later Roman period, this tradition was either totally or partially given up in many areas, for instance, hardly any finds come from the area between the Rhine and Weser in this period, certainly hardly any swords.[517]

Comparing the later Roman period assemblage with that of the early Roman period, it is clear that the Roman influence had increased.[518] The influx of Roman manufactured goods is reflected in other categories of finds as well as the military equipment.[519]

The relatively small number of finds and the limited range of equipment naturally makes it difficult to draw conclusions. This is particulary true when attempting to assess whether objects were gained through normal exchange or found their way onto Germanic territory as booty. Certainly for the early Roman period, Thompson discusses how the Germans would equip themselves by stripping the Roman dead after a battle, or by stealing Roman weapons during a raid.[520] The very nature

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[515] Thompson 1965, 112.

[516] Todd 1992, 38.

[517] Raddatz 1967, 4.

[518] Raddatz 1967, 12.

[519] This aspect is discussed in more detail in Chapter 10.

[520] Thompson 1965, 120 note 1.

of the provincial Roman equipment within the graves, albeit a small group, comprising primarily scabbard and belt fittings, suggests, however, that this was probably not the case. It could well be that the equipment was acquired by a Germanic warrior or soldier whilst in service in the provincial Roman auxiliary army.[521]
The absence of certain items of military equipment within the funerary contexts may be due to items being passed down, or inherited, by close kin of the deceased. This may be a good explanation for the absence of swords in contexts where scabbard fittings, presumably attached to a belt, do exist.
The fact that the shield is one of the most commonly found pieces of military equipment within the late first- second century AD graves may support Todd's assertion that the only defensive armour for the vast majority of warriors was the shield in this period. The evidence for secondary burning on almost all surviving metal fragments from shields indicates that the shields were burnt on the pyre. It might even be an indication that the 'warrior' was cremated lying either on or under his shield.
The spatial distribution of shield fragments within Rheindorf (A22) has some implications for the reconstruction of the development of the cemetery, see below Chapter 9.3.

5.8 Brooches

5.8.1 General Remarks

From the whole study area 190 brooches are recorded, of which 185 come from burial contexts (141 of these coming from the cemetery at Rheindorf, A22) and only 5 from settlement contexts.
Within this section an attempt has been made to identify the brooch forms present in the study area, their provenance and distribution, as well as to assess the available evidence for their dating. The brooches are an important tool for dating, especially since they are often the only closely datable grave good in many of the graves. The function of the brooch within the burial context is also discussed.
The manner in which the brooches have been divided and described needs explanation. Although the majority of the brooches, particularly those from Rheindorf, have previously been discussed by both Rademacher and von Uslar,[522] a detailed reanalysis was felt necessary here. Thie was not only due to new discoveries from the study area in the last sixty years or more, but also because recent publications have encouraged a more systematic approach to the study of the manufacture and

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[521] This will be further discussed in Chapters 9 & 10.

[522] Rademacher 1922; Von Uslar 1938.

provenance of the brooches, as well as providing a more refined chronology for the various types.[523]

Cosack briefly summarizes the state of research into Germanic brooches up until 1979. He admits that, despite its various critics, and accepting several refinements with regard to the typological and chronological divisions set out, Almgren's 1923 publication on Germanic brooches still remains the basis for modern research and definitions.[524] That being said, the habit has grown to view Almgren's figures not as being illustrative of general groups, but as representing *definitive* forms, which was never Almgren's intention. To some extent von Uslar's identification of the brooches in the study area has fallen into this trap.[525] In making the effort to compare and fit his forms to Almgren's series, some of the differences or variations between the brooches, which are discussed below, have received no comment.

Almgren's treatment of the forms of the earlier Roman period is much more detailed than his treatment of the later forms. Differing typochronological approaches have since been put forward, for example by Preidel, Voigt and Matthes.[526] A discussion of later Roman types is provided by Kuchenbuch in particular, and also Raddatz.[527]

For the provincial Roman brooches, the publications of Böhme, Riha and van der Roest have been primarily used here.[528] As with the other imported artefacts in the study area, the proximity of the study area to the Lower German province, leads one to expect that dates given for forms occurring in the province are close to, or even the same as, dates given for forms occurring in the study area.

Brooches can be studied according to a variety of considerations. From a purely functional point of view, for instance, changes through time can be recorded according to the prevailing fashion in dress.[529] As Riha argues, a discussion based purely on chronological considerations can lead to confusion, since many types of brooch are in use at the

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[523] The publications that have particularly been referred to here are those of Exner 1939; Böhme 1972; Riha 1979; Cosack 1979; van der Roest 1988.

[524] Cosack 1979, 21; Almgren 1923.

[525] Von Uslar 1938.

[526] Preidel 1928; Voigt 1964; Matthes 1931. See Cosack's discussion: 1979, 21.

[527] Kuchenbuch 1938; Raddatz 1957.

[528] Böhme 1972; Riha 1979; van der Roest 1988.

[529] See, for example, Gechter 1979, 77.

same time.[530] For the purposes of this study, a division has been made according to technological characteristics. This is in accordance with the most recent publications. Such a division entails grouping the brooches according to their fastening construction. By dividing the assemblage in this way, it becomes apparent (see the discussions on forms below) that variations in construction techniques can be useful indicators of provenance, function, and to some extent, dating. A division according to construction inevitably leads to the separation of certain brooch types one traditionally would group together, for instance the division of disc brooches into sprung and hinged types. This should not be seen as a disadvantage, however, since such a divison allows for a better understanding of why the two different types came into being. Although not discussed in a strictly chronological manner, the groups below do, nevertheless, illustrate some degree of chronological development.

All the brooches from burial contexts within the study area appear to have been burnt on the pyre with the body.[531] They therefore usually survive in a bad condition and in various fragmentary states. Rarely are complete brooches found. This inevitably leads to problems in identification and classification.

Problems aside, on technical grounds the brooches divide into two main categories which have then been further split: sprung brooches (Form A) and hinged brooches (Form B).

Under each brooch form discussed below, the examples from the study area are listed at the beginning of the section according to metal, i.e. silver (S), bronze (B), or iron (I). This refers to the principal metal used for their manufacture. One or more asterisks (*) after an entry indicates one or more other brooches were found in the same context. Three brooch fragments are of unidentifiable form:

B: A8 Gr.17 iv; A22 Gr.174 iii.

I: A22 Gr.30 i.

5.8.2 Form A: Sprung Brooches

5.8.2.1 Introduction

The Germanic sprung brooches (in German, *Armbrustfibeln*) comprise either a bow or disc with a bilateral spring and pin of either round or square-sectioned wire. Such a construction was already known in the pre-Roman period for bow brooches, so the forms below represent a

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[530] Riha 1979, 11.

[531] The condiiton of brooches that are now missing is not recorded.

continuation and development from earlier forms.[532]
In one-piece brooches (exclusively bow brooches), the spring, pin and chord hook are made from the same piece of wire as the bow of the brooch. The number of turns on each side of the pin can vary according to form, although the length of the spring is practically restricted to only a small number of turns by the method of construction.
In two-piece brooches (bow and disc brooches), the wire spring with the pin is made separately and is held to the head of the cast bow by an axial bar passed through the centre of the coil and through a central lug, or spring holder, projecting from the back of the bow or disc. The spring is made with either an external chord, i.e. one which passes over the spring, or an internal chord, i.e. one which passes under the spring. The two-piece construction enables the use of much longer springs, allowing for more variation in form. It also has the added advantage of being simpler to produce. Whilst many forms originated as two-piece brooches, other one-piece forms developed into them through time.
Of all the brooches from the study area, 180 have a spring construction, representing 97% of all the brooches. For the brooches were this can be distinguished (175), 31 (*c.*17%) are of one-piece and 144 (*c.*80%) of two-piece construction. These have been divided between 7 groups and 32 sub-groups. Due to their conditon, a significant number of brooches cannot be more closely identified:
Sprung brooches of unidentifiable type From burials: (B) A22 Gr.31 i**; A22 Gr.180 i. (I) A22 Gr.266? i.
Two-piece brooches of unidentifiable type From burials: (B) A8 Gr.37 i; A8 Gr.40 i*; A18 Gr.5 i; A18 Gr.8 i; A22 Gr.56 iii*; A22 Gr.60 iii**; A22 Gr.80 i**; A22 Gr.83 i; A22 Gr.90 iv; A22 Gr.98 i; A22 Gr.123 iii*; A22 Gr.175 i; A22 Gr.176 ii; A22 Gr.185 i; A64 Gr.1 iv. (I) A8 Gr.22 i; A22 Gr.36 iii; A22 Gr.60 iii**; A22 Gr.223 i.
From settlements: (B) B18 A i.

5.8.2.2 Form A1: One-Piece Brooches with Four Turns on the Spring and an Internal Chord

5.8.2.2.1 Form A1.1: Dish or Capped Brooch (*Schüsselfibel/Kappenfibel*)[533]

From burials: (B) A18 D iv.
The stray find from Bergisch Gladbach (A18) is the only probable example of this form to be found in the study area. The brooch was

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[532] Almgren 1923, 7. See also Cosack 1979, 21 where, on the basis of Hachmann (1960, 111), he lists finds from Hornbek and Putensen in the Lower Elbe region that apparently prove the development of this construction from local Late La Tène forms.

[533] Van Buchem 1941 Form 4 A; van der Roest 1988, Form 1.1.1 Variant Nijmegen (esp. Taf.1, no.004).

found within the cemetery area and, considering its burnt patina, most likely originates from a destroyed grave. The uncertainty attached to its identification is not only due to its advanced fragmentary condition, but also to the fact that the brooch was not available for study.[534]

The name given to this cast brooch relates to the wide, dish or cap-shaped head of the bow that curves over the spring, the head gradually widening from a profiled 'knot' in the centre of the bow. The catch-plate can often have ornamental perforations. The spring construction is made of four turns and an internal chord.[535] According to van der Roest, the form has been found in the Netherlands, Belgium and the Rhineland. The type dates to the early Roman period and reflects the continuance of a tradition which has its roots in the Late La Tène period.[536] Within the Augustan forts along the Lower Rhine, Gechter lists one example of the form found at the Kopseplateau in Nijmegen and three more found in Neuss.[537] The type apparently enjoyed a certain level of popularity among the soldiers of the Lower Rhine army in the first decades of the first century AD.[538]

5.8.2.2.2 Form A1.2: 'Soldier' Brooches (*Soldatenfibeln*)[539]

Of the eight *Soldatenfibeln* found within the study area, six are one-piece brooches, and two are apparently of two-piece construction. These simple one-piece wire brooches are of provincial Roman manufacture and follow in the same tradition as the Late La Tène transitional brooch forms such as *Knickfibeln* and *Augenfibeln*.[540] A main difference between these examples and their predecessors is that the provincial Roman brooches almost always have an internal chord. This type of sprung brooch was the most common brooch form along the Rhine and Danube in the second half of the first century until into

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[534] Only an earlier publication drawing of the brooch was available since the brooch is part of a private collection. See catalogue entry in Appendix I.

[535] See Van der Roest 1988, 145.

[536] Almgren 1923, 3 & Taf.I.9. For further lit. see van der Roest 1988, 145 note 9.

[537] Gechter 1979, 78, Taf. 10.

[538] Van der Roest 1988, 145, citing nineteen examples found in the Tiberian fort of Bunnik-Vechten (*Fectio*) alone.

[539] Rademacher 1922, Form 14, Almgren 1923, fig.15; Van Buchem 1941, Form 22; Böhme 1972, Form 14; Jobst 1975, Form 9; Ettlinger 1973, Form 4; Riha 1979, Form 1.6; van der Roest 1988, Form 1.3.2.

[540] Almgren 1923, 7-8; van der Roest 1988, 154.

the second century.[541]

The fragmentary nature of the examples from the study area means that significant details for a typological or chronological division, such as the length of the brooch, or the shape and decoration of the bow and catch-plate, are not clear. The six one-piece examples can, however, be further subdivided.

Form A1.2.1: brooches with a flat, arched bow[542] From burials: (B) A18 Gr.10? i; A22 Gr.193 ii.

Von Uslar describes the brooch as having a flat rather than a round-sectioned bow,[543] which is more akin to Riha's Variant 1.6.1.[544] The Rheindorf (A22) example, however, does not have the kink or sharp bend in the bow which is apparently characteristic of the form. The variant represents an early version of the general brooch form, being characteristic of the Flavian period (AD 69-96).[545]

Form A1.2.2: Brooches with a round-sectioned, arched bow[546] From burials: (B) A8 Gr.58 i*; A22 Gr.206 i; A38 i?*. (I) A22 Gr.259 i.

This simple brooch form has a narrow, curved, wire bow, either round or oval in section. The spring itself comprises four turns, with the wire in the spring being square in section. The catch-plate would normally be small, hammered flat with the end rolled over. Three of the brooches are made from a single piece of twisted bronze wire whilst the fourth is made of iron.

As its name implies, the *Soldatenfibel* brooch has often been found within military forts along the Rhine and is the most common form found on the Saalburg and the fort at Zugmantel, in contexts which date from the Domitianic-Hadrianic period (AD 81-138).[547] The form has also been found in civilian settlements.[548]. According to Böhme, the

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[541] Riha 1979, 153.

[542] Cf. Böhme 1972, Form 14 B; cf. Jobst 1975, Form 9 C; cf. Riha 1979, Variant 1.6.1.

[543] Von Uslar 1938, 101.

[544] Riha 1979, 60.

[545] Riha 1979, 60.

[546] Böhme Form 14 A; Jobst Form 9 A; Riha Variant 1.6.2; van der Roest 1.3.2 A.

[547] Riha 1979, 59.

[548] Riha (1979, 59) cites Mandeure, Besançon as well as Augst. The settlement of De Horden is discussed by van der Roest 1988.

form was not exclusively worn by men, but also by women.[549]
The brooch form originates in the Rhineland where it has been found in great numbers.[550] Its distribution mainly covered the western provinces, particularly in the Germanic or Gallic parts of the Empire. Second-century examples have also been found further beyond the study area in Germania.[551] Cosack describes the distribution of wire bow brooches in Germania as being concentrated particularly along the Lower Elbe. He describes a distinctive group, one characteristic of which is an almost semi-circular curved bow and a round-sectioned spring wire. He attributes this group to Germanic manufacture, the intention most probably being to imitate the provincial Roman *Soldatenfibeln* that are also found in small numbers in the Lower Elbe region.[552] The imitations are dated as being contemporary with the provincial Roman examples, i.e. falling within *Stufe* B1.[553] The examples from the present study area are, however, 'true' *Soldatenfibeln* of provincial Roman manufacture.
Although such wire brooches have been found in the early Rhineland forts, the form did not develop into a mass product until the Flavian period and earlier examples are rare.[554] Riha states that Flavian examples from the Upper Germanic-Raetian frontier are generally no longer than 5.5 cm with relatively delicate bows, which would tend to correspond with those from the study area. Almost all examples of this form are manufactured in bronze, although those from the first part of the first century AD are mostly in iron. The brooch in A22 Gr.259 could therefore be one of the earliest of the group from the study area. According to Riha the main period of use of this simple form in the settlement at Augst was during the Domitianic-Hadrianic period.[555] The form is common in Domitianic forts in Upper Germanic forts and was

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[549] Böhme 1972, 14 esp. note 77. listing the female grave from Thuin where two brooches of Almgren 15 were found together with two of Almgren 16.

[550] For example 352 from Nijmegen alone. See van der Roest 1988, 154.

[551] Cosack 1979, 22-3. Ref. also in Riha 1979, 60.

[552] Although their development from local Late La Tène forms is not ruled out. See Cosack 1979, 22-3, Tafel 1 & Karte 2.

[553] AD 0-50, following Eggers 1955.

[554] Gechter states that the forms Almgren 15 and 16 along the Lower Rhine are generally of Flavian-Trajanic date, although he notes two outliers (Almgren 15) from the Augustan fort at Vetera I. See also Riha 1972, 60; van der Roest 1988, 154.

[555] Riha 1979, 59.

used by the *legio VI* at Neuss/*Novaesium* between AD 65-105.[556] The brooch type continued in use, although less common and in a more developed form, into the second and until the third century AD.

5.8.2.3 Form A2: One-Piece Brooches with External Spring Chord and Chord Hook

5.8.2.3.1 Form A2.1: Dagger Brooch (*Dolchfibel*)[557]

From burials: (B) A22 Gr.117 i.

This provincial Roman brooch is confusingly described by von Uslar as being of two different forms; a *Stützbalkenfibel* of Hofheim Form 1a,[558] and an example of Almgren's fig. 20.[559] The main characteristics of this brooch fragment are, however, better comparable to the *Dolchfibel*: a spring with an external chord, chord hook and support plate (*stützplatte*), a short wire-like, dagger-shaped bow, with a high, sharp bend and crosswise raised strip, tapering down to a hammered out foot, which would have been flattened out to form a (missing) catch-plate.[560] Because of the bad condition of the brooch, the characteristic 'eye' decoration is not visible.

The distribution area covered by this form is extremely limited and is almost exclusively restricted to the Middle and Lower Rhine, with only a few outliers to the south (e.g. Rottenburg am Neckar, Augst).[561] The form is not found in the early Roman fort at Hofheim (AD 40-80), even though within its distribution area. Its apparent absence[562] on this site is taken to mean that the dagger brooch was not yet developed in the Vespasian period. The form has been found in the Domitianic forts at the Saalburg, Zugmantel and Bendorf. Six examples were also found in the legionary fortress at Nijmegen, from where the legion withdrew between AD 102-105. The form is thus seen to be characteristic for the Domitianic period (AD 81-96) on the Middle and Lower Rhine.

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[556] Van der Roest 1988, 154.

[557] Van Buchem 1941, Taf.7,27-32; Böhme 1972, Form 11 (cf. no. 40); Riha 1979, Form 2.8 (cf. Taf.8, 229); van der Roest 1988, Type 1.2.5; Haalebos 1990, Form XIA.

[558] Von Uslar 1938, 100-1. See Riha Type 2.6 which she dates almost exclusively in the first half of the first century; 1979, 71.

[559] Von Uslar 1938, 231. This corresponds with Ritterling's (1913) Hofheim Type 1b & Riha 1979, 71 Type 2.7, a younger variant of the 1a.

[560] Böhme 1972, 12-13; Riha 1979, 72; van der Roest 1988, 152.

[561] See Böhme 1972, Tafel 32.

[562] Although the similarity of the *Dolchfibel* to the Hofheim Types Ia and Ib may mean some fragmented examples were misidentified.

5.8.2.3.2 Form A2.2: One-Piece Germanic Knee Brooches[563]

Within his Group V, Series 9, Almgren amalgamates a number of different brooch types under the general name of knee brooches. The shared characteristics of the series are a sharp, knee-like bend high on the bow and a long spring with an external chord which is either held in place on top of the bow by a hook or by being twisted round the bow. The catch-plate is high and usually square.[564] Both one-piece and two-piece knee brooches have been found within the study area. The general description given here of the characteristics, development, distribution and dating of the one-piece brooches also applies to the two-piece brooches under Form A4.3 below.

In Germania, the distribution of the knee brooch form is limited to the West German cultural zone. The quantity and range of forms found within the present study area can only be paralleled in the Lower Elbe region, where Almgren and Rademacher both state that the vast majority of knee brooches are found, dating to the second century AD. None are recorded east of the Oder and very few further north. Only a few have been recorded from the Roman Rhineland.[565] Böhme and Riha confirm this distribution, listing only one example from the Saalburg (Almgren fig.141), one from Augst (a two-piece brooch, Almgren figs.140-2) and a small number from other Roman sites, including Nijmegen, Vechten, and Neuss-*Novaesium* on the Lower Rhine.[566]

Typologically, Almgren places the knee brooch forms as contemporary with his figs. 75, 77 (see Form A4.2.1 below), and fig.102.

Chronologically, knee brooches appear before the middle of the early Roman period and examples are known after the beginning of the late Roman period.[567] The variants of brooches within this group were all used throughout the whole of the second century, although individual examples are known from the late first century.[568] Rademacher states that the whole series disappeared out of use by AD 180/200. The one-piece knee brooches found in the study area divide into six different form variations. One brooch is of an unidentifiable form. Fromburial: (I) A22 Gr.108 i.

Form A2.2.1: brooches with a narrow, round-sectioned bow with foot-

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[563] Rademacher 1922, Forms 5-8 & 10-13; Almgren 1923, Group V Series 9; Riha 1979, Form 3.7.

[564] Almgren 1923, 62-4; Riha 1979, 82.

[565] Almgren 1923, 63; Rademacher 1922, 226. See also von Uslar 1938, 105 for sites in his study area.

[566] Böhme 1972, 32, esp. note 214; Riha 1979, 82.

[567] Almgren 1923, 64.

[568] Böhme 1972, 32, note 216; von Uslar 1938, 105.

knob and large chord hook[569] From burials: (B) A22 Gr.120 i*; A22 Gr.142 ii; A22 Gr.143 i; A22 Gr.164? ii; A22 Gr.215 i*; A22 Gr.217? ii; A22 Gr.218 ii; A22 Gr.222 x2 i,ii. (I) A22 Gr.128 i; A22 Gr.201 i.
Whilst all these brooches have a narrow, round-sectioned bow, none have the foot-knob which is a characteristic of Almgren's fig.138.[570]
Form A2.2.2: brooches with a narrow, cylindrical bow, with the external chord twisted around the top of the bow[571] From burials: (B) A22 Gr.116 i; A22 Gr.122 ii*; A22 Gr.131 ii.
Form A2.2.3: brooches with a narrow, cylindrical bow, a deep groove behind knee-shaped bend and a large chord hook[572] From burial: (B) A8 Gr.61 i (x2).
These two brooches belong either to Form A2.2.3 or A2.2.4. The distinction between the two relies on the relative depth or shallowness of the groove in the back of the bow bend. In other respects, the two types appear to be identical. Almgren suggests that the groove on the back of the bend in the bow was not merely decorative, but had a practical use in that it lightened the weight of the bow at this point. The functional difference between the two types may therefore be that one (Form A2.2.3) was used for securing a heavier fabric than the other.
Form A2.2.4: brooches with a large chord hook and a narrow, round-sectioned bow with a shallow groove behind the knee-shaped bend[573]
From burial: (B) A8 Gr.58 i*.
Form A2.2.5: Knee brooches with a flat bow[574] From burials: (B) A22 Gr.144 iii; A22 Gr.185 i. (I) A22 Gr.198? ii*; A22 Gr.199 i.
Any decoration that may have existed on the bow of the brooch from A22 Gr.199 is no longer visible. The brooch within A22 Gr.144 has simple vertical grooves down each side of the bow plate. The brooch illustrated by von Uslar as coming from A22 Gr.185[575] is of similar design. The problem here, however, is that the brooch stored under this grave number, although probably of Almgren fig.145 type, is of two-piece construction and has filigree wire decoration around the

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[569] Cf. Almgren 1923, fig.138.

[570] This is also the case for the trumpet brooches in A4.2.1 below, suggesting these may be transitory forms, i.e. variants of the north German types.

[571] Cf. Almgren 1923, fig.139.

[572] Cf. Almgren 1923, fig.140.

[573] Almgren 1923, fig.141.

[574] Cf. Almgren 1923, fig.145.

[575] Von Uslar 1938 Tafel 32.12.

spring end terminals and grooved decoration down the edge of the bow plate - clearly not the same brooch, but its original provenance is not recorded.
The difference between the two brooch types with a flat bow (Forms A2.2.5 and A2.2.6) is not explained clearly by Almgren, but appears to rely on the general size of the brooch, the width of the bow plate and the ornateness of the decoration, where this is still visible. The bad condition of the brooches in the study area means that a more precise identification is not possible. Both types are contemporary with the knee brooches with a round-sectioned bow, but are less common.[576]
Almgren states that all examples of this type are of bronze and are one-piece brooches. From the study area there is, however, one example in iron as well as two-piece examples (see A4.3.4 below).
Form A2.2.6: Knee brooches with a flat bow[577] From burials: (B) A22 Gr.169 ii*; A22 Gr.189 iv.
Von Uslar's identification of the brooch from A22. Gr.189 must be accepted here since the brooch is now lost. From the illustration, however, the more rounder-sectioned bow may have more affinity with Almgren's fig.144, and may also have been of two-piece construction. Both brooches are decorated, one with horizontal ribbing across the bow (A22 Gr.189) and the other (A22 Gr.169) with more ornate rows of silver-wire beaded decoration on the bow plate and rows of beaded wire around the foot, decoration techniques that are also used on Almgren's fig.144 (see below A4.3.3).

5.8.2.4 Form A3: Two-Piece Sprung Brooches with Spring and Chord Casing (*Rollenkappenfibeln*)[578]

From burials: (S) A22 Gr.161 (x2) i. (B) A22 Gr.106 iv; A22 Gr.139 i; A22 Gr.153 (x2) i,ii.
From settlements: B40 i.
This brooch type is discussed by Almgren, von Uslar and, in most detail, by Cosack.[579] Although there is an extreme variety within the whole group, the brooches found within the study area can be generally characterized as having a solid catch-plate, a cast bow with a semi-circular comb midway down its length, with a circular casing around the spring as well as one around the chord. The tree examples from A22 Gr.161 and B40 are decorated, with punched dots on the bow and grooves on the bow and around the spring casing. Only four of the examples

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[576] Almgren 1923, 63.

[577] Cf. Almgren 1923, fig.147.

[578] Rademacher 1922, Forms 1-2; Almgren 1923, fig.38.

[579] Almgren 1923, 17 and further; von Uslar 1938, 102-3; Cosack 1979, 29-56.

from the study area are complete. The two brooches from A22 Gr.153 have a foot that is the same width as the bow. The examples from A22 Gr.161 (2x) and B40 have a foot that is more trapezoidal in form. Cosack describes the development of a casing around the chord as dating to *Stufe* B2 (AD 50-150). Almgren's initial division of the brooches into western forms with a chord hook and eastern forms with a chord casing,[580] is questioned by von Uslar, considering the number of examples with a chord casing that have been found in the west.[581] Cosack further illustrates that a chord casing was present on brooches throughout western Germany as well as in the east.[582] Whilst examples dating to *Stufe* B2 are found in both Jutland and the Lower Elbe, following on from their *Stufe* B1 predecessors, Cosack states that a relatively higher concentration come from the Lower Elbe, although more research is necessary to clarify this provenance.[583]

5.8.2.5 Form A4: Two-piece Sprung Brooches with External Chord and Spring Holder

5.8.2.5.1 Form A4.1: Brooch of Middle La Tène Form

Fromburial: (I) A22 Gr.237 i.

This single, large brooch from Rheindorf comes from one of the earliest parts of the cemetery. The corroded condition of the brooch makes the form almost unrecognizable and means that little can be added to Rademacher's description of the brooch, whereby he describes the bow as curving round the pin to provide a catch-plate.[584] Its very size alone, i.e. a 7.5 cm long spring made up of sixteen turns, would suggest a two-piece construction. Rademacher ascribes the brooch to his Group III, provincial Roman brooches, dating to his period K1b. He describes the brooch as being of a long-lived form which had its roots in the Middle La Tène period, but still continued into the first century AD, although for exactly how long is uncertain.[585] The brooch is one of the earliest to be found in the study area. The lack of other grave goods within the grave prevents precise dating, but a date within the Late La Tène D, even D2-3, rather than the early Roman period, cannot be ruled out.

5.8.2.5.2 Form A4.2: Profiled Brooches

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[580] Almgren 1923, 13 and further.

[581] Von Uslar 1938, 102.

[582] Cosack 1979, 31 & Karte 9.

[583] Cosack 1979, 37.

[584] Rademacher 1922, 228 and Tafel X,9.

[585] Rademacher 1922, 228.

Form A4.2.1: Trumpet brooches (Trompetenfibeln)[586] From burials: (S) A18 Gr.1 i. (B) A22 Gr.119 ii; A22 Gr.120 ii*; A22 Gr.122 i*; A22 Gr.165 i.

Apart from these five brooches, von Uslar lists no others of the type occurring outside the Lower Rhine area.[587] Almgren, however, discusses the development and northern European distribution of this and related forms in detail.[588] The condition of the brooches makes a more refined destinction between Almgren's figs.75 and 77 impossible. The name 'trumpet brooch' comes from the characteristic disc or trumpet-like shape of the head of the bow. The profiled bow is further characterized by a decorative circular disc midway down its length. None of the brooches from the study area have the end knob on the bow as present on Almgren's examples.

The form is also similar to Almgren's fig.101 as described below (Form A4.2.2).[589] The lack of end knobs on all three Rheindorf brooches may indicate they are a variant of this form.[590] All the brooches are undecorated. What remains of the silver brooch from Bergisch Gladbach (A18) shows beaded wire decoration around the edge of the central disc from the bow. Almgren notes the use of beaded wire and even enamel or glass inlay on examples found in northern Europe especially Denmark. The general distribution area of this brooch type is northern Europe, but particularly along the Elbe. They are seldom found within the Roman province, although examples are known from Hofheim. Their discovery here dates their presence on the Rhine certainly to the middle of the first century AD and Rademacher cites them as one of the earliest forms in the study area.[591] Von Uslar states their use did not continue too late into the second century.[592]

Form A4.2.2: Almgren fig.101; Böhme Form 35 form c From burials: (B) A8 Gr.16 i. (I) A8 Gr.60 i.

Almgren and Böhme[593] characterize this type of spring brooch as having an external chord, a trumpet-like head, a bow with a central decorative disc and a straight foot without a foot knob. Both brooches

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[586] Rademacher 1922, Form 4; Almgren 1923, Group IV figs.75/77.

[587] Von Uslar 1938, 103.

[588] Almgren 1923, 34-5, 39-45.

[589] Böhme 1972, 30 Form 35a, the earliest variant.

[590] See also A2.2.1.1 above.

[591] Rademacher 1922, 225-6.

[592] Von Uslar 1938, 103.

[593] Almgren 1923, 52-3; Böhme 1972, 30-2 and Tafel 35.

most closely correspond to Böhme's variant c. The obvious similarities to A3.2.1 above correlate with Almgren's idea that his fig.101 developed from his fig.77 brooch in the Elbe region.
Except for the possible silver example from Bergisch Gladbach (A18 Gr.1) discussed under Form A4.2.1, only two brooches are identified from the study area as being of this form, both from Troisdorf (A8). The brooch from A8 Gr.16 was originally identified as most similar to Almgren's figs.121 and 123. The disc in the centre of the bow and the straight, broad foot makes it, however more comparable to Almgren's fig.101. Any decoration there may have been on the brooch is no longer visible. The second brooch, from Gr.60, has the same broad foot decorated with four punched eyes.
Böhme states that this brooch type is characteristic of the Flavian-Trajanic period, but examples appear throughout the first half of the second century and some even later.
Joachim dates these brooches from Troisdorf, at their earliest, in the first half of the second century (i.e. *Stufe* B2).[594]
In her Tafel Böhme 35 illustrates the unusual distribution pattern of the brooch type: along the Elbe and along the Rhine - Main, with no findspots in the area between. Until now, hardly any examples have been known of from the Lower Rhine.[595]
Böhme contends that the Almgren fig.101 brooch was part of the female costume as evidenced by a number of graves in the Elbe region.
Although the brooch is found on military sites in the province she states it should not be classed as a soldier's brooch. This association with female graves is also indicated in the cemetery at Kemnitz.[596]

5.8.2.5.3 Form A4.3: Germanic Knee Brooches

Except for the fact that they are of a two-piece construction, this group of knee brooches has the same general characteristics, development, distribution and dating as the group in A2.2 above.
Form A4.3.1: Brooches with a narrow, round-sectioned bow with foot-knob and large chord hook[597] From burials: (B) A22 Gr.130 i; A22 Gr.147 iii; A22 Gr.150 i; A22 Gr.215 i*; A22 Gr.220 i; A22 Gr.230 i; A22 Gr.240 i.
As will those under A2.2.1.1 above, none of these brooches have the foot-knob Almgren sees as a characteristic of the type. Only one of the brooches (A22 Gr.230), indeed the only one of all the Almgren

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[594] Joachim 1987, 13.

[595] See Joachim 1987, 13, citing Fischer 1966, 229ff, Abb.8c.

[596] Geislar 1984, 148.

[597] Cf. Almgren 1923, fig.138.

fig.138 types, is decorated. A vertical line of beaded bronze wire has been applied to the centre of the bow, with a horizontal line of beaded wire around its foot. Although all the brooches have an axial bar through the spring, in only one example (A22 Gr.240, but only in von Uslar's illustration), does the bar still retain evidence for the presence of end terminals.

Form A4.3.2: Brooches with a narrow, cylindrical bow, with the external chord twisted around the top of the bow[598] Fromburial: (B) A22 Gr.135 ii.

The fact that the brooch is unusually small may be related to the fact that it was found in a child's grave.

Form A4.3.3: Knee brooches with a flat bow[599] From burials: (B) A8 Gr.42 i; A8 Gr.50 i; A8 Gr.55 i; A22 Gr.227 ii. (I) A8 Gr.4 iv; A8 Gr.21 i; A8 Gr.36 i; A8 Gr.51 i; A9 Gr.1 iv; A22 Gr.107 i; A22 Gr.111 iv; A22 Gr.121 (x2) i,ii; A22 Gr.123 ii*; A22 Gr.129 i; A22 Gr.140 (x2) i; A22 Gr.145 ii; A22 Gr.149 i; A22 Gr.151 i; A22 Gr.160 i; A22 Gr.169 i*; A22 Gr.171 i; A22 Gr.198 ii*; A22 Gr.200 (x2) i; A22 Gr.214 i; A22 Gr.216 i; A22 Gr.225 (x2) i.

The distinguishing characteristics of this knee brooch form are that it is exclusively a two-piece brooch and that it has decorative knobs on the side of the bow. Unfortunately, most of the examples are in so bad a condition that these knobs are only still present on a few of the brooches (A8 Grs.50, 55, and A22 Grs.169, 200). Von Uslar states that this form always appears in iron, often with silver-plating on the surface and silver filigree decoration.[600] The more recent excavation at Troisdorf (A8), however, produced three examples in bronze (A8 Grs. 42, 50, 55) one of which (A8 Gr.42) was silver-plated. Unlike the knee brooches with a round-sectioned bow, this form is often decorated using a variety of techniques, for example, silver-plating or foil covering (A8 Grs.4, 36, 42, and A22 Gr.169); horizontal ribbing across the bow (A8 Grs.50, 55, and A22 Gr.200) rows of beaded silver wire applied to the bow (A8 Gr.51) in the same manner as in Almgren's 145 and 147 below, the addition of rings around the bow (A22 Gr.169). Geislar and Joachim associate this brooch form with female graves in the cemeteries of Kemnitz and Troisdorf respectively.[601] Good parallels are to be found in the cemetery at Darzau[602] and in Altendorf.[603] In Troisdorf, the form is dated to a

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[598] Cf. Almgren 1923, fig.139.

[599] Almgren fig.144.

[600] Von Uslar 1938, 104.

[601] Geislar 1984, 148; Joachim 1987, 8.

[602] Hostmann 1874, Tafel 8,5.

developed phase of *Stufe* B2, even though there is evidence for the form appearing already in *Stufe* B1/B2 in its main distribution area of eastern Hanover-Altmark.[604]

Form A4.3.4: Knee brooch with a flat bow[605] From burial: (B) A22 Gr.61 iii.

This single brooch was decorated with a strip of beaded wire across the knee bend. The middle panel of the bow may also originally have been decorated. Rademacher describes this brooch as being one of the latest of the knee brooch types (belonging to his period K2), the wide chord hook not being found on earlier types.[606]

Form A4.3.5: Knee brooch with a flat bow[607] From burials: (B) A8 Gr.39 i. (I) A22 Gr.110 i.

The almost complete example from Troisdorf (A8 Gr.39) has rows of beaded silver wire decoration down the bow, one row across the knee bend and two rows across its foot. The identification of the bow fragment from Rheindorf (A22 Gr.110), relies solely on the description given by von Uslar,[608] which was presumably made when the brooch was still in good condition.

5.8.2.5.4 Form A4.4: Zoomorphic Brooch[609]

From burials: (B) A8 Gr.27? i; A8 Gr.57 i*.

These Troisdorf (A8) brooches are discussed by Joachim.[610] A hind deer is apparently depicted on the surface of the brooch from A8 Gr.57. Parallels are known, but with the head facing right and not left. The main distribution area of this type is eastern Hanover-Altmark, this being the first example known from the Rhineland.[611] Joachim suggests that this type of brooch may have been used as an amulette. Joachim dates the brooch from A8 Gr.57, on the basis of its association with a second disc brooch, to *Stufe* C1a, i.e. the second half of the second-first decades of the third century.

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[603] Pescheck 1978.

[604] Joachim 1987, 13.

[605] Rademacher 1922, Form 21; cf. Almgren 1923, fig.145.

[606] Rademacher 1922, 228-9.

[607] Cf. Almgren 1923, fig.147.

[608] von Uslar 1938, 231.

[609] Thomas 1967, Form F Series 3.

[610] Joachim 1987, 13.

[611] See Thomas 1967, 60 and further, Abb.25, Karte 8.

5.8.2.6 Form A5: Two-Piece Sprung Brooches with an Internal Chord
Indeterminate form From burials: (B) A18 Gr.4 i; A22 Gr.48 i; A22 Gr.99 i*; A22 Gr.101 i; A22 Gr.167 i.

5.8.2.6.1 Form A5.1: *Soldatenfibeln*
Whilst the *Soldatenfibel* form is generally accepted to be a one-piece brooch type (see Form A1.2 above), two brooches from the study area appear to be of an uncommonly found two-piece construction.[612] The two-piece construction may either be an attempt to 'Romanize' the original basic La Tène form, or may be an attempt to strengthen the design for use with more heavy-duty cloth. The context in which these brooches were found suggests no chronological differentiation with the one-piece types. Each of the brooches from the study area shows a slightly different variant:
Form A5.1.1: Brooch with a sharp knee-like bend in the bow[613]
Fromburial: (B) A8 Gr.59 i.
This brooch was previously published as an example of Almgren 138.[614] The illustration, however, shows it has far more similarities to the simpler *Soldatenfibel* types and the axial bar through the spring indicates its two-piece construction. It is most similar in form to Riha's type 1.6.1, although the bow appears to be round-sectioned rather than flat. In Augst, Riha sees these brooches as characteristic for the Flavian period (AD 69-96).[615]
Form A5.1.2: Brooch with a round-sectioned, arched bow Fromburial: (B) A22 Gr.132 ii.
Von Uslar describes this brooch from Rheindorf (A22) as a two-piece type, made of bronze but with an iron axial bar through the spring.[616] Apart from this description, the only other evidence for this construction is von Uslar's own illustration, since the brooch itself is now lost. Whilst the illustration does appear to show the existence of simple end knobs on each end of the axis bar, in other respects the brooch is very similar in form to the one-piece types of Form A1.2.2, which date from the Domitianic-Hadrianic period (AD 81-138).

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[612] There are no known parallels for these brooches.

[613] Cf. Riha 1979, Form 1.6.1.

[614] Joachim 1987, 32 & Taf. 24.1.

[615] Riha 1979, 60.

[616] von Uslar 1938, 232. In his general discussion of the type on p.101, however, he groups this brooch with the other one-piece types.

5.8.2.6.2 Form A5.2: *Armbrustspiralfibeln*[617]
From burials: (B) A22 Gr.35 (x2) i,iv. (I) A8 Gr.2 i?
Of the three brooches, only two have the bow still attached to the long spring. These two are similar to Böhme's Form 38 b, whereby the foot is the same width as the bow. According to Böhme, this type is particularly prevalent in north-west Germany.[618] Matthes dates the type to around AD 300, and certainly fourth century, in the Elbe region.[619] On the basis of burial evidence, particularly in the Elbe region, Böhme describes these brooches as being exclusively worn by females.[620]

5.8.2.6.3 Form A5.3: Bow Brooches with a Long Catch-Plate and Internal Chord (*Armbrustfibeln mit hohem Nadelhalter*)
In discussing this group as a whole, Rademacher states that these brooch types began to appear shortly before AD 200 and represented a cultural advance westwards from the Elbe region.[621] Almgren dates his whole Group VII into the third century.[622] Raddatz, however, states that at least some of the forms within the group could already have been in use around *c.* AD 200. The earliest presence of such forms on provincial Roman soil can certainly be dated to the late second century.[623] Böhme lists examples of this general brooch form from the Saalburg and Zugmantel. There is no evidence to suggest that this brooch type was worn either by males or females.[624]
Brooches of indeterminate form From burials: (B) A22 Gr.70 iv*; A56 Gr.8 iv. (I) A22 Gr.251 (x2) i,i; A22 Gr.252 i; A22 Gr.273 (x2) i,i.
Form A5.3.1: Brooch with a narrow, curved bow decorated with rings of wire, a straightish foot with foot-knob, spring with end terminals[625]
From burial: (B) A22 Gr.74 i.

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[617] Rademacher 1922, Form 29; Almgren 1923, fig.169; Matthes 1931, Group VI 2, Series 5; cf. Böhme 1972, Form 38 b.

[618] Böhme 1972, 35, cf. Tafel 23, 916.

[619] Matthes 1931, 49 & Tafel 23.

[620] See Böhme 1972, 35 note 232.

[621] Rademacher 1922, 229.

[622] Almgren 1923, 97-8.

[623] Böhme 1972, 35.

[624] Böhme 1972, 33-5.

[625] Rademacher 1922, Form 22; cf. Almgren 1923, fig. 213; Matthes 1931, Group VII Series 2b; Kuchenbuch 1938, Series 1b; Böhme 1972, Form 37b.

All that remains of this Rheindorf brooch is a small part of the P-shaped bow with a circle of wire around the top.[626] Matthes dates his Series 2 to the first half and middle of the third century, i.e. the first part of *Stufe* C2.[627]

Form A5.3.2: Brooch with a round-sectioned, blunt ended bow[628] From burials: (B) A22 Gr.49 iv; A22 Gr.71 i; A68 Gr.1 iv*. (I) A22 Gr.80 i**.

Böhme states that, with later examples, the tendency was for the bow to become shorter and thicker, with an even longer catch-plate. Such examples have not, however been found within the study area.[629] The condition of the iron brooch from A22 Gr.80 means that its precise form cannot be identified. Its round-sectioned bow and long spring suggests, however, that it belongs to this group. Kuchenbuch notes that this form developed out of the earlier knee brooch forms.[630] Matthes notes their presence in the *limes* fort at Zugmantel, dating to the first half and mid-third century.[631] In the assemblage from the Thorsberger Moor, Raddatz dates the form exclusively to *Stufe* C1.[632] The similarity between these and Almgren's earlier dated fig.138 is striking (Form A4.3.1). The form is Elbe-Germanic in origin, as is indicated by Böhme's distribution of the type which shows the heaviest concentrations along the Elbe.[633]

Form A5.3.3: Brooch with a narrow, high, almost semi-circular bow with no foot, the bow being hammered out to form the catch-plate[634] From burials: (B) A22 Gr.54 i*; A22 Gr.95 i; A22 Gr.267 i; B26 i.

Böhme's distribution map of the type shows clearly the connection between the Elbe region and the area to the north, i.e. Denmark and

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[626] See Matthes 1931, Tafel 12b-c for similar types. Also Böhme 1972, 33. The most similar brooch to A22 Gr.74 is her no.880 (Tafel 22).

[627] Matthes 1931, 49.

[628] Cf. Almgren Group VII Series 2 fig.208, Matthes Group VII Series 3, Kuchenbuch Series 3, Böhme Form 37d.

[629] Böhme 1972, 34. Her no. 893 (Tafel 22) is closest in its dimensions to the study area examples.

[630] Kuchenbuch 1954, 29.

[631] Matthes 1931, 49 & Tafel 13.

[632] Raddatz 1957, 108-9, also Tafel 15, 11-2.

[633] Böhme 1972, 33, Abb.3. Raddatz specifies that the distribution is overwhelmingly the middle Elbe (1957, 108-9).

[634] Rademacher Forms 27 & 28, Cf. Almgren Group VII Series 3, Matthes Group VII Series 4, Kuchenbuch Series 4b, Böhme 37e.

southern Sweden, with the two Germanic.[635] Riha also describes Kuchenbuch's Series 4b brooch types as having end terminal knobs on the spring, often with decorative discs in front of the knobs (*manchetten*).[636] Good parallels for the brooch from A22 Gr.267, with its extended spring and pairs of decorative discs on each arm of the spring, are to be found in the assemblage from the Thorsberger Moor.[637] Matthes states the type already existed in the mid-third century and were still in use into the fourth century.[638] Raddatz dates the type mainly to *Stufe* C1.[639]

Form A5.3.4: S-shaped brooches with a flat bow[640] From burials: (B) A22 Gr.99 i*; A68 Gr.1 iv*.

This brooch type is characterized by a flat, often S-shaped bow, and a catch-plate as described under Form A5.3.3 above. Matthes dates this type to the third century AD.[641] Raddatz dates the type to *Stufe* C2.[642]

Form A5.3.5: Brooch with long spring, S-shaped bow and straightish foot with foot-knob[643] From burials: (B) A56 Gr.7 iv; B26.

In these brooches, a horizontally-applied decorative wire strip marks the top of the foot. Whilst the brooch from Düsseldorf-Stockum (B26) with its relatively short spring is clearly similar to Almgren's no.201, the brooch from Ehingen (A56)[644] has a considerably longer spring than other published examples.[645] The extended spring, with fourteen turns on either side, is more reminicent of Almgren's Group

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[635] Böhme 1972, 34, Abb.4. See also Tafel 23, 913-4 for similar types to those from the study area. See also Riha 1979, 82-3.

[636] Riha 1979, 82-3.

[637] Raddatz 1957, Tafel 17,6 & 15.

[638] Matthes 1931, 49 & Tafel 14a-b.

[639] Raddatz 1957, 110-1.

[640] Cf. Matthes 1931, Group VII Series 4; Kuchenbuch 1938, Series 4a; Böhme 1972, 37e.

[641] Matthes 1931, 49 & Taf. 11.

[642] Raddatz 1957, 109-10.

[643] Cf. Almgren 1923, VII Serie 1 fig.201; Matthes 1931, Group VII Series 2a.

[644] Stampfuß 1938, 245 and Tafel 22,5 for a photograph of this brooch; Raddatz 1957, 110.

[645] Cf. Almgren 1923, Taf. IX no.201; Cf. Matthes 1931, 49 & Taf. 11 e & i.

VII Series 4.[646] This brooch can thus be seen as a transitional form between the two types. Matthes dates this type to the first half and mid-third century and sees the main distribution area of the type as concentrating in the Elbe region.[647] Stampfuß states that the type could already have been in use at the end of the second century AD.[648]
Form A5.3.6: Brooch with long spring, narrow, curved bow with a rounded, flat-cut foot[649] From burial: (I) A56 Gr.9 iv.
This brooch has previously been identified as an Almgren fig.195.[650] Again, as with the brooch from A56 Gr.7 under Form A5.3.5, although the bow agrees with the type, the spring is much longer, with nineteen turns on either side. The chord only extends halfway along the spring. Almgren states that this western form, developing out of eastern brooch types (represented by his no.194), is commonly found in the Elbe region.[651] the dating given for this type agrees with that for Form A5.3.5.

5.8.2.6.4 Form A5.4: Disc and Plate Brooches

Because of the condition of the disc brooches, it is not always easy to decide whether the disc was originally smooth and plain or whether it originally had a raised box-like attached. The long catch-plate in particular differentiates the Germanic disc brooch forms from similar provincial Roman forms. All these forms belong to Almgren's general group represented by his figure 227. Rademacher states that all the types within the group, excepting the enamelled brooches, are present in the Lower Elbe region, beginning *c* AD 100.[652] As a whole, the group is long-lived with some examples being found within Constantinian dated contexts in Rheindorf (in *M*, see below).
Brooches of indeterminate form From burials: (B) A7 Gr.10 iv; A8 Gr.3 iv; A22 Gr.31 (x2) i; A22 Gr.39 ii; A22 Gr.43 i; A22 Gr.47 ii; A22

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[646] Almgren 1923 Tafel IX, nos.208-9.

[647] Matthes 1931, 49. He notes an example in the *Limes* fort at Osterburken, destroyed in the third quarter of the third century.

[648] Stampfuß 1938, 245.

[649] Cf. Almgren VII Serie 2 fig.195, Matthes Group VII Series 1b or 3.

[650] Stampfuß 1938, 245 and Tafel 22,6 for a photograph of this brooch. Both Matthes Tafel 11,c (Series 1b) and Tafel 13,g (Series 3) appear to be similar to the Ehingen brooch. Raddatz incorrectly classifies the brooch as belonging to Kuchenbuch's Series 4b (1957, 110).

[651] Almgren 1924, 93-4.

[652] Rademacher 1922, 231.

Gr.51 i; A22 Gr.52 i; A22 Gr.52 ii; A22 Gr.54 i*; A22 Gr.56 i*; A22 Gr.57 iii; A22 Gr.60 i**; A22 Gr.66 iv; A22 Gr.80 i**; A22 Gr.94 i; A22 Gr.100 ii*; A22 Gr.102 iii; A22 Gr.239 ii.

Form A5.4.1: Enamelled disc brooches[653] From burials: (B) A8 Gr.40 i*; A22 Gr.53 i.

Whereas the loss of the disc from the Rheindorf brooch (A22 Gr.53) means that von Uslar's definition has to be relied upon,[654] the brooch from Troisdorf (A8 Gr.40) clearly has a spring construction and high catch-plate. The disc of the brooch has six peripheral lugs with a central conical knob and its surface is laid out in a geometric design between concentric cast bronze plates. The outer field is filled with a ring of beaded wire and the inner field is separated into alternating areas of white, yellow and blue enamel.[655]

The brooch represents a later stage in the development of the hinged enamelled brooches which date within the last half of the second century AD.

The appearance of these brooches coincides with that of the bow brooches of similar construction, towards the end of the second century AD. Rademacher describes its production as being a combination of two techniques: the disc reflects the provincial Roman form and technique of enamelled decoration, whilst the long spring construction reflects Germanic techniques and traditions. Arguments for both provincial Roman and Germanic manufacture have been put forward,[656] although a provincial Roman provenance is almost certain, with technological changes being made to the original hinged brooch type, possibly to suit the Germanic market.

Form A5.4.2: Brooch with a smooth, undecorated disc From burial: (B) A8 Gr.2 i.

The brooch from Troisdorf Gr.2 appears to be the only example from the study area with a simple, flat disc. The construction of this brooch is also exceptional, the spring being attached directly onto the disc without the use of a spring holder.[657] On typological and technical grounds this brooch would not have been suitable for practical use.

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[653] Rademacher 1922, Form 26; cf. Exner 1939, Group III.26; Böhme 1972, Type 41 x-y; Riha 1979, Form 3.15; van der Roest 1988, Form 2.2.4.

[654] Von Uslar 1938, 227.

[655] This brooch is discussed by Joachim 1987, 13.

[656] Rademacher 1922, 230; Almgren 1923, 101; Von Uslar 1938, 113 and notes 98-9 for references to Plettke, Priedel and Barthel; Thomas 1966, 126; Joachim 1987, 13, esp. note 60 for further refs.

[657] Von Uslar (1938, 111) cites parallels, for example from Gießen and Sorge.

This may suggest that certain brooches were produced specifically for inclusion in the burial ritual. Von Uslar suggests this brooch may date slightly earlier than the other spring construction types.[658]

Form A5.4.3: Smooth surfaced, undecorated plate brooches From burials: (B) A22 Gr.77 i; A22 Gr.79 iv; A22 Gr.258 i.

Von Uslar describes the brooch from A22 Gr.77 as violin shaped and that from A22 Gr.79 as clover-leaf shaped. The brooch in A22 Gr.258 appears to have had a rectangular-shaped plate.

Form A5.4.4: Disc brooch decorated with metal inlay From burial (B) A22 Gr.100 i*.

Von Uslar states that the size of this brooch suggests it was more likely to originally have had a metal inlay or filling rather than enamel. He notes several of this type being found in Gießen.[659]

Form A5.4.5: plate brooches with metal plating or foil cover From burial: (B) A27 Gr.1 iv; A30 Gr.2 iv.

Form A5.4.6: Brooches with an ornamental, raised box-like attachment on the disc (Dosenfibel)[660] From burials: (B) A8 Gr.57 i*; A14 Gr.2 iv; A22 Gr.59 i; A22 Gr.84 i; A22 Gr.86 i; A22 Gr.88 i; A22 Gr.92 i.

Rademacher divides the group into three variants: Form 35, with a long spring and a small box-like attachment (A22 Gr.59); Form 36, the most common, with a shorter spring and a larger box (A22. Gr.43?, Gr.48?, Gr.51?, Gr.54, Gr.60?, Gr.80, Gr.84, Gr.86, Gr.99); Form 37, with peripheral lugs around the disc (A22 Gr.92). The latter shows similarities with provincial Roman enamelled brooches and may in fact be a Germanic copy. Again, the *Dosenfibel* is a type common in the Lower Elbe area. The type is characteristic of the third century AD.[661]

Form A5.4.7: Tutulus-like brooch From burial: (B) B26 i.

Only one brooch, from the settlement at Düsseldorf-Stockum (B26), may be an example of a two-piece, sprung tutulus brooch with a high catch-plate. The edges of the disc and inner tutulus are decorated with beaded or rilled wire. Its bad condition makes a more precise identification impossible.

5.8.3 Form B: Hinged Brooches

Only six hinged brooches are recorded from the study area, a mere 3% of all the brooches. In a hinged brooch, the separately made curved pin is attached to the main body of the brooch by being fastened

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[658] Von Uslar 1938, 111.

[659] Von Uslar 1938, 112.

[660] Rademacher 1922, Forms 35-37; cf. Almgren 1923, fig. 224.

[661] Rademacher 1922, 231-2.

(whilst still allowing free movement backwards and forwards) between two plates on the back of the bow or disc using an axial bar. The hinge construction was Roman in origin, and only occurs as an import in Germania.[662]

5.8.3.1 Form B1: Enamel Bow Brooches with a Divided Bow and Hinge Casing[663]

From burials: (B) A22 Gr.127 ii; A22 Gr.168 ii; A22 Gr.178 ii.

All three examples of this provincial Roman brooch type found in the study area belong to a general form (with many variants) that was common throughout the Roman provinces.[664] The common characteristics of this group are a hinged pin encased in a wide cylindrical housing (*Hülsenscharnier*) and an enamel-decorated bow with a foot in the shape of a stylized animal head. Both Riha and van der Roest describe this group as representing the last stage in a typological and chronological development of a form that had its origins in the Aucissa brooch.[665]

The exact form of the brooch from A22 Gr.127 is not certain as it was only listed in Rademacher and not in von Uslar.[666] The brooch from A22 Gr.178 has a rhombic or lozenge-shaped bow with an alternating enamel decoration (von Uslar does not record the colours) both within and surrounding a square-shaped field in the centre. The zoomorphic foot is decorated with a punched design. This type is most similar to Böhme's no.344-5 from the Saalburg.[667]

The brooch from A22 Gr.178 has a triangular-shaped bow with blue-green enamel decoration within a central triangular-shaped field bordered by beaded wire. The outer edge of the triangle is also decorated with beaded wire. The zoomorphic foot is again decorated with a punched design. This brooch shows most similarities to Exner's I 31b,[668]

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[662] Riha 1979, 12. Abb.1 5-7 illustrates the construction.

[663] Rademacher 1922, Form 19; Exner 1939, Group I; Böhme 1972, Form 17, Ettlinger 1973, Form 37; Riha 1979, Variant 5.17.5; van der Roest 1988, Form 2.1.4.

[664] Especially the brooch type represented in A22 Gr.168. See Böhme 1972, 17 note 93 for detailed references. A more detailed discussion of this brooch type can be found in Böhme 1972, 15-17; Riha 1979, 154-161 (esp.159); van der Roest 1988, 162-3.

[665] Riha 1979, 155; van der Roest 1988, 162.

[666] Rademacher 1922, 235.

[667] Böhme 1972, Tafel 6.

[668] Exner 1939, 81-2.

Böhme's no.339 from the Saalburg.[669] and van der Roest's no.227 from De Horden.[670]
Exner saw the enamelled brooches (including Form B2.2 below) as being more decorative rather than functional pieces of jewellry worn by women.[671] Although the brooch type did begin to appear before the beginning of the second century, the type is most commonly found in contexts dating to the first half of the second century. By the second third of the second century the brooch type is already much more uncommon and is hardly found along the Limes.[672] By this period the form is superceded by the disc brooch.

5.8.3.2 Form B2: Lug-Hinged brooches (*Backenscharnierfibeln*)

5.8.3.2.1 Form B2.1: Tutulus-Like Brooch[673]

From burials: (B) A22 Gr.115 ii.
This brooch belongs to a general group of tutulus-like disc brooches whose characteristics are a stepped, domed-shaped, hollow centre with a central profiled decorative knob. Other types have a small cup-like hollow in the centre that is filled with glass paste. Whilst this brooch appears to be plain, others are decorated with enamelling.[674]
The type is particularly common in the provinces of northern Gaul and the Rhine area.
In Augst examples of this brooch type have been found dating to the Flavian period and others date until the mid second century AD.

5.8.3.2.2 Form B2.2: Enamelled Lozenge-Shaped Plate Brooch[675]

Fromburial: (B) A22 Gr.134 i.
This provincial Roman brooch comprises a lozenge-shaped plate with a rilled edge and a flat central field decorated with green and blue enamel. The condition of the brooch does not allow the recognition of the original pattern. Whereas this brooch has no exact parallels, lozenge-shaped brooches with peripheral lugs are relatively common in

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[669] Böhme 1972, Tafel 5.

[670] Van der Roest 1988, Tafel IX.

[671] Exner 1939, 44-6.

[672] Riha dismisses Exner's previous general dating of the type in the second half of the second century as being too late. See Riha 1979, 155, also Rieckhoff 1975, 59;

[673] Rademacher 1922, Form 17; Ettlinger 1973, Form 50; Riha 1979, Variant 7.11.1; van der Roest 1988, 2.2.2.

[674] See Riha 1979, 186-8 for a detailed discussion of the type.

[675] Rademacher 1922, Form 18; Exner 1939, Form III A.2; Böhme 1972, Form 41; Riha 1979, Form 7.13.

the Rhineland. Without lugs, flat brooches are usually round, or decorated in a millefiori chessboard design.[676]
The brooch type generally dates to the first half of the second century AD. Rademacher notes that whilst the type is known from Hofheim (AD40-60), examples are known dating throughout the whole second century AD.[677].

5.8.3.2.3 Form B2.3: *Millefiorifibel* with a Box-Like, Raised Centre[678]

Fromburial: (B) A22 Gr.70 iv*.
This provincial Roman disc brooch with the remains of peripheral lugs had a raised ring in the centre of the brooch decorated with inlaid millefiori. This brooch is similar to Böhme's no. 966[679] and van der Roest's no. 240.[680] It does not, however, appear to have had the central decorative knob that both Riha and van der Roest describe as characteristic of the type.[681] The box-like raised centre also bears similarities to the tutulus brooch forms. Böhme states that enamelled plate and disc brooches are found in a variety of forms throughout the Roman provinces but are clearly concentrated in the areas of northern Gaul-Belgium and the Rhineland.[682]
The general date given by Exner to brooches with a symmetrically laid out design ranges from the middle to the end of the second century AD.[683] On the basis of the terra sigillata present, von Uslar dates the grave to *c.*AD 180. Rademacher puts it slightly later, *c.* AD 200.[684]

5.8.4 Conclusions

The majority of the brooch forms, chronologically speaking, fall within the period AD 70 -200/240. The number of each brooch form found

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[676] Exner 1939, 99. See, for example, Böhme 1979, Tafel 26, 1005-6.

[677] Rademacher 1922, 227.

[678] Rademacher 1922, Form 25; Exner 1939, III; Böhme 1972, Form 41 p; Riha 1979, Variant 7.14.1; van der Roest 1988, Form 2.2.5.1.

[679] Böhme 1972, Tafel 25, although no.966 has enamel rather than millefiori decoration.

[680] van der Roest 1988, Tafel X.

[681] Riha 1979, 189-90; van der Roest 1988, 166.

[682] Böhme 1972, 38.

[683] Exner 1939, 62-4. See also Riha 1979, 190.

[684] Rademacher 1922, 230.

and its dating is presented in Figure 5.26. One or two brooches date to the Late Iron Age or early decades of the first century AD. Together with a very small group of imported pottery and the evidence from the sites B32 and B41, they form the only indication for activity in the area that might pre-date the Flavian period. In contrast to the situation within the province, there is, however, also a significant later element within the study area of brooch types that date within the third - fourth centuries AD.

As stated above (5.8.1), the vast majority of the brooches from the study area, 98%, were found in graves. A mere 2% are recorded from settlements. This small number means that little can be said about the distribution of particular brooch forms or whether certain forms were preferred over others for inclusion in the burial ritual. As is has been put forward for bronze vessels and other metal fragements, the recyclable value of metal in normal or daily use may be the reason for the lack of artefacts within settlement contexts.[685] From the condition of the brooches in the graves, all were burnt on the pyre, the assumption can be drawn that the brooches were directly associated with the deceased. Very probably, the brooch was actually on the clothes, robe or shroud worn by the deceased for cremation.

As far as the functional use of brooches is concerned, as part of civilian clothing within the Roman province, their use decreases in the third century. Van der Roest attributes this to changes in clothing fashion, whith new forms of dress which meant the brooch was no longer necessary, Only in military contexts does the use of bow brooches continue from the second into the third century AD.[686] Within the study area this does not seem to be the case, the use of brooches clearly continued to a later date. This may be an indication that the inhabitants of the study area adhered to a different, Germanic, fashion in clothing rather than strictly following the more Romanised provincial styles. It may also be that brooches continued to be worn more commonly for their ornamental rather than functional value. A sex-specific preference for particular brooch forms, or pairs of brooches, is difficult to prove.[687] The use of Roman brooches, as reflected in the surviving material record, is minimal, only 10% can be classed as being of provincial Roman manufacture (see Fig. 5.27). Whilst not reflecting the picture presented by provincial Roman sites

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[685] See 5.5.8 above. Also Chapter 6.6,

[686] Van der Roest 1988, 172.

[687] See below, Chapter 9.1.3.

in the border zone on the left bank of the Rhine,[688] the high quantity of brooches of German manufacture does compare well with cemeteries further east, for example Kemnitz in the Elbe region.[689] The fact that brooches were no longer so widely available in the province in the later period could be one explanation for their scarcity in the study area. The variation in construction techniques recorded within the assemblage may well have had a functional purpose. Certain brooch types were undoubtedly more suitable for wearing with certain types of clothing.

5.9 Finger-Rings

From burials: (B) A22 Gr.95 i; A22 Gr.218 i A56 Gr.9 iv. (I) A22 Gr.218 i; A56 Gr.9 iv; A56 Gr.10 iv. (Gold?) A33 iv.
All of the finger-rings show signs of having been secondarily burnt on the pyre.[690] The identification of the example from A33 as a finger-ring is dubious.
Whilst the bronze finger-rings in A22 Gr.95 and A22 Gr.218 (with enamel decoration) are of provincial Roman origin, the plain finger-rings, particularly those of iron, are most probably Germanic. In general, the absence of anything other than plain rings in burials may be due to a symbolic role of rings, either in marriage or in establishing inheritance, ensuring that they were usually retained by the spouse or heir. Two burials (A22 Gr.218, A56 Gr.9) contain both a bronze and an iron finger-ring.

5.10 Pins

Fromburials:
Bronze pins A7 Gr.2 i; A8 Gr.34 i (x2); A22 Gr.80 i; A22 Gr.200 ii (x2).
Worked bone pins A8 Gr.20 i; A22 Gr.46 i; A22 Gr.70 i; A22 Gr.80 i; A22 Gr.102 i (x2); A22 Gr. 262 i.
Pins, such as the bronze and bone examples within the study area, with long, circular-sectioned shanks and ornamental heads were used as personal adornments for fastening clothing or, more specifically by

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[688] For example, from De Horden, the Netherlands (van der Roest 1988) and Tönisvorst, Kreis Viersen, Lower Rhineland (Bridger 1996, 119-134.

[689] Geislar 1974; 1984.

[690] The occurrence of finger-rings in the study area is discussed by von Uslar 1938, 126.

women, for use in hairstyling.[691] The fragmentary nature of most examples means that their precise function is uncertain. Only two pins are recorded as having visible signs of secondary burning.[692] Two different forms can be distinguished within the worked bone assemblage. Firstly the headless pins, where the upper end of the shank terminates in a straight-cut or blunt end (A22 Grs. 46, 70, and 80, unless profiled or conical heads are missing). Similar examples are known in the provincial Roman cemetery at Valkenburg, the Netherlands, where Verhagen suggests a possible function as a *discerniculum* which was used in parting the hair or, alternatively, they could have been used to apply eye-black. Crummy gives a date range of *c.* AD 70-200 or 250 for this type of pin.[693] The long, conical-headed pin in A22 Gr.102 is similar to another example from Valkenburg, which is classified by Verhagen as belonging to the group of 'conical-headed pins with flanged shanks'.[694] A date range for such types is given as mid second century - late fourth or early fifth century AD.[695] Their provenance is largely uncertain. Whilst some parallels and numerous comparable examples are found within the Roman province for the bronze pins, lathe-turned bone pins are found both within the province and Germania.[696]

5.11 Bracelets

Fromburials: A9 Gr.11 iii; A22 Gr.60 iii (x2?); A22 Gr.80 i; A22 Gr.123 i.

Of the five examples, all made from bronze, at least three are similar to bracelets identified within the Roman provinces, for instance, the bracelet with the 'sliding knot' fastening in A22 Gr.123, and the twisted wire bracelets in A22 Grs.60 and 80.[697] All show signs of

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[691] The anthropological analysis of cremated remains suggests a female only in A8 Gr.34 and A22 Gr.70, whereas the pin is associated with a spindlewhorl in A22 Gr.102.

[692] A8 Gr.20, A22 Gr.70.

[693] Crummy 1979, 159.

[694] Verhagen 1993, 379, Cat nos. 94-5 & 106 respectively. See also MacGregor 1985, 116.

[695] Verhagen 1993, 379, citing Crummy 1979, 162.

[696] For instance, von Uslar lists the two bronze needles from A22 Gr.200 as probably Roman and others, especially the Bone needles, as equally Germanic or provincial Roman (1938, 127, 130).

[697] See Allason-Jones & Miket 1984, Type 8, 126, 132-3, and Type 14, 128.

secondary burning and are so fragmentary that precise identification is difficult. A provenance for manufacture could well be within the Roman provinces, although similar styles were also manufactured by the Germans, often in precious metals.[698]

5.12 Mirror

Fromburial: A22 Gr.264 i.
The single example of a semi-complete, bronze mirror lid with concentric circular incised groove decoration had clearly been burnt on the pyre. The grave dates to the third-fourth century AD.

5.13 Beads

Beads have been found in 27 graves in the study area, the vast majority coming from Rheindorf. None have been recorded in settlement or stray find contexts.[699] The occurrence of beads in burials can be divided into four main groups.
From burials:
Single beads within burials A22 Gr. 1 ii; A22 Gr.29 i (amber); A22 Gr.35 i; A22 Gr.40 iv; A22 Gr.60 iii; A22 Gr.92 i; A22 Gr.174 i; A22 Gr.218 i; A22 Gr.260 i; A22 Gr.265 i
2-4 beads within burials A12 Gr.1 iv? (x2 stone); A22 Gr.19 ii (x2); A22 Gr.27 ii (x3); A22 Gr.45 ii (x2); A22 Gr.53 i (x2); A22 Gr.189 i (x2: game pieces?); A22 Gr.251 i (x2); A22 Gr.255 i (x3); A30 iv (indet).
More than 4 beads within burials A22 Gr.25 iv (indet.); A22 Gr.94 i (x5 clay, incl. 1 melon bead); Gr.95 i (indet.); A22 Gr.247 i (*c.*4); A22 Gr.272 i (*c.*5)
Necklace of beads within burials A22 Gr.80 i (>18); A27 Gr.1 (>11); A56 Gr.10 i (check nr)
The actual number of beads recovered from the study area, particularly of glass, is difficult to determine for several reasons. The molten state of glass from the funeral pyre often makes it difficult to distinguish some fragments from vessel glass or gaming pieces. Erdrich suggests that the majority of beads were made of opaque glass, with gaming pieces in his study area being made almost always of white, black or cobalt blue translucent glass paste.[700] That being said, the

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[698] For instance, Krüger 1988, esp. Taf.41.

[699] Another glass bead was found as a stray find on the Augustan period settlement of Essen-Burgaltendorf B32. The excavators, however, also associate this find with a possibly disturbed second-third century AD cemetery on the same location.

[700] Erdrich 1996, 68.

original form of black glass fragments in A22 Gr.189 is uncertain. The *intended* number of beads in a grave may also have not been fully recognized due to inadequate collection methods during excavation. Some may have been burnt to nothing on the pyre, or alternatively have been so small as to be overlooked when the remains were collected for burial. The fact that many graves had been damaged before their discovery, as well as the absence of systematic sieving during excavation, may also have influenced recovery levels.
An attempt at classifying the beads in order to look at distribution, provenance, dating, as well as function proved to be of little value. Very little useful material has been published on Roman period beads in Germania. The most detailed publication is that of Tempelmann-Maczynska, which attempts to provide a structure for the typological classification of beads found within Central Europe.[701] Tempelmann-Maczynska's groups I, II, V, VI, LVI, and XXX can be broadly identified within the assemblage.[702] The usefulness of this publication is, however, unfortunately limited since her division into groups, types, variants and sub-variants is often confusing, unclear and inconsistent. The classification offers nothing for the understanding of chronology, since many forms occur contemporaneously and are long-lived, and provenance is also uncertain. The recognition of any distinctions in form is further limited due to the condition of the beads in the study area. Most show signs of secondary burning, being so deformed that the original form cannot be recognized. In several cases only fragments of beads were found.
Koch suggests future divisions within Roman period beads should be based on colour rather than form.[703] Whilst the colour of a bead is not so much of a problem, however, decoration and patterning with colours certainly is due to the distorting effects of the pyre.
Single and small groups of beads occur in graves, dated on the basis of other grave goods, from the late first or early second century until the fourth century AD. The three larger collections of beads in A22 Gr.80, A27 Gr.1, and A56 Gr.10 must represent one or more complete necklaces and date from the late second-mid third century. The number of bead graves increases towards the later Roman period: late first-second centuries (Eggers' *Stufe* B2), five graves; second-third centuries (Eggers' *Stufe* C1), eight graves; third-fourth centuries (Eggers' *Stufen* C2-3), ten graves. This is supported by the seriation of the Rheindorf graves (see Chapter 8.5). Whilst glass beads span the

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[701] See Tempelmann-Maczynska 1985, esp. 7, in which all previous literature is listed.

[702] Details of individual beads are given in the relevant catalogue entries.

[703] Koch 1987, 829.

whole period, clay (with melon bead) and stone beads (A22 Gr.94 and A12 Gr.1 respectively) belong to the early period and the single amber bead to the latest (A22 Gr.29).
Glass beads in Germania were overwhelmingly Roman imports, although the question of provenance and the possibility of the secondary working of Roman glass within Germania is still under discussion.[704] Glass, presumably beads as well as vessels, was certainly produced at various centres in the Rhineland until the Carolingian period, the largest centres being Cologne and Trier.[705] Cologne was also one of the centres for amber working, with raw material coming from the North and Baltic Seas.[706]

The number of beads within a grave is most probably significant when trying to determine the function of the artefacts within the burial ritual, notwithstanding the limitations of recovery and condition as previously discussed.
Beads are most commonly interpreted as the remains of necklaces, and possibly bracelets and earrings.[707] Within the study area, more graves contain a single bead (10 graves) or a pair (6 graves) than any other combination. With the exception of the amber bead (A22 Gr.35) and three glass beads (A22 Gr.1, A22 Gr.35, A22 Gr.92), all show signs of secondary burning.
Next to brooches and belt ornaments, beads were the most widespread elements of the *Frauentracht*, certainly of that represented within the burial remains.[708] Necklaces would not necessarily have had many beads. The rest of the string may have been left empty or, alternatively, would have been strung with organic material (for instance, grain). The combination of stone, bone, bronze and glass beads, occasionally with metal amulets, is known from Central Europe. Long necklaces with a large number of beads, such as those in A22 Gr.80, A27 Gr.1, and A56 Gr.10, are more characteristic of the late Roman period and early Migration period.[709]
Melon beads, of which only one has been recognized within the study area (A22 Gr.94), were the most widely distributed beads of the western provinces, most common in the western and south-western *Limes* provinces of Germania, Raetia and Noricum. The date range for their

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[704] Tempelmann-Maczynska 1985, 133; also Erdrich 1996, 9 note 2 for literature.

[705] Tempelmann-Maczynska 1985, 127-136

[706] Tempelmann-Maczynska 1985, 14.

[707] Tempelmann-Maczynska 1985, 137.

[708] Tempelmann-Maczynska 1985, 149.

[709] Tempelmann-Maczynska 1985, 137-9.

use spanned the whole Roman period. Whilst the melon bead is known to have been used as part of equine equipment or as decoration for a dagger or axe sheath, its rare occurrence in native contexts could suggest its use as an amulet.[710]

Philpott notes a similar occurrence of single or small groups of beads in Romano-British graves dating from the late first-early third centuries. He suggests that, in some cases, these may represent a token offering removed from a necklace or bracelet string for inclusion in the burial as a *pars pro toto* symbol of the whole. In such instances the bead necklace forms a rare example of a type of possession which would have been divisible without impairing the integrity of the whole, the remainder being available as a momento to the heirs of the deceased.[711]

Although beads may have originally been part of a necklace, they could always have acquired another use within the burial ritual. Single or small groups of beads may have had an amuletic, magical significance and may have been appropriate to males as well as females. Beads are found associated with both female and male cremations as well as children.[712] At least one grave has been identified as possibly female (A22 Gr.255) and one as possibly male (A22 Gr.19) within the study area.[713]

The inclusion of beads as imported, and presumably luxury, artefacts may well say something for the status of the deceased. The concentration of the beads within the cemetery at Rheindorf may be yet another indication of the significance of the cemetery in the study area. Other, contemporary, large sites, Troisdorf (A8) in particular, do not contain a single bead.[714]

5.14 Bone Combs

From burials:

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[710] Tempelmann-Maczynska 1985, 127-9.

[711] Philpott 1991, 130-1.

[712] For example, Tempelmann-Maczynska 1985, 137-9, 145-6. In Romano-British contexts, children appear to have been commonly buried with beads (Philpott 1991, 130).

[713] In addition, A22 Gr.53 possibly contains the remains of a male and female adult, and A22 Gr.80 contains a male adult, an adult undetermined and a child.

[714] The identification of A12 as provincial Roman or native is arguable. The necklace from A56 is an exception, but still representing only a single grave in the cemetery. Both A27 and A30 are isolated burials.

Thomas Form I A8 Gr.4 i; A8 Gr.36 i; A22 Gr.86 i; A22 Gr.94 i.
Indeterminate A4 Gr.1 i; A14 Gr.2 i; A22 Gr.43 i; A22 Gr.53 i; A22 Gr.56 i; A22 Gr.77 i; A22 Gr.80 (x2?); A22 Gr.95 ii; A22 Gr.254 i.
Only thirteen combs are represented within the study area, all made of bone. Any wooden combs would either have been completely burnt on the pyre or would have perished after deposition. All the combs are from cremation graves, both male and female graves,[715] the majority, nine, in Rheindorf (A22). all show signs of secondary burning. Only singular or a small number of fragments remain for each comb, suggesting most fragments were lost on the funeral pyre or, alternatively, not recognized during excavation.
The bad condition of preservation makes a precise identification of type, decoration, and subsequently close dating, impossible.
All the examples from the study area are composite combs, i.e. made from tooth segments riveted together between two or more connecting plates (*Dreilagenkämme*), dating to the later Roman period.[716] Simple combs,i.e. made from a single piece of bone (*Einlagenkämme*) and dating to the early Roman period, are not found. Although Thomas states that combs of this period were mostly made of horn or antler, this could not be identified by the author, so the general term 'bone comb' is used here.[717] The fragmented nature of the remains means that only four combs can be attributed to Thomas' Form I combs, defined as having a semi-circular grip plate.
Only one comb (A22 Gr.86) can be classified more closely, to Thomas' Form I Variant 3, with a more triangular or trapezium-shaped grip plate, similar to Form II.[718]
It is not clear whether the rest represent Form I or Form II combs, which would be chronologically significant.[719] The possibility of Form III combs being present can be excluded due to their later date.[720]
One comb (A8 Gr.4) is decorated in Thomas' *Motivgruppe A*, with a combination of ring and dot patterns and grooved or stabbed lines. Three combs (A8 Gr.36, A22 Gr.53, and A22 Gr.254) are decorated in Thomas' *Motivgruppe B*, comprising exclusively ring and dot patterns.

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[715] See Chapter 9.1. This corresponds with, for example, Thomas 1960, 54.

[716] Thomas 1960, 54-5. See von Uslar 1938, 130-1 for earlier discussion of material in the study area.

[717] Thomas 1960, 54, 76.

[718] Thomas 1960, 77, 170 nr.252. Thomas, in fact, lists none of the other combs found in Rheindorf or Troisdorf before 1960.

[719] Type II combs being generally later: Thomas 1960, 77-104.

[720] Thomas 1960, 104-114.

The comb in A22 Gr.80 is notable in that as well as several fragments decorated in *Motivgruppe A*, one fragment is covered in zigzag grooves of the more unusual *Motivgruppe C*. This fragment may represent a second comb in the grave.
According to Thomas, Form I combs predominate in Central and Northern Europe, the majority being found in Elbe, Oder-Weichsel, and North Germanic regions and probably developed in the Oder-Weichsel region. The combs begin to appear in the first half of the third century (*Stufe* C1) and continue until the end of the fourth century. The majority belong in the second half of the third century and the first half of the fourth century, i.e. *Stufe* C2.[721] Form I Variants (1, 2 and 3) are more or less contemporary.[722] Keller dates Form I combs from south-west Germany and northern Bavaria slightly earlier, to *Stufe* C1-2, the second half of the second century to the first decades of the fourth century.[723]
To date, very few composite combs have been found within the Rhine-Weser Germanic region. No early Roman simple combs are known. Von Uslar states that in the West combs were already present in the first half of the third century.[724] No combs in Rheindorf can be reliably dated before AD 200, although a late second-century date for some graves cannot be completely excluded (A22 Gr.143?, A22 Gr.182?). The seriation of the Rheindorf graves seems to support the conclusion that the inclusion of combs in graves only becomes fashionable in the last phase of the cemetery (see Chapter 8.5) Joachim dates the comb in A8 Gr.36 to a late phase of *Stufe* B2 on the basis of its association with an Almgren Form 144 fibula.[725]

5.15 Casket Fittings

From burials: A8 Gr. 3 i?; A8 Gr.27 i?; A9 Gr.6 ii; A22 Gr.9 i; A22 Gr.60 i, iii; A22 Gr.73 i; A22 Gr.74 i; A22 Gr.83 i?; A22 Gr.95 i; A22 Gr.102 i; A22 Gr.124 i?; A22 Gr.151 i; A22 Gr.169 i?; A22 Gr.172 i; A22 Gr.180 i; A22 Gr. 185 i; A22 Gr.186; A22 Gr.212 i?; A22 Gr.215 i, iii; A22 Gr.221 i; A22 Gr.225 i; A22 Gr.260 ii; A22 Gr.272 i.
At least 23 graves, the vast majority within the cemetery at Rheindorf, contain a combination of metal fittings, bronze or iron or a combination of both, that testify to the original presence of a box

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[721] Thomas 1960, 92, 94.

[722] Thomas 1960, 92; Siegmund 1996, 46.

[723] Keller 1974, 263.

[724] Von Uslar 1938, 131.

[725] Joachim 1987, 13-4.

or casket within the burial assemblage.[726] The fittings are all that remain from the caskets that were either burnt on the pyre, or that decomposed within the sandy soil. Only in A9 Gr.6 does discoloration of the sandy soil still show traces of the original planks used to make the box.[727] The fittings comprise a combination of bronze rings, lockplates, decorative studs, nails, fragments of sheet bronze from bindings or decorative plates, iron hinges, staples, escutcheons, hasps or fastenings, handles, lock springs[728] or keys. Undiagnostic elements in other graves, such as small fragments of sheet metal, loose nails or studs, and loose bronze rings in particular,may well have been part of a casket. Von Uslar states that the construction of the lock systems indicates Germanic rather than Roman manufacture.[729]
The function of the casket within the burial is rarely clearly understood, since the find circumstances and position in the grave were not recorded on excavation. In his discussion of Romano-British casket burials, Philpott states that the casket fulfilled a variety of functions within the burial, either containing the ashes and smaller grave goods, or accompanying, rather than containing, the cremated bone. The detailed arrangement of the casket and its contents were not subject to hard and fast rules but rather to personal preference.[730] There is no reason to believe the situation was otherwise in Germanic contexts.
The inclusion of a casket among the grave goods is not a chronological factor since, within Rheindorf, the custom appears to be long-lived, appearing in graves from the late first century or early second century until into the third century AD. Although von Uslar suggests that casket fittings are most likely to be found within female graves,[731] only five of the 23 graves can be determined as female, three as male, and two as belonging to children.[732]
In general, caskets are most often found in either well-equipped or averagely-equipped graves, most particularly in the later Roman

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[726] Von Uslar 1938, 120-4, discusses these fittings in detail.

[727] See catalogue entry in Appendix I.

[728] Some of which may be latchlifters.

[729] Von Uslar 1938, 120.

[730] Philpott 1991, 12-3.

[731] Von Uslar 1938, 166.

[732] Either on the basis of anthropological analysis or associated grave goods. Female: A8 Gr.27, A22 Gr.60 (although double burial), A22 Gr.74, A22 Gr.102, A22 Gr.124. Male: A8 Gr.3, A22 Gr.73, A22 Gr.186. Children: A22 Gr.95, A22 Gr.169.

period. The same situation seems to be the case in cemeteries within the Thüringen Basin and within Roman-British graves.[733]

5.16 Textile Working

5.16.1 Spinning

5.16.1.1 Spindlewhorls

In the lists below, one or more asterik (*) by an entry indicates that another form is also present in the same context.

From burials:

Biconical spindlewhorls A7 Gr.1 iv; A8 Gr.4 i; A8 Gr.27 i; A8 Gr.34 i; A8 Gr.57 i; A10 Gr.2 iv; A10 Gr.5 i*; A18 stray i; A22 Gr.63 i; A22 Gr.92 i; A22 Gr.102 ix3**; A22 Gr.106 i; A22 Gr.119 i; A22 Gr.124 i; A22 Gr.146 i; A22 Gr.199 i; A22 Gr.201 i; A22 Gr.226 i; A22 Gr.231 i; A22 Gr.249 i; A56 Gr.9 iv; A56 Gr.10 x3*; A62 iv.

Spherical spindlewhorls A10 Gr.5 i*; A22 Gr.102 i****.

Disc-shaped spindlewhorls A22 Gr.102 i****.

Spherical or domed 'melon-shaped' A22 Gr.77 i; A22 stray i; A56 Gr.10 i***.

From settlements:

Biconical spindlewhorls B6; B9?; B19; B29; B32 Find A; B40.

Conical spindlewhorls B21 (Berg. Gladbach check nr); B36 (Essen-Hinsel).

From the whole study area 33 spindlewhorls have been recorded from cremation graves, the majority of these being from Rheindorf (A22: 18 examples, representing 54.5%). Spindlewhorls were recorded on only six settlement sites.[734]

Almost all the spindlewhorls are biconical in form (87.5%), under which assymetric examples are predominant. Only two are spherical and one disc-shaped.[735] Three 'melon-shaped' examples have been identified. All the spindlewhorls are made of clay,[736] the vast

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[733] Becker 1996, 42; Philpott 1991, 14.

[734] Due to the inadequate excavation and recording of the settlement material this should not be seen as a reliable statistic. The general picture from the study area, with the majority of spindlewhorls coming from burials, is similar to that proposed by Becker for the Eastern German region between Harz, Eichsfeld, Thüringer Pforte and the Middle Elbe (1996, 35), and substantiates the earlier work of von Uslar (1938, 136-7).

[735] A more detailed description of the spindlewhorl forms can be found in von Uslar 1938, 136.

[736] Von Uslar suggests that some of the glass beads, presumably the larger ones, could have been used as spindlewhorls (1938, 136).

majority have been found complete, and most are undecorated. Except for the melon-shaped spindlewhorls, only two have short vertical grooves around the girth: A8 Gr. 4[737] and A22 Gr.201. Von Uslar suggests that these two may be examples of a special form local to the area.[738]
Although spindlewhorls are commonly found and exhibit clear variations in form, there are no indications for chronological or chorological distinctions within the group. The basic form remains the same from at least the Late Iron Age onwards. Only the 'melon-shaped', ribbed spindlewhorls appear to date exclusively to the later Roman period.[739]
Within the graves, only four spindlewhorls have been found dating to *Stufe* B2[740], the remainder can be dated to *Stufe* C.
The reason for the existence of combinations of different forms, for instance, biconical and spherical (A10 Gr.5), biconical, spherical and disc-shaped (A22 Gr.102) and biconical and 'melon-shaped' (A56 Gr.10), is unclear.
Whether the prevalence of examples within the later Roman period is of any significance also still remains to be tested.

5.16.1.2 Distaff Elements
From burials:
Cylinder A22 Gr.102 ii.
Pierced discs A22 Gr.102 i x2; A22 Gr.255?.
Ornamental plug A22 Gr.102 i.
In discussing artefacts associated with spinning found within the provincial Roman settlement and cemetery of Valkenburg (Zuid-Holland, the Netherlands), Verhagen lists the presence of bone cylinders (*Knochenrörhren*) decorated with double line incisions, pierced discs and ornamental plugs, all showing signs of having been burnt on the pyre.[741] Similar artefacts, also calcined, are listed from other cemeteries in the north-western part of the Roman Empire, for example from Stettfeld in Southern Germany and Nijmegen-Hatert, Spijkenisse, Kesteren, Cuijk-Groetstraat, south of the Rhine in the Netherlands, and the Frisian settlement of Schagen,[742] north of the Rhine in the

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[737] Joachim 1987, Taf.4,2.

[738] Von Uslar 1938, 137.

[739] Von Uslar sees them as being imitations of the melon bead (1938, 136).

[740] A22 Gr.106; A22 Gr.119; A22 Gr.124; A22 Gr.201.

[741] Verhagen 1993, Cat. nos. 4-15, fig. 5, 4-7 fig. 6, 8-15, 343-5, 349-53.

[742] See Verhagen 1993, 346 fig.2.

Netherlands, as well as the cemetery of Tongeren in Belgium.[743] Verhagen notes that these bone artefacts bear a strong similarity to small luxury distaffs made of bronze and jet in the Rhineland and that their common occurrence within female graves supports such an interpretation. The small dimensions of the elements in Valkenburg suggests that their actual use as a spinning implement is unlikely and that their function was probably symbolic. Verhagen gives dates for these artefacts that range from after AD 50 until after the second half of the second century.

Although the function of these artefacts remains unclear, it is possible that the examples found within the two Rheindorf graves listed above also represent distaff elements. Their association with other spinning artefacts in A22 Gr.102 (late second-early/mid third century AD) and a possible female burial in A22 Gr.255 (fourth century AD) could support this.[744]

5.16.2 Weaving

5.16.2.1 Loomweights

Fromburial?: A55 iv x12.

From settlements: B6; B18; B19; B40.

No loomweights have been found as reliable parts of a grave goods assemblage. The twelve examples from Duisburg-Huckingen (A55), now lost, are of 'stone' and appear to have all been found spread within a circular area of *c.* 1m diameter. Whether this had anything to do with the disturbed graves on the site is not clear. The examples from settlements so far recovered indicate the presence of conical, skittle-shaped and pyramid-shaped loomweights in the study area. None of these forms are chronologically diagnostic, all being found on sites dating since the Neolithic.

5.16.2.2 Weaving Sword

Only one example of a weaving sword (*spatha*), complete and made of iron, was found in a grave in Troisdorf (A8 Gr. 4).[745]

5.16.3 Sewing

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[743] See Verhagen 1993, 345 notes 10-18 for further literature.

[744] Bone cylinder fragments from A22 Gr.62, although similar in appearance to Verhagen's examples, are too small for reliable identification: they may alternatively be part of a knife handle. The example of a bone cylinder listed by von Uslar in A22 Gr.70 has not been illustrated and has not been seen by the author.

[745] Von Uslar 1938, 120 & Taf. 33,27; Joachim 1987, Taf.3,40.

5.16.3.1 Sewing Needle

Only one sewing needle has been clearly identified in the study area: a bronze needle with a broken eye from A22 Gr.71, dating to the late second or third century AD. Such bronze needles, found in both Germanic and provincial contexts, are associated with the sewing of fine cloth. The rarity of such artefacts within graves in Germania, however, leads to the assumption that their inclusion in graves was exceptional, reflecting the higher social status of the deceased within society.[746]

5.17 Knives and Razors

Eighteen knives and razors have been recorded in the study area.[747] Excepting two, all the knives come from graves in Rheindorf. Various forms can be identified in the assemblage. These variations do not appear to be chronological or regional when seeking parallels outside the study area.[748] The assemblage as a whole ranges in date from the late first - second century until the third century AD. All the blades are of iron, only the zoomorphic handle terminals in A22 Gr.33 and Gr.48 are of bronze.

Blades of uncertain form From burials: A22 Gr.60 i; A22 Gr.107 i; A22 Gr.238 i; A22 stray find; A44 Gr.1.

The remaining blades and handle fragments can be divided into the following forms.

Form 1: Straight-bladed knives
A12 D Gr.1 iv?; ?A22 Gr.62 i; A22 Gr.74 i; A22 Gr.74 iii; A22 Gr.253 i

Form 2: Sickle-shaped blade from a razor with coiled handle terminal
A22 Gr.9 ii.

Form 3: Razor handle with horse's head terminal
A22 Gr.33 i; A22 Gr.48 iv.

Form 4: Trapezoidal blade
A22 Gr.43 i.

Form 5: Axe-shaped blades
A22 Gr.56 i; A22 Gr.99 ii.

Form 6: Half-moon shaped blade
A22 Gr.133 i; A22 Gr.175 i.

It may well be that the variation in blade form relates to specific function, some knives being the tools of craftmen, others razors or eating utensils.[749]

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[746] See Becker 1996, 37-8.

[747] Some of the knives and razors from the study area have already been discussed by Rademacher 1922, 236 and von Uslar 1938, 118.

[748] See Becker 1996, 34.

[749] See Philpott 1991, 176.

Except for in A22 Gr.74, only one knife is found per grave. The analysis of the cremated remains is not conclusive enough to attribute specific forms to males or females.[750] Breitsprecher associates sickle-shaped knives traditionally with male graves, although the function remains uncertain.[751] A small number of graves may be assumed to be male on the basis of the inclusion of razors,[752] or where knives are associated with weaponry.[753] It is possible that the knives associated with caskets are from female graves.[754] Two knives were apparently from children's graves.[755]

5.18 Shears

Only seven pairs of shears have been recorded within the study area:
From burials
A7 stray find iv; A8 Gr.2 i; A8 Gr.4 iv; A22 Gr.234 ii; A22 Gr.235 i; A22 Gr.247 i; A44 Gr.1 iv.
All the shears are of iron except for one bronze example from Troisdorf (A8 Gr.2). The assemblage ranges in date from the first-second century to the third-fourth century AD.
Breitsprecher concludes that shears are not generally gender-specific.[756] The shears in A8 Gr.4 may well be associated with a female burial and the textile-making process represented by the weaving sword and spindlewhorl in the same grave. Cremation remains indicate a male burial in A8 Gr.2. Shears are associated with weaponry in A22 Gr.234 and A44 Gr.1, indicating male burials.

5.19 Whetstones

From burials: A22 Gr.62 i; A22 Gr.71 i; A22 Gr.73 i; A22 Gr.74 i; A22 Gr.101 i; A22 Gr.226 i; A22 Gr.235 i; A22 Gr.272 i; A56 Gr.12 i.
From settlements: B7; B9; B18; B26; B29.
With one exception, all the whetstones from burials are found in

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[750] The only male grave from cremation evidence is A22 Gr.43, female grave A22 Gr.99.

[751] Breitsprecher 1987, 32 and, for knives in general, 41-3.

[752] A22 Gr.9, A22 Gr.33, A22 Gr.48, A22 Gr.56?, A22 Gr.133?.

[753] A22 Gr.62, A22 Gr.107, A44 Gr.1.

[754] Although A22 Gr.9, if it contains a razor, would contradict this hypothesis. Other graves with caskets are A22 Gr.60, A22 Gr.74.

[755] A12 D Gr.1, A22 Gr.175.

[756] Breitsprecher 1987, 35.

Rheindorf (A22). All can be dated within the second century AD. The very small number recorded within the study area suggest that they are not to be included in the formal grave good assemblage but are rather evidence for individual selection. The primary function of whetstones would have been as implements for sharpening tools or equipment. There inclusion in a grave may indicate a special connection with either the occupation or tasks carried out by the deceased. In at least two graves (A22 Gr.74, A22 Gr.235) the whetstones are associated with a knife or shears. Both female and male-associated grave goods are found within the assemblages.

5.20 Figurines

Only four figurines are recorded in the study area, two animal figurines, including a cock and a three-legged animal, apparently with no head (B11 Find A i and A22 Gr.242 i respectively), and two standing, naked figurines, at least one of which (from Rheindorf) is a boy (A12D Gr.1 iv; A22 Gr.95 i). All the figurines are made of white, moulded terracotta. Both burials fall within a date range of late second - early/mid third century AD. The Rheindorf figurine is very similar in appearance (particularly in the execution of the hair and facial features) to a bronze Germanic figurine dating to the third century AD found in Geveshausen near Oldenburg, Lower Saxony.[757]
All the figurines appear to be products of the Rhineland-Mosel industry, with important centres of production in Trier and Cologne (end of first century AD - *ca.* AD 180).[758]
The function of the figurines is uncertain, although it is clear that the three found within graves played a role in the funerary symbolism. Whilst it is possible that the figurines were toys, van Boekel argues against this explanation, since the fragility of terracotta would not lend itself to play. She does, however, cite ancient written sources that connect terracottas to children.[759] The presence of miniature vessels within the same burial assemblage may also support this hypothesis (see A22 Gr.95). Van Boekel suggests that figurines in burials served predominantly as votive offerings. Animals were often seen as the emblems for deities, or alternatively as substitutes for real offerings, such as meat, in the grave.[760] Figurines of standing

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[757] Gehrig 1995, 320-1, with further literature.

[758] Van Boekel 1983, 203. For the cock, see 235.

[759] Van Boekel 1983, 239-40.

[760] Van Boekel 1983, 238-9.

boys are also seen as having a primarily votive character.[761] One explanation she gives is that figurines of children may have belonged primarily to the devotions of women pleading for fertility in the one hand and the good health of their children on the other, especially for boys possibly because of their higher social value.[762] Yet another explanation may be that a figurine was put in a grave as a symbolic representation of the still living child of a deceased mother.

5.21 Gaming Pieces

From burials:
Glass counters: A22 Gr.189 i (black); A56 Gr.10? i (blue-green).
Bone counters: A8 Gr.16 i (x1); A22 Gr.5 i (x1); A22 Gr.251 i (13 remaining, whereas 24 originally found); A22 Gr.254 i, ii (x3); A22 Gr. 255 i (x1); A22 Gr.271 i (x1).
Bone die: A22 Gr.254 i.
Possible gaming pieces: A22 Gr.89 i (x2).
This group of finds appears to represent games deposited within the grave, possibly a favourite pastime in life also to be enjoyed in the after-life. No gaming boards (presumably made of wood) have survived, if they were ever included in the burial assemblage. Only the glass counters are recorded as showing signs of secondary burning. Whilst the specific games played with the counters and die cannot be identified, numerous similar glass and bone pieces have been found within the Roman province, in the *limes* forts, and on other sites in Germania, in settlements as well as inhumation and cremation graves, indicating the widespread popularity of board and dice games.[763] Glass and bone counters are never found together, which makes them unlikely to have been used as counterparts in the same game. Krüger suggests that glass counters had a higher value than bone examples.[764]
Certainly, they were all imported from the Roman province. Except for the examples from Rheindorf (A22) and Duisburg-Ehingen (A56), coming from second-century graves (Eggers' *Stufe* B2 or C1), the only other sites recorded by Krüger as containing glass counters within the *limes* region are the forts.[765]
The bone examples, in contrast, could equally have been locally made.

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[761] Van Boekel 1983, 263-7.

[762] Van Boekel 1983, 238 note 253.

[763] A detailed discussion of gaming pieces for board and dice games in Germania, including the examples from Rheindorf, is presented by Krüger 1982.

[764] Krüger 1982, 156-8.

[765] Krüger 1982, 192 Karte 15; 196 Karte 19.

They are found within graves dating from the early to the late Roman period. Within the assemblage of bone counters, three types can be identified, although there is no chronological distinction between them:[766]

Form 1: counters with countersunk or concave obverse surface, often with a concentric circular groove around the edge. These types appear to have been either lathe-turned or made with a hollow bit, hence the central bore hole (A22 Gr.251, A22 Gr.254).

Form 2: counters with multiple concentric rings on the obverse surface (A8 Gr.16, A22 Gr.255).

Form 3: undecorated, with either a flat or slightly convex obverse surface (A22 Gr.5, A22 Gr.251, A22 Gr.254, A22 Gr.271).

Both types may represent either different games or different pieces within the same game, as probably do the different sizes present in A22 Gr.251.

Six-sided cubic dice, often called *tessera*, are found within Germania although again, along the *limes* Rheindorf contains the only example outside of the Roman forts.[767] Since the Roman period the patterning on dice is usually arranged in such a way that the value of opposite sides always totals seven. Roman-period examples have the values marked in ring-and-dot motifs.[768] According to Krüger, however, the Rheindorf example is unique, in that the patterning of the ring-and-dot values is irregular and the significance of the different sized motifs is unclear.

Krüger's attempts to link the inclusion of gaming pieces in a cremation burial to a reflection of social status is unsatisfactory.[769] The gaming pieces appear in both male and female graves within the study area, and are also possibly associated with children.[770]

The function of the two slightly biconical pieces in A22 Gr.89 is not clear. The concentric circles and ring-and-dot patterns on the ends of one of the pieces suggests a possible function as gaming pieces. No parallels have, however, been found. A completely different interpretation suggests they are actually standard measures, based on the *sicilicis*, 1/48th of a Roman foot. The majority of known examples, albeit made from metal, are known from the Netherlands, particularly

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[766] These types have also been recognized in the assemblage from the Roman site at Valkenburg, the Netherlands. See Verhagen 1993, 372-8, who also cites MacGregor 1985, 132-3.

[767] Krüger 1982, 144-5, 184 Karte 7.

[768] See also Verhagen 1993, 373.

[769] Krüger 1982, 215-8, 221.

[770] A22 Gr.5, A22 Gr.251.

the Dutch eastern river area, along the IJssel, and western Friesland. The contexts are described as being of late Roman date and tend to be military work places or possibly associated with craftsmen who worked for the late Roman army.[771]

5.22 Animal Bone

From burials: A8 Gr.13 i; A8 Gr.17 i; A8 Gr.19 i; A8 Gr.20 i; A8 Gr.28 i; A8 Gr.42 i; A8 Gr.48 i; A8 Gr.54 i; A11 Gr.3 i; A12F Gr.1 i; A12F Gr.3 i; A22 Gr.18 i; A22 Gr.24 i; A22 Gr.27 i; A22 Gr.29 i; A22 Gr.30 i; A22 Gr.35 i; A22 Gr.36 i; A22 Gr.53 i; A22 Gr.75 i; A22 Gr.80 i; A22 Gr.87 i; A22 Gr.137 i; A22 Gr.143 i; A22 Gr.160 i; A22 Gr.167 i; A22 Gr.168 i; A22 Gr.174 i: A22 Gr.182 i; A22 Gr. 183 i; A22 Gr.200 i; A22 Gr.247 i; A22 Gr. 254 i. The vast majority of the animal bone found within the burial assemblages is from the legs of suckling pigs, mostly no older than one and a half years old at slaughter (see Table 5.7).[772] All the bone shows signs of secondary burning on the pyre. This is a phenomenon more commonly found in provincial Roman contexts, being particularly associated with Roman eating habits, rather than Germanic.[773]

The inclusion of animal bone in the grave may represent either the remains of a funeral meal, or alternatively meat that was deposited as a meal for the deceased. Wahl and Kokabi, discussing provincial Roman graves, suggest its inclusion should be seen as an indication of social status.[774] There seems to be no clear association with gender, since bones are found in both male and female graves, as well as children and infants. The date range for the group of burials spans the whole period under discussion. Many of the graves with pig bones seem to be of a relatively late date within the Rheindorf cemetery. This is supported by the outcome of the seriation of the graves (Chapter 8.5). This leads to the conclusion that this type of Roman fashion food was introduced relatively late in the study area at least.

The larger bones in A22 Gr.160 are from either a horse or cow. The unburnt horse bones found in A22 Gr.24 appear at first glance to be of some significance. The lack of human remains and the find circumstances indicate, however, that this was probably no human grave

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[771] Pers. comm. R.H.P.Proos (ROB, Amersfoort, the Netherlands).

[772] Much of the information here is based on an analysis of the animal bone from Rheindorf stored within the Römisch-Germanisches Museum in Cologne by Dr. Hubert Berke (unpubl.).

[773] See Lauwerier 1988, 76.

[774] Wahl & Kokabi 1988, 232.

at all,[775] but either a horse burial or the remains of a dumped carcass.
The bones of a pine marten or otter were identified in the double burial of A22 Gr.80. Berke suggests that the animal may have been accidently burnt whilst hiding in the pyre, or that the bones represent garments or furs worn by one of the deceased. However, an identical find comes from one of the 'richer' burials in the rural cemetery of Oss-Ussen in the province of Brabant, the Netherlands, lending more support to the idea of the bone being from a garment or furs included on the pyre.[776]

5.23 Nails

From burials: (B) A7 Gr. 2 iii; A8 Gr.5 i; A8 Gr.40 i; A8 Gr.50 i; A9 Gr.8 ii; A22 Gr.9 ii; A22 Gr.36 i; A22 Gr.121 i; A22 Gr.125 i, iii; A22 Gr.129 i; A22 Gr.130 i; A22 Gr.132 i; A22 Gr.137 i; A22 Gr.139 i; A22 Gr.140 i, iii; A22 Gr.143 i; A22 Gr.145 ii; A22 Gr.146 i, ii; A22 Gr.150 ii; A22 Gr.151 i; A22 Gr.152 ii; A22 Gr.157 ii; A22 Gr.160 i; A22 Gr.171 iii; A22 Gr.174 iii; A22 Gr.180 i; A22 Gr.181 i; A22 Gr.186 i; A22 Gr.189 i; A22 Gr.194 i; A22 Gr.200 i; A22 Gr.203 i; A22 Gr.208 i; A22 Gr.211 i; A22 Gr.215 iii; A22 Gr.234 ii; A56 Gr.10 i; A56 gr.13 iv. (I) A8 Gr.21 i; A8 Gr.40 i; A8 Gr.48 i; A8 Gr.52 i; A8 Gr.54 i; A8 Gr.64 i; A10 Gr.15 i; A10 Gr.18 i; A11 stray i; A14 Gr.2 iv; A22 Gr.1 i; A22 Gr.10 i; A22 Gr.25 iv; A22 Gr.26 i; A22 Gr.33 iii; A22 Gr.36 i, ii; A22 Gr.52 i; A22 Gr.55 iii; A22 Gr.67 i; A22 Gr.70 i, iii; A22 Gr.87 i; A22 Gr.99 i; A22 Gr.108 i; A22 Gr.121 iii; A22 Gr.124 i; A22 Gr.126 i; A22 Gr.145 i; a22 Gr.147 i; A22 Gr.149 i; A22 Gr.151 ii; A22 Gr.161 i; A22 Gr.165 i; A22 Gr.172 i; A22 Gr.184 i; A22 Gr.186 iii; A22 Gr.188 iii; A22 Gr.198 iii; A22 Gr.212 iii; A22 Gr.213 i; a22 Gr.214 i; A22 Gr.215 i; A22 Gr.217 i; A22 Gr.219 i; A22 Gr.224 i; A22 Gr.225 i; A22 Gr.246 iii; A22 Gr.272 i; A56 Gr.13 iv; A65 Gr.1 i.
Loose nails, either complete or fragments, have been recorded in 79 graves in the study area. Their function within the assemblage is uncertain. Almost all the nails show signs of secondary burning. Whilst some of the nails may originally have been part of other grave goods, a large number may well have been originally within the timber used for the pyre. Their incorporation in the burial assemblage is therefore coincidental.

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[775] A large number of horse bones were found in a natural hollow *c.*1 m deep. See catalogue entry in Appendix I.

[776] Pers. comm. W.A.M. Hessing (ROB, Amersfoort The Netherlands).

CHAPTER 6 THE BURIAL DATA

6.1 Introduction

A total of 74 burial sites have been recorded within the study area. With the exception of one burial mound and the possible remains of three pyres, the only funerary features recorded within the cemeteries are graves. The reliability or otherwise of the documentation for individual graves, which inevitably affects the classification that can be achieved, is set out per site within the Catalogue of Burial Sites in Appendix I.

This chapter is divided into three sections. The first section assesses the relevance of existing theoretical approaches to the analysis of burial data when applied to the evidence from the study area. The aim is neither to provide a comprehensive critique of the full range of different theoretical possibilities for the study of burial data nor to give a detailed account of the development of the discipline. The main intention is to provide, by citing specific hypotheses and recent publications, an introduction for the research themes and objectives. The aim to move from raw burial data towards a better insight into Germanic social structure in the study area forms the key element in this thesis. A broad understanding of the relevant theoretical arguments is essential as a background to the interpretation of the material evidence as presented below in Chapters 8, 9 and 10 in particular.

The second section presents the limited historical evidence for burial ritual within Germania that may be applied to the study area. The third section returns to a more conventional treatment of the data, setting out a typology for the graves within the study area and presenting models for the reconstruction of the burial ritual based on the recorded archaeological evidence.

6.2 Theoretical Approaches to the Analysis of Burial Data

In West and Central Europe the study of burials has one of the longest traditions as a focus of archaeological research within the prehistoric, protohistoric and early historic periods. For the Roman period in particular, especially within the Germanic provinces and the adjacent areas beyond its frontiers, in terms of the refinement of chronologies, the survival of artefacts and the size of the samples for quantitative and qualitative analyses, the amount of material evidence available for research is enviable compared to earlier periods. What persists is an apparent difficulty in knowing how to use the data. Most published reports and academic research contain comprehensive catalogues of grave forms and grave goods. Questions posed in research on mortuary data remains predominantly

typochronological and culture-historical in nature. Since graves contain extensive artefact assemblages, inventories are often solely used to establish typochronologies of material culture. Whilst this work is certainly necessary, once complete, however, there often seems to be scant attention paid to evaluating the significance of any patterns found, not to say, what new understanding of the period can be achieved through further interpretation.

Roymans' criticisms of research into later prehistoric societies in Northern Gaul can be applied to a far greater area. Whereas archaeological traces of mortuary treatment are often interpreted in terms of religious behaviour, burial data are seldom used for more ambitious studies about social organization.[777] Jones, referring particularly to Roman burial archaeology, relates this to a reluctance to tackle explicitly the theoretical bases for interpretations of archaeological data, or worse, a denial that they have any theoretical framework at all. He suggests that this point goes to the heart of how we carry out protohistoric and historical archaeology: do archaeological data do any more than provide useful illustrations to written evidence, attempting to fit the data into preconceived and usually debatable historical reconstructions of social classes, or are we working in a discipline with its own dynamics?[778]

The problem is a significant one within the long tradition of Germanic Archaeology, that is to say the study of areas beyond the limits of the empire. The majority of theoretical arguments for the treatment of burial data have not concentrated specifically on Germanic burial data. In the almost complete absence of such studies, the relevancy of important models developed for systems and regions outside the study area does inevitably remain limited.

A number of the theoretical concepts, however, especially those put forward by Morris and Jones and discussed below, are seen as being significant for this study. Such work provides a useful framework for the chosen approach to the material as well as providing a model to help towards the final interpretation.

A more analytical or theoretical approach to the understanding of archaeological data increasingly took hold after the 1950s, mainly in Anglo-Saxon and, somewhat later, in Scandinavian archaeology. At this time, the traditional 'culture model' defined by Childe[779] came under increasing criticism from theoreticians who felt that to gain insight into social and economic processes, more appropriate models were

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[777] Roymans 1990, 217.

[778] Jones 1993, 247.

[779] "A culture is an assemblage of artifacts that recur repeatedly associated together in dwellings of the same kind and with burials by the same rite." Childe 1950, 2.

needed. In the 1970s and 1980s, particularly in British and American archaeology, research on mortuary ritual was redefined in theoretical and methodological respects. Building on the ideas being introduced by the "New Archaeology", the approach to mortuary data became focused on the analysis of sociocultural organization which "emphasizes the independance of a society's funerary practices with the other aspects of the total cultural system and stresses that no aspect of funerary behaviour exists in isolation from the adaptive priorities and necessities of the society at large."[780] The origins of much of the modern debate on the interpretation of funerary remains can be traced back to the work of Lewis Binford[781] and Arthur Saxe[782] in the 1960s and early 1970s, which opened up the possibility of identifying aspects of social organization from archaeological funerary data. The premise for Binford's ideas were that the 'social persona' of the deceased, defined as a congruent composite of several 'social identities' maintained in life, was reflected directly within the burial ritual. Within each society there was structural variability in mortuary ritual which was primarily determined by four factors: age, the sex of the deceased, his or her social status within the group, and his or her membership in various social groups (such as a kin group and tribe). On the basis of ethnographic data Binford suggested that there was a positive correlation between the heterogeneity of the mortuary ritual and the degree of sociocultural complexity of a society, as well as the size of the social unit. He also stated that as society became more complex, vertical differentiation, or social ranking, began to play a greater role in creating variability in mortuary ritual. Proceeding from a systemic concept of culture, one can reach conclusions about the organization of the entire sociocultural system through the study of the mortuary ritual.[783] Binford's hypothesis was eagerly seized upon by many "new archaeologists", especially in order to help identify social ranking within communities.[784]

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[780] O'Shea 1981, 52.

[781] esp. Binford 1971.

[782] Saxe 1970.

[783] For a more detailed discussion of the theories of Binford and Saxe, see Willems 1978.

[784] For example, the citation of Peebles given in Willems 1978, 84: "Individuals who are treated differently in life will also be treated differently in death. That is, the reciprocal rights and duties gathered by an individual during his lifetime will not abruptly terminate: they will carry on into his burial and, in most societies,

There has been, and still is, criticism of Binford's rather straightforward, functionalist ideas. At best, his views on the possibility of using statistical data from burials for the reconstruction of social structures have been seen as optimistic and often naive. For a start, it is certainly not true that all differentiation in mortuary ritual, let alone the social organization of society, is directly and unequivocally reflected in the archaeological record.[785]

Since burial analysis is carried out by comparison of all relevant burials, it is also necessary to work with a large enough sample of burials in which all disposal types are proportionally represented. Furthermore, it is extremely important that burials belong to the same society. Relevant variables for distinguishing social personae may be qualitatively different between societies. Social anthropologists have shown that, while in some communities the archaeological fraction of the funerary process may reflect well the living social organisation, in a neighbouring community it may be thoroughly misleading.[786]

Later approaches concentrated on analysing to what degree variability in mortuary behaviour within a society is archaeologically verifiable. O'Shea made a crucial observation in pointing out that "The existing theory of mortuary differentiation has concentrated on statements which specify the relationship between the organisation of a living society and its practices for disposal of the dead. It fails to predict the additional relationship between these mortuary practices and the archaeological observation, which is, of course, the evidence on which any social reconstruction will be based."[787]

One positive result of Binford's work has been that, in an attempt to make more valid reconstructions of mortuary behaviour, more attention has started to be given to the study of formation processes, those cultural and non-cultural processes that have contributed to the realization of the archaeological record. Roymans' presents a useful model for the formation processes affecting the major phases of the North Gallic mortuary ritual, outlining the steps taken for each burial, phases I-V.[788] Such a scheme is, with only a few alterations, equally valid for the Germanic period within the present study area (see Fig. 6.1).

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beyond. Therefore, the patterned variations in mortuary ceremonials accorded individuals in a society ought to reflect their positions within the society during their lifetimes."

[785] Roymans 1990, 258.

[786] Bloch 1971; cf. Willems 1978, esp. 89-90; Hodder 1982b.

[787] O'Shea 1981, 40.

[788] Roymans 1990, 218-20 & fig. 9.2.

Still, many more problems remained when attempting to translate burial data into terms of human behaviour, let alone interpreting them in order to reconstruct social structure.
Within the school of post-processual archaeology the emphasis has been laid from the start on the meaning and make-up of social structure itself. This should, for instance, not be seen as a rigid set of formalized rules that determines our behaviour, but rather as a flowing scheme resulting from the combination of pre-existing rules and individual actions based on them, which transmits and transforms structure itself through time.[789] Defined in this way, social structure contains two interacting levels. The interaction between the two levels is seen as the main subject of study in the theory of structuration.[790] It is through rituals, such as the burial ritual, that these sometimes contrasting elements are translated and social structure can become visible.
Pader summarizes the implications and theoretical arguments associated with funerary ritual. She suggests that how one defines the term 'ritual' will itself influence and set limits on how the empirical data are interpreted. The repetitive quality of ritual, by its very nature, is capable of creating, legitimating and perpetuating societal inequalities. Regardless of the theoretical bias or the preferred concept of ritual, it is generally agreed that one of the fundamental points concerning funerary ritual is that it is an important means of organizing the society of the living.[791]
Lohoff seeks to interpret burial rituals on the basis of the social acts of the persons involved. Although writing about the Early and Middle Bronze Age in North-East Netherlands, he puts forward ideas equally valid for other archaeological periods, including that under study. Burial ritual is defined by him as a complexity of measures and activities carried out during the burial of a person. Such a definition implicitly supposes a direct link between burial ritual and social structure. Social structure, Lohoff argues, should not be seen as a 'static' concept. The daily reality in both prehistoric and modern societies seldom gives us the full picture of social, cultural and material phenomena, but rather a process of constant change and variation within the elements regarded as characteristic of a culture. Accordingly, social structure should be described in terms of change and processes governed by certain rules, rather than as a sequence of distinct static structures.[792]

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[789] Morris 1992, 5-6.

[790] Giddens 1987.

[791] Pader 1982, 36-42.

[792] Lohoff 1994, 98-99.

The theoretical debate in funerary archaeology in the last decade seems to have concentrated on attempts to seek out the code of funerary symbolism. All our archaeological evidence has been recreated into rituals. In Morris' and Hodder's words; "We must face up to the complexities of the rituals in which our evidence was created: burial ritual is not a passive reflection of other aspects of life. It is meaningfully constructed... In death people often become what they have not been in life."[793] Therefore, the most effective way to look at the material evidence of burials is in terms of the people who produced it, as well as in the terms of the modern observer.

In studying funerary behaviour in pre- and protohistoric north-western Europe, we are dependent on archaeology as our sole source of evidence. Any interpretative models applied to archaeological data must clearly be suited to the material available for study. The methodology adopted for analysing the material within the study area is therefore for the most part based on a more practical, more traditional, but on the the other hand arguably also contextual approach.[794] Important and convincing arguments for returning to a more detailed understanding of the material culture represented by the archaeological record when studying social structure have recently been given by both Jones and Morris.[795]

In his discussion of provincial Roman burial practice, Jones emphasizes that there is still a need to link social and political theory satisfactorily with observable archaeological evidence. The first step has to be to describe and demonstrate the variability in the archaeological data. To do this it is essential to consider all aspects of the evidence, the most productive way forward being to define explicit archaeologically testable correlates of social organisation and then to test them. These arguments have just as much relevance for Germanic as provincial Roman material. Jones goes on to define the main components of the archaeological data that need to be made sense of as the remains of the form of burial: grave goods, grave form, the funerary process, human remains, spatial arrangements within burials and cemeteries, and chronology.

Morris goes further in advising to assume as little as possible, and simply look for patterns in the burial record. The features worth looking at are basically the same as those put forward by Jones. Identified patterns should be defined statistically. Not because the statistics provide explanations, but because they add precision to the kind of statements we make. The next step is to find any significance

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[793] Hodder 1982a, 141, 146; Morris 1992, 23.

[794] But contextual as in the practical implementation used by Morris rather than in Hodders' highly abstract sense.

[795] Jones 1991 & 1993; Morris 1992, esp. 21-30.

in these patterns by working along five 'axes' which together form the context into which the burial ritual is set. The five axes he mentions are typology, time, contexts of deposition, space and demography. Jones uses a key point from Binford's original argument to basically say the same. Paraphrasing his words, he suggests it is fruitless to compare inventories of cultural content without understanding the variables that affect that content.[796] To achieve patterns that are convincing it is necessary to use large samples of data and common grave attributes, not uncommon or rare ones. Only when the patterning of variability is demonstrated is it possible to begin to seek explanations.

Jones uses the degrees of consistency and variability within cemetery populations to support the 'rule theory' as a key element to understanding social interaction, with social groupings defined in terms of those individuals who follow certain cultural traditions, or rules, which were transmitted as part of a culture's learned behaviour.[797]

In order to understand the dynamic processes of social integration, coherence or acculturation, and cultural change within the Empire, it is suggested that communities should be defined by their general adherence to the common traditions or rules that can be distinguished at three levels: the basic unit of the local 'face to face' community, the regional level, and the supra-regional level, defined for provincial Roman studies as being the Roman western Empire.[798] Such a methodology would appear to be equally valid when applied to societies living outside the Roman frontiers.

The material remains of disposal ritual do represent what a society actually did, but the crucial point is that the meaning of the remains will not be completely understood if read too literally. The key point remains that, the burial record does not provide facts about history. It is there to be interrogated and interpreted within its context.[799]

6.3 Historical Evidence For Reconstructing the Burial Ritual

Whilst there are numerous classical accounts or references dealing with Roman customs and burial rites,[800] the short monograph published by Cornelius Tacitus in AD 98, the *Germania*, is the only surviving

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[796] Jones 1993, 249.

[797] Jones 1991, 116; 1993, 250-1.

[798] Jones 1991, 118; 1993, 251-3.

[799] Morris 1992, 102.

[800] See Fellman 1993 for a summary of the important texts.

historical source that specifically refers to the burial practices of the Germanic people.

" There is no ostentation about their funerals. The only special observance is that the bodies of famous men are burned with particular kinds of wood. When they have heaped up the pyre they do not throw garments or spices on it; only the dead man's arms, and sometimes his horse too, are cast into the flames. The tomb is a raised mound of turf. They disdain to show honour by laboriously rearing high monuments of stone, which they think would only lie heavy on the dead. Weeping and wailing are soon abandoned, sorrow and mourning not so soon. A woman may decently express her grief; a man should nurse his in his heart."[801]

As an aid to interpreting the archaeological evidence this sparse text is both inadequate and unsatisfactory. The aim of the text was presumably to point sharp criticism at the *mores* of Roman society rather than to give a detailed account of Germanic practices. In addition, it is unclear what Tacitus means by the term 'Germans', since no distinction is made as to which tribe he is portraying.[802] Notwithstanding the significant details that can be gained from the historical sources of Classical Antiquity, it is increasingly obvious that an approach that involves attempting to make the evidence from archaeological excavations fit within a framework based ultimately on these accounts is, at best, inadequate and liable to lead to error. For much of the Roman Empire itself we have no literary evidence for the majority of people that is unambiguously relevant to these issues. The very lack of written evidence for the Roman period burial ritual within the *Limesvorland* reinforces the need, at least for the purposes of this study, to set the funerary archaeology of the Roman period into the general framework of funerary archaeology.

6.4 The Archaeological Evidence for Grave Types

6.4.1 Towards a Classification

From the 74 burial sites within the study area, 439 graves have been recorded sufficiently to enable their inclusion in a classification according to grave type. The total number of graves in the study area is not known, since as discussed in Chapter 4, some cemeteries are insufficiently recorded.[803] Except for Düsseldorf-Rath (A44) where the

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[801] Tacitus, *Germania* 27.

[802] See, for example, Todd 1992, 5-7 for a critical evaluation of Tacitus' *Germania*.

[803] The burial sites and the number of graves per cemetery have already been given in section 4.2.2.1.

burial was covered by a mound (see Grave Type 1.5 below), neither above-ground markers nor monuments nor features such as enclosure ditches have been recorded. This does not necessarily mean that they were not originally present, but rather that they may not have been recognised or recorded during excavation. The remains of pyres are very rare (see Grave Type 3.2 below) and their identification from the documentation is uncertain. Neither have other features, for instance ash pits containing the remains of a cleared pyre, been conclusively identified.

The vast majority of all graves within the study area, almost 99% (433 graves), are cremation burials. Because of the lack of documentary evidence to suggest any other interpretation, any pit containing human cremated remains, no matter how small an amount, has been classified as a grave. Only two inhumation graves have been identified, although the evidence dating them to the Roman period is unreliable (see Grave Type 4 below).

Within German and Dutch provincial Roman archaeology at least, various publications have sought to deal with the problem of providing a standardization within the terminology used for the description of cremation grave types. Unfortunately, except in a very general sense, it is still the case that there exists no clear consensus as to the use of specific terminology for particular grave forms. The terminology put forward by Bechert for the Lower German provincial Roman sites, although criticised by some scholars, does provide a good basis for understanding the processes involved in the various rituals (see Fig. 6.2).[804]

Due to the lack of consensus, it has been felt necessary to provide the burials within the study area with their own classification, referring whereever possible to earlier definitions.

Three key factors have been identified as playing a role in making a distinction between different burial rites within cremation graves. The essential destinction is to be made on the basis of the initial treatment of the cremated human ashes: whether the ashes of the

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[804] For the study area itself, von Uslar's classification for Germanic burials remains important (1938, 159-163). See also Mackensen 1978, 134 for a useful classification of provincial Roman cremation graves. Within German provincial Roman archaeology the terminology put forward by Bechert (1980, 253-258) has been criticised as being inconsistent and contradictory, see, for instance, Joachim's publication of Troisdorf, 1987, 7 note 31. The most recent discussion, with useful criticisms and illustrations of the inconsistencies within published German research, is given in Bridger (1996, 220-226) who provides a comprehensive list of references. For the Netherlands see esp. the cemetery of Nijmegen-Hatert, Haalebos (1990, 11-20). In English, Philpott (1991, Section A) provides a detailed summary of burial types in Roman Britain. Todd only describes Germanic burials in very brief detail (1975, esp. 57-8; 1992, 79-83).

deceased were collected after cremation on the pyre, often then to be cleaned or even washed, or whether the ashes were left untreated and mixed with the rest of the pyre remains. The second distinction is made depending on the manner in which the ashes were deposited in the grave: whether they were concentrated, either in a heap or in a receptacle acting as an urn, or whether they were distributed throughout the grave fill. The third distinction leading on from this relies on whether the grave pit itself contained further fill made up of remains from the pyre (in German, the *Brandschüttung*), such as burnt earth, charcoal, or grave goods, and often containing more ashes. The term *Brandschüttungsgrab* has, confusingly, been used to refer to different phenomena in various publications. Bridger's definition states that the collected ashes were scattered in the grave pit on top of the pyre remains.[805] Todd's definition states that the cremated remains were kept separate from the urn and other grave furniture.[806] Neither of these definitions can be related with ease to the graves in the study area. This may well be due in part to the inadequate level of information recorded about find circumstances. Without a trained eye and modern excavation techniques, it is quite easy to see how Bridger's definition could be confused with a *Brandgrubengrab* (Grave Type 3 below).

For this study, the term *Brandschüttungsgräber* is used as a general term to describe all grave types that contain burnt pyre remains (the *Brandschüttung*) as well as cremated ashes.[807]

For the cremation graves within the study area two main groups have been distinguished:

Group One: graves with a cinerary container (Grave Types 1 and 2),

Group Two: graves without a cinerary container, i.e. an unenclosed cremation grave (Grave Type 3).

A further division of Group One has been made into firstly, graves that contain a recognizable cinerary urn, i.e. of inorganic material (Grave Type 1), and secondly, graves in which the cinerary urn is not recognizable and was therefore presumably of perishable organic material (Grave Type 2). A model identifying the various formation processes involved in each grave type, from cremation to deposition, is given in Figure 6.2.

A division according to type of container used for the ashes is somewhat spurious, since it can be argued that the actual burial rite practised in graves of Grave Types 1 and 2 was the same. The common distinguishing feature within both is that the cremated ashes were

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[805] Bridger 1996, 233 & note 1214.

[806] Todd 1992, 81.

[807] The classification agrees with that put forward by von Uslar 1938, 160 and particularly that used in Joachim 1987.

collected and deposited separately to any other grave fill. Suppositions as to the choice or predominance of one particular rite over another are discussed in 6.4 and 6.5 below and further in Chapter 9.2.2. A division according to recognizable and unrecognizable container, inorganic as opposed to organic for example, may well have been important, however, in reflecting personal choice, a particular social standing, or alternatively a trend in a particular period. The presence, absence or condition of grave goods is not a criterion for distinguishing grave type. Grave goods are characteristic of all grave types.[808] The significance or otherwise of the form of the grave itself in determining grave type has not been discussed since, accurate dimensions and forms have not been recorded for the majority of sites, preventing any overall trends from being identified. For ease of reference to German literature and because of its particular relevance to the study area, the Germanic terminology has been retained throughout the text.

6.4.2 Grave Type 1: Graves with Recognizable Cinerary Containers

In all these graves there is evidence to show that the cremated ashes were collected from the burnt pyre remains and deposited separately, in an inorganic urn (*ossuarium*), in the grave pit. Five variations can be distinguished. The most important distinction is the absence of pyre remains (Grave Types 1.1, 1.3, 1.5, 2.1) or the presence of pyre remains (Grave Types 1.2, 1.1/2, 1.4, 2.1/2, 2.2) in the grave fill.

6.4.2.1 Grave Type 1.1: *Urnengrab*

A8 Gr. 35; A8 Gr.36; A9 Gr.2?: A9 Gr. 5?; A12F Gr.3.
In these graves an urn containing the collected cremated ashes, with or without grave goods, was buried in a small pit. No further remains from the pyre were deposited with the urn.
Only 1% of all Grave Types in the study area belong to this category (see Fig. 6.3). In Troisdorf (A8) the two urns were placed upright on the floor of the graves, whereas in Wahn (A9) both vessels were placed upside down over a heap of cremated ashes. All five urns are Germanic pots. The grave in A12F is apparently associated with a pyre (see Grave Type 3.2 below).

6.4.2.2 Grave Type 1.2: *Urnengrab + Brandschüttung*

A1 Gr.1; A8 Gr.2; A8 Gr.4; A8 Gr.21; A8 Gr.25; A8 Gr.32; A8 Gr.54; A8 Gr.59; A9 Gr.6; A10 Gr.5; A12 Gr.1; A13 Gr.2; A14 Gr.1; A14 Gr.2; A14 Gr.3; A15 Gr.1; A19 Gr.2; A22 Gr.43; A22 Gr.44; A22 Gr.46; A22 Gr.48; A22 Gr.50; A22 Gr.52; A22 Gr.53; A22 Gr.56; A22 Gr.59; A22 Gr.62; A22 Gr.68; A22 Gr.70; A22 Gr.71; A22 Gr.74; A22 Gr.77; A22 Gr.79; A22

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[808] See also Chapters 5 and 9.

Gr.80; A22 Gr.81; A22 Gr.86; A22 Gr.87; A22 Gr.95; A22 Gr.98; A22 Gr.101; A22 Gr.102; A22 Gr.116; A22 Gr.148; A22 Gr.156; A22 Gr.159; A22 Gr.204; A22 Gr.223; A22 Gr.263; A22 Gr.271; A51 Gr.1, A51 Gr.2; A56 Gr.18; A64 Gr.1.

These 53 graves contain remains from the pyre (*Brandschüttung*) in addition to the cremated ashes which had been collected and deposited separately to the rest of the fill, in an inorganic receptacle, a pot, acting as an urn. The urn always stood upright in the grave. This group represents 12% of all identifiable graves from the study area. Of the graves were the vessel form is recorded (49 graves), 75% (37 graves) contain Germanic pots used as urns, as opposed to only 25% (12 graves) using Roman pots. The use of either a complete pot or sherds as a lid covering the contents of the urn is testified in nine graves (see Table 6.1). A unique grave is to be found in Wahn (A9 Gr.6), where the cremated ashes are enclosed in a rectangular wooden box or casket. In Bensberg (A14 Gr.1), the urn was apparently lined with the remains of a wickerwork basket or nest made from thin twigs which contained the cremation. This may have been a more common practice than recorded, the uniqueness of this find being due to an accident of good preservation and observant excavator.

6.4.2.3 Grave Type 1.1/2: *Urnengrab* or *Urnengrab + Brandschüttung*

A4 Gr.1; A7 Gr.1; A7 Gr.3; A7 Gr.7; A10 Gr.1; A10 Gr.2; A10 Gr.3; A10 Gr.10; A10 Gr.13; A10 Gr.21; A12D Gr 1; A12E Gr.1; A12F Gr.2; A13 Gr.1; A13 Gr.4; A16 Gr.1; A21 Gr.1; A25 Gr.1; A27 Gr.1; A28 Gr.1; A29 Gr.1; A30 Gr.1; A34 Gr.1?; A34 Gr.2?; A35 Gr.1; A35 Gr.2; A35 Gr.3?; A35 Gr.4?; A58 Gr.1; A61 Gr.1; A65 Gr.1?.

Due to a lack of documentation, whilst the cremated ashes from these 31 graves are known to have been enclosed in an *ossuarium*, it is unclear whether further remains from the pyre were also present in the grave pit. A division into *Urnengräber* or *Urnengräber + Brandschüttung* cannot, therefore, be made. This group represents 7% of all the identifiable graves in the study area. Of all the graves were the vessel form is recorded (30 graves), almost 57% (17 graves) contain Germanic pots used as urns. Roman pots comprise 40% of all urns (12 graves). In only one grave from Düsseldorf-Reisholz were the ashes contained in a bronze vessel (A29 Gr.1). A complete Form IV vessel was used as a lid completely covering the Roman beaker urn in a Hilden grave (A25 Gr.1).

6.4.2.4 Grave Type 1.3: *Urnengrab + Knochenhäufchen*

A8 Gr.24, A22 Gr.157.

In the Troisdorf (A8) grave the contents of the Germanic urn (Form V) were covered over by burnt decorated terra sigillata sherds (Form 1.2) and metal fragments.

6.4.2.5 Grave Type 1.4: *Urnengrab + Brandschüttung + Knochenhäufchen*
A22 Gr. 47; A22 Gr.49: A22 Gr.60; A22 Gr.82.
In three of the Rheindorf (A22) graves the urn stood upright in the grave. Only in the fourth grave (A22 Gr.60) was the urn placed upside down over a heap of cremation on the floor of the grave.
These graves are ascribed to Grave Type 1 because of the use of an urn for enclosing the cremated ashes. The graves comprise multiple burials that, in fact, reflect a combination of Grave Types 1.1 and 2.1, and 1.2 and 2.2 respectively.

6.4.2.6 Grave Type 1.5: Burial Mound with Cinerary Urn
A44 Gr.1.
In the 1870s a single burial mound "thirty-foot high" was discovered in Düsseldorf-Rath (A44). Unfortunately all the finds are now missing and the grave itself was inadequately recorded.[809] The burial, dating to the Roman period (first or second century AD?), contained a varied assemblage of grave goods including several vessels which appear to be decorated terra sigillata bowls (Form 1.2, one of which was apparently used as an urn), glass and metal vessels, a spear, a knife blade and shears. Although the evidence is sparse, the uniqueness of this mound burial within the study area may suggest it is the grave of a person of an elevated social class, possibly even a warrior or war-leader considering the presence of weaponry. In drawing such a conclusion, some comparisons can be made with a group of richly-furnished burials, the so-called Lübsow 'princely' burials, that have been found in the north German plain, between the Weser and Vistula, and on the Baltic islands. The burials, in some cases under mounds, contain grave goods which include Roman imports that are vastly more elaborate and extensive than in the general mass of burials. These were plainly the graves of major figures in early Germanic society: if not tribal leaders then their principal followers.[810] The most significant difference is that the burials at Lübsow were inhumations, whereas this grave was clearly a cremation.

6.4.2.7 Vessel Forms Used as Urns
The total number of graves containing an inorganic urn make up 21.5% (94 graves) of all the identifiable graves in the study area. The majority of urns, 67% (63 graves), are Germanic pots. The identifiable urn forms are presented per Grave Type in Table 6.1. Clearly some vessel forms were more frequently chosen as urns than others, bearing in mind that each vessel form had a chronologically distinct period of

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[809] See the catalogue entry in Appendix I for further literature.

[810] See Eggers 1950, 58; Todd 1977, 40-1; 1992, 35-6, 80, 130.

use.[811] For the second and third century AD graves, however, it does appear that Form II vessels, especially Form IIC (representing 25.5% of all Germanic vessels) occur more frequently as urns. The fact that the Form V vessels are, in general, more commonly found in grave assemblages but then as accompanying grave goods (and often as sherds), may support the idea that Form II vessels were deliberately chosen to be used as urns above other, just as readily available forms.

Only 25.5% (24 graves) of all the urns were imported provincial Roman vessels. Of these the majority, 50% (12 graves), were complete decorated terra sigillata bowls of Form 1.2. Apart from single vessels of particular forms, three colour-coated beakers were found and three coarseware jars of Form Oelmann 89. The condition of a number of the urns, both Germanic and provincial Roman pots, indicates that they had been subject to intense heat and secondary burning, as a result of being on, or standing next to, the pyre.[812] The choice of which vessel to use as an urn may simply have rested on which vessel remained complete after the cremation (see 6.6 below).

As stated above, complete pots or sherds covering the ashes, acting as a lid on the urn, are only recorded in nine graves. It is possible that other pottery, or even perhaps organic material, was used to cover the urn in other graves, but the exact find circumstances were either not recognized or not recorded on excavation, the sherds or complete pots being simply described as part of the accompanying grave good assemblage.

6.4.3 Grave Type 2: Graves with Unrecognizable Cinerary Containers

Two variations have been identified in this group. In these graves the cremated ashes were not enclosed in a recognizable container. In theory it could be argued that, in at least some of these graves, the bones were never deposited in a container. Generally, however, the shape of the heap clearly suggests that the bones were originally enclosed, for instance in a perishable, organic container, such as a textile or leather bag. It is possible that a basket made of twigs, such as that apparently used in Bensberg (A14 Gr.1)[813] to line the urn, may also have been used in other graves.

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[811] See above Chapter 5.2-3.

[812] Inadequate recording means that the picture is not comprehensive for the whole study area.

[813] see catalogue entry in Appendix I.

6.4.3.1 Grave Type 2.1: *Knochenhäufchen*[814]
A8 Gr.28; A28 Gr.30; A28 Gr.37; A22 Gr.50; A18 Grs.17-21; A22 Gr. 273.
In these ten graves a heap of cremated ash selected out of the pyre remains, with or without grave goods, was buried in a small pit. This group makes up only 2% of all the graves in the study area.

6.4.3.2 Grave Type 2.2: *Knochenhäufchen + Brandschüttung*
A7 Gr.15; A8 Gr.34; A8 Gr.39; A8 Gr.57; A8 Gr.58; A10 Gr.15; A22 Gr.9; A22 Gr.11; A22 Gr.14; A22 Gr.17; A22 Gr.22; A22 Gr.25; A22 Gr.27; A22 Gr.29; A22 Gr.31; A22 Grs.33-36; A22 Gr.40; A22 Gr.42; A22 Gr.45; A22 Gr.51; A22 Gr.54; A22 Gr.55; A22 Gr.57; A22 Gr.58; A22 Gr.61; A22 Gr.64; A22 Gr.67; A22 Gr.69; A22 Gr.72; A22 Gr.73; A22 Gr.83; A22 Gr.85; A22 Gr.88; A22 Gr.90; A22 Gr.91; A22 Gr.94; A22 Gr.99; A22 Gr.100; A22 Gr.104; A22 Gr.105; A22 Gr.107; A22 Gr.112; A22 Gr.114; A22 Gr.121; A22 Gr.122; A22 Gr.126; A22 Gr.128; A22 Gr.133; A22 Gr.136; A22 Gr.137; A22 Gr.157; A22 Gr.162; A22 Gr.168; A22 Gr.181; A22 Gr.185; A22 Gr.194; A22 Gr.202; A22 Gr.205; A22 Gr.222; A22 Gr.234; A22 Gr.248; A22 Gr.251; A22 Gr.256; A22 Gr.262; A22 Gr.268.
Graves that contain pyre remains in addition to a heap of selected cremated ashes make up a total of 70 graves, 16% of all the graves in the study area.

6.4.3.3 Grave Type 2.1/2: *Knochenhäufchen* or *Knochenhäufchen + Brandschüttung*
A22 Gr. 266; A22 Gr.267; A53 Gr.1; A56 Gr.3.
Again, inadequate documentation means it is unclear whether remains from the pyre were also present in the grave as well as the heap of cremated ash.

6.4.4 Grave Type 3: Unenclosed (Unurned) Cremation Graves

6.4.4.1 Grave Type 3.1: *Brandgrübengrab*[815]
A2 Gr.3; A22 Gr.4; A5 Gr.1; A7 Gr.14; A8 Gr.5; A8 Gr.6; A8 Grs.13-17; A8 Gr.19; A8 Gr.22; A8 Gr.23; A8 Gr.26; A8 Gr.27; A8 Gr.29; A8 Gr.31; A8 Gr.33; A8 Gr.38; A8 Grs.40-46; A8 Gr.48; A8 Gr.49; A8 Grs.51-53; A8 Gr.55; A8 Gr.56; A8 Gr.60-64; A9 Gr. 1; A9 Gr. 3; A9 Gr.11; A10 Gr.4; A10 Grs.6-9; A10 Gr.11; A10 Gr.12; A10 Gr.14; A10 Grs.16-20;, A18 Gr.1-16; A18 Grs.22-25; A20 Gr.2; A22 Grs.1-8; A22 Gr.10; A22 Gr.12; A22 Gr.13; A22 Gr.15; A22 Gr.16; A22 Grs.18-21; A22 Gr.23; A22 Gr.26; A22 Gr.28; A22 Gr.30; A22 Gr.32; A22 Grs.37-39; A22 Gr.41; A22 Gr.63;

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[814] In the German literature this type of burial, with the cremated ash in a heap, is also referred to as a *Knochenlager* (Geislar 1974) and a *Knochennest* (von Uslar 1938).

[815] Von Uslar 1938, 159-60; Bechert 1980, 253 & note 6; Bridger 1996, 233-4 (Form 3).

A22 Gr.65; A22 Gr.75; A22 Gr.76; A22 Gr.78; A22 Gr.84; A22 Gr.89; A22 Gr.92; A22 Gr.96; A22 Gr.97; A22 Gr.103; A22 Gr.106; A22 Grs.108-111; A22 Gr.113; A22 Gr.115; A22 Grs.117-119; A22 Grs.123-125; A22 Gr.127; A22 Grs.129-132; A22 Gr.134; A22 Gr.135; A22 Grs.138-147; A22 Grs.150-155; A22 Gr.158; A22 Gr.160; A22 Gr.161; A22 Gr.163; A22 Grs.164-166; A22 Gr.169; A22 Grs.171-180; A22 Grs.182-184; A22 Grs.186-193; A22 Grs.195-201; A22 Gr.203; A22 Gr.206-221; A22 Grs.224-231; A22 Gr.233; A22 Gr.235; A22 Grs.236-244; A22 Gr.246; A22 Gr.247; A22 Gr.249; A22 Gr.250; A22 Gr.252; A22 Gr.253-255, A22 Gr.257; A22 Gr.259-261; A22 Gr.264; A22 Gr.265; A22 Gr.270; A22 Gr.272; A42 Gr.1; A56 Grs.1-9; A56 Grs.11-14; A63 Gr.1; A68 Grs.1-2, A71 Grs.1, 2; A72 Gr.1; A74 Grs.1-2.
This Grave Type is represented by 259 identifiable graves, by far the majority of all graves within the study area, 59% (see Fig. 6.2). These graves can be defined as burials without any form of organic or inorganic container, such as a pot, box or bag, for the cremation. The grave pit contains the unselected cremation, mixed with remains from the funeral pyre (ash and charcoal) as well as any grave goods, burnt or unburnt.

6.4.4.2 Grave Type 3.2: Pyre?

A12F Grs. 1, 3; A42.
The evidence for the interpretation of both these features is unreliable. In A12F Gr.1 the documentary evidence suggests the presence of a flat *bustum*, with all the remains covered over and buried *in situ* after cremation, the cremated ash scattered throughout the rest of the pyre remains. A12F Gr.3 and A42 are both apparently the remains of cleared pyres, the former being associated with an *Urnengrab* (Grave Type 1.1 above).

6.4.5 Grave Type 4: Possible inhumations:

A6 Gr.1?; A17 Gr. 1?
The evidence from neither of these findspots can be said to be conclusive as far as classification and dating is concerned. In A6, human bones were apparently found in a grave-pit accompanied by a Roman sword (*spatha*?) and a spearhead.[816] In A17 a skeleton was apparently found, accompanied by a decorated terra sigillata bowl (form Dr.37?).[817] The absence of any skeletal remains and inadequate recording makes the evidence extremely unreliable.

6.5 The Cremated Bone

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[816] See catalogue entry, Appendix I.

[817] See catalogue entry, Appendix I.

For only two cemeteries within the study area has a detailed anthropological analysis of the cremated bone been carried out: Troisdorf (A8)[818] and Rheindorf (A22)[819]. Such research is intended to present a model as to the manner of burial, and is useful in identifying the 'completeness' of the body in the grave. Within the 53 Roman period graves in Troisdorf (A8) from which cremated remains have been recorded,[820] the weight per grave varies between 4g and 1772g, with an average weight of 239g (see Table 6.2). More than half the samples weigh under 100g. Wittver-Backofen states that only 5-10% of all the graves from Troisdorf contain a 'complete' body (i.e. weighing between 1000g - 2500g). The majority of the identified fragments were from long bones, less common were skull fragments and teeth. From the trunk of the body, the most commonly occurring bones were from the ribs and vertebrae. The pelvis and collar bones were seldom identified, as were bones from the hands and feet. Wittwer-Backofen attributes this to a careless collection of the cremated remains from the pyre, rather than an intentional collection of only certain parts of the body.[821]

In both *Brandschüttungs-* and *Brandgrubengräber* the volume of pyre remains in the fill, the amount of cremation recovered, and the incomplete, fragmentary nature of the grave goods, all seem to indicate that a deliberate *pars pro toto* selection was made for burial.[822]

Exactly the same situation is reflected in Rheindorf (A22). Cremated bone with a total weight of 10791g was recovered from 119 graves, the weight varying between 1g and 1366g per grave, with an average weight of only 90.6g (see Table 6.3).

Double graves do not vary significantly in their content, that is they do not have appreciably more cremated bone, than the individual graves. The exception to this is the double burial in Gr.80, at 1366g it has the largest amount of cremated bone of all graves.

In both cemeteries, the average weight of the cremation bone significantly varies depending on the grave type. The average weight per grave type is given in Tables 6a-b. Perhaps not surprisingly, the tables show that, in both Troisdorf and Rheindorf, largest average quantity of cremated remains was recovered from Grave Types 1.1 (in

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[818] Wittwer-Backofen 1987.

[819] P. Caselitz, in prep.

[820] See Chapter 9.

[821] Wittwer-Backofen 1987, 58.

[822] This is particularly true of the pottery, bronze vessels and possibly military equipment. See Chapter 5.2-3, 5.5, & 5.7.

Troisdorf, but not present in Rheindorf), 1.2 and 2.1. All these Grave Types (*Urnengräber*, *Urnengräber + Brandschüttung*, and *Knochenhäufchen* respectively) are the result of the cremated bone being carefully selected out of the pyre remains for burial within a container (either an urn or a perishable container). The least amount of cremated bone was collected from Grave Type 3.1, the *Brandgrubengräber*, in both cemeteries. On average, the *Brandgrubengräber* contain only a smaller quantity of unselected cremated bone, still mixed together with remains of the pyre. It may even be that, in some cases, the majority of cremated bone could have been selected for burial in an urn elswhere and the remains of the pyre, including the rest of the cremated bone was buried in a pit. Such a description comes close to the so-called *Aschengräber* that have not been recognised in the study area.

6.6 The Grave Goods

Each individual finds group within the total assemblage of grave goods has been discussed in detail in Chapter 5. This section will therefore concentrate on a few summarizing conclusions specifically dealing with the problems relating to the interpretation of the function of grave goods. Subsequent chapters will deal with specific points in more detail.

As has been stated above, unlike the cremated remains, the grave goods play no role in defining the different grave types. Grave goods do, however, have two essential roles in cemetery analyses. Firstly, grave goods is that they provide the dating of individual graves, thereby providing a general date range for grave types. This is discussed below (6.8).

Secondly, grave goods have an important part to play in reconstructing the burial ritual. It is commonly-accepted that the objects recovered from within the sealed context of a grave were not all necessarily the personal possessions of the deceased. Various publications discuss the distinctions which can be made within the grave assemblage.

Breitsprecher, for instance, divides the objects into the following categories:

- those that are the personal possessions of the deceased;
- those that were specifically for use in the afterlife;
- those that were gifts from mourners, either family or members of a client or kinship network.[823]

Following this model, it is not surprising to find, at least in some cemeteries, a mixture of traditionally female and male objects in a

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[823] Breitsprecher 1987, 62. See also Bridger 1996, 260 and notes 1366-7 for further literature.

grave.[824] Whilst the categories defined are usually logical it is, however, extremely difficult to divide any grave assemblage accordingly. It remains arguable which objects were actually the personal possessions of the deceased and which were included because of their particular 'symbolic' value, giving evidence for a certain profession, or denoting social positioning.
Whilst being personal possessions, not all objects were 'true' grave gifts. According to Gebühr, certain fittings and ornaments, for instance, could have remained attached to the clothing of the deceased on cremation, and were therefore unintentionally included in the grave.[825]
Bridger divides the artefacts into primary grave goods, those burnt on the pyre, and secondary grave goods, those that remain unburnt.[826] Millett argues that grave goods that remain unburnt were not placed on the pyre and therefore may have been less closely associated with the dead than the burnt objects. Such objects could indeed have been placed in the grave by the mourners, who may have been using their offerings to define their own status and their relationship to the deceased.[827] The conclusions set out in Chapters 5 and 6.6 suggest that the majority of burials within the study area contained primary grave goods (according to Millett's definition), having all been burnt on the pyre. With the exception of some of the unburnt urns, there is almost no other reliable evidence to suggest the addition of further goods to the assemblage after the cremation and during the interment ritual. Certainly no new types of grave goods can be attributed to this category. Therefore, except for residual finds, the grave goods are considered as symbolic gifts to the deceased. The multiple use of the same location for the pyre, and a haphazard collection of the remains, may often have lead to the mixing of grave good assemblages, particularly with regard to the smaller artefacts. This could inevitably lead to the inclusion of, for instance, spindlewhorls, within an otherwise traditionally male assemblage containing weaponry.[828]
In general, from the graves in the study area, the grave goods that were included on the pyre can be divided into three main groups. Firstly, those goods that relate to personal clothing and adornments.

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[824] Sex-specific grave goods are discussed further in Chapter 9.1 below.

[825] Gebühr 1976, 11 & esp. 47-9; Breitsprecher 1987, 62.

[826] Bridger 1996, 262 note 1387.

[827] Millett 1993, 267.

[828] See Breitsprecher 1987, 61-2.

In this category, as well as jewellery and brooches, artefacts such as spindlewhorls and whetstones, for example, can be included as indicated a certain personal status. Secondly, weapons and armour. The evidence suggests, from some of the earlier burials at least, that certain male members of society were burnt with their weaponry, most commonly with their shields. Thirdly, those goods making up a drinking service, or those having been used in a drinking ceremony. Very few vessels can be directly related to eating, whereas drinking vessels are commonly found. In particular, large vessels that can be associated with communal drinking, such as Germanic Forms I, II and V in particular, and decorated terra sigillata bowls of Form 1.2. In 30 graves, these Form 1.2 bowls are also associated with bronze vessels as well as with other imported beakers and cups.[829] The large number of burnt vessels included (as well as the number of sherds) may be evidence for communal drinking, possibly around the pyre, the vessels being placed around the body before cremation. If the evidence does suggest a communal drinking ritual, this would be in contrast to the ritual practised within provincial Roman burials, where the small beakers and flagons relate to an individual drinking service.

The overriding problem in assessing the value of such interpretations remains, unfortunately, the fact that the vast majority of the graves in the study area, and certainly none from the largest cemetery of Rheindorf (A22), were excavated using modern techniques of recovery and documentation. The precise location of a particular artefact within the burial is almost never recorded. Because of the poor quality of the documentation, it is therefore impossible to draw any conclusions as to the moment at which particular finds were incorporated within the burial ritual, either before cremation, or after cremation as part of the interment of the remains.

The secondary burning of finds has been discussed in Chapter 5. Whereas a large number of the finds do show signs of having been burnt on the pyre, the lack of any sign of burning does not necessarily imply that a particular artefact was included at a later stage in the ritual. The fact that some examples of the same finds group were burnt and others not further complicates attempts to make such distinctions. Although the evidence remains inconclusive, it can be argued that the adding of goods, or gifts, to the grave after the cremation of the deceased did not play a major role in the ritual. It may be that all grave goods were first placed on the pyre. An exception to this may be some of the urns which remain unburnt. Many urns, however, do show signs of having been burnt. The choice of which vessel to use as the urn in such cases may simply have relied on which vessel remained the most complete after the funeral pyre had been extinguished.

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[829] See Chapter 5.5.8.

6.7 Distribution of Grave Types Across the Study Area

The total number of each recognizable Grave Type from the study area is presented in Figure 6.3. When considering the distribution of grave types throughout the study area, in general it is clear that all the grave types are represented throughout the region. The main influence on the spatial patterning is the location of the larger excavated cemeteries, most of which are located on or south of the river Wupper (see Figs. 2.3 and esp. 4.1). As has been discussed in earlier chapters, this is more likely to be due to the haphazard nature of their discovery, rather than a true reflection of the contemporary distribution pattern (see Chapters 2,4 and 4.3).

The evidence does show that the graves without pyre remains, that is the *Urnengräber* (Grave Type 1.1) and *Knochenhäufchen* (Grave Type 2.1), are only found in the southern part of the study area, but the small number of graves in question (4 and 10 respectively) and the large number of graves of uncertain type (Grave Types 1.1/2 and 2.1/2 respectively) give little support to such a hypothesis.

The predominance of *Brandgrubengräber* (Grave Type 3.1) is striking. It might be argued that the picture for the region as a whole is overly-influenced by the cemetery at Rheindorf (A22), which contains 60% of the total number of graves. In Rheindorf itself, *Brandgrubengräber* account for 61% of all the grave types, 37% more than any other (Fig. 6.4). It is clear when looking at the larger cemeteries in the region, however, that *Brandgrubengräber* are the largest group on all sites. In Troisdorf (A8) they represent 66% (Fig. 6.5), in Rösrath-Hasbach (A10) 62% (Fig. 6.6), in Bergisch Gladbach (A18) 80% (Fig. 6.7), and in Duisburg-Ehingen (A56) 72% of all graves (Fig. 6.8).[830]

Group One graves, i.e. with a cinerary container (Grave Types 1 and 2), make up 39.5% of all graves in the study area. From the cemeteries illustrated above it is, however, clear that the ratio between the different Grave Types in this category varies from cemetery to cemetery. In addition to the *Brandgrubengräber*, Rheindorf (A22) contains only graves of Grave Type 1 and 2, the majority, 24.5% (64 graves) being of Grave Type 2. The second largest cemetery Troisdorf (A8), in contrast, contains more graves of Grave Type 2 (29%, 10 graves) than Grave Type 1. Within the smaller cemeteries, Rösrath-Hasbach (A10) contains more examples of Grave Type 1 (*c.* 33%, 7 graves). Only 1 example of Grave Types 1 and 2 respectively were found

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[830] In Wahn (A9), the type could be said to predominate, but more than half of the total graves from the cemetery (8 graves) were unidentifiable, in addition to the type comprising only 3 graves (as opposed to 2 *Urnengräber* and 1 *Urnengrab + Brandschüttung*). The value of 50% is therefore not representative for the cemetery. Again, in Niederpleis (A7) 10 of the 15 graves were unidentifiable, thus preventing any comparison.

in Duisburg-Ehingen (A56). Bergisch Gladbach (A18 on the other hand, contained no graves of Grave Type 1, but only examples of Grave Type 2.1 (20%, 5 graves) as well as the *Brandgrubengräber*. Such variations within the structure of individual cemeteries can theoretically be sought in a number of different explanations, for instance, purely chronological, suggesting specific burial rites were more popular in specific periods, or that specific rites were linked to gender or status. External influences from outside the region may be responsible for the introduction of new rites within the Roman period. Alternatively, the choice of a certain deposition rite over another may simply reflect the preference or custom of the local community. Such arguments can only be taken further if evidence from anthropological research into the cremated ashes, combined with an analysis of grave good assemblages, is related to each specific grave type. Further discussion on these points is found in Chapter 9.

6.8 Changes in the Burial Rite Throughout the Roman Period

Cremation, the overwhelming burial rite practised within the study area, was already a well established practise in the second millenium BC amongst Germanic peoples. It continued as the dominant rite of burial throughout the next thousand years and into the historic period. The variety of grave types associated with the rite that are encountered in the Roman period are also found within Iron Age cemeteries (*Urnengräber*, *Brandgrubengräber* for instance, Grave Types 1.1 and 3.1 respectively). The total number of identifiable grave types from the study area have been divided into three phases, in order to see if there is evidence for changes in the burial rite, or the introduction of new burial rites at any phase of the Roman period. In the earliest phase, *c.* AD 50-150 (Fig. 6.9), the picture is dominated by the *Brandgrübengräber*, Grave Type 3.1 (71%). The use of urns, or the presence of separated heaps of cremated bone, is represented by a total of only 28.5% of the graves, with a slight preference (2% more) for the deposition of *Knochenhäufchen* (Grave Type 2.1). By the Middle Roman Period, AD 150-250, the number of *Brandgrübengraber*, whilst still the largest group, appears to have decreased in its relative popularity to 48% of the total. In contrast, the number of graves containing urns or separated heaps of bone has risen to 51% of the total, now with a preference (13% more) being shown for graves containing urns. In the Late Roman Period, AD 250-350, the *Brandgrübengräber* are still in the majority (55%), but there is again a shift back to *Knochenhäufchen* over urn graves, with an even greater incidence than in the earliest phase (24% more). The only site which shows evidence for continuity throughout all three phases is Rheindorf (A22). Since the majority of the graves recorded come from this cemetery, it is to be expected that the evidence for each of the

three phases generally reflects that provided by the study area as a whole (Fig. 6.10). Looking at the different gravefields within Rheindorf in more detail (Fig. 6.11a-b), the earliest gravefields *O*, *S* and *M* (late first - second century AD), all contain a majority of *Brandgrübengräber* and a preference for *Knochenhäufchen* within the *Brandschüttungsgräber*. The second-third century AD gravefields (*W*, *W1*, *W2*, *and W3*) generally show the predominance of *Brandschüttungsgräber* over *Brandgrübengräber*, with a preference for graves containing urns within this group. Within the latest graves in grave field *M2*, the picture changes dramatically, returning to a predominance of *Brandgrübengräber* overall, although with an equal division between the different types of *Brandschüttungsgräber*.

Possible reasons for the variations and changes within the burial rite, as presented above, are discussed in Chapters 8, 9 and 10.

CHAPTER 7 SETTLEMENT EVIDENCE

7.1 Introduction

As has already been said in Chapter 1.3, at the outset of this study it was envisaged that the underpinning of the evidence for the main research objective, an analysis of the significance and development of the *Limesvorland* during the Roman period, would be based on a balanced dataset of material from both burial and settlement findspots.[831] An analysis of the excavated archaeological record made it clear, however, that the settlement data recovered, or available for study, was sparse in both quantity and quality in comparison to the data from burials. As a consequence, very few settlements have been satisfactorily recorded. A total of only 40 settlement sites have been identified in the study area, almost half the number of burial sites (74). The relationship between the distribution of sites and both the modern and the palaeo-landscape has already been discussed in Chapter 2.4. The distribution of sites in other regions of Germania bordering the *limes* suggest that, rather than being a true reflection of the settlement pattern during the Roman period, this unbalanced picture is most likely due to the poor quality of archaeological reconnaissance across the whole study area and the lack of any systematic regional surveys, particularly in the areas with few or no sites. For the central part of the Netherlands, for example, the systematic documentation of archaeological evidence has resulted in a more balanced relation between the number of cemetery and settlement sites (see Fig. 7.1).

A complete list of all the settlement sites within the study area has been given in Table 4.3 and the location of each site is shown in Figure 4.1. The sites are classified as either native Germanic settlements (Settlement Type 1: 37 sites), Roman military settlements (Settlement Type 2: 2 sites), and Roman infrastructural and industrial elements (Settlement Type 3: 4 sites).[832] These Site Types are discussed below.

Where relevant, the finds from the settlement sites have been discussed in Chapter 5. Although the limitations of the material evidence have already been clearly stated,[833] the overall picture presented by the finds does identify particular aspects that can be related to the more detailed evidence gained from the burials.

7.2 Evidence for Germanic Settlement

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[831] Chapter 1.3.

[832] See also Chapter 4.2.2.2 above.

[833] Esp. Chapters 4 & 5.

Very little can be said about, for instance, patterns in the choice of location, settlement layout and houseplans based on the evidence from the study area alone. Comparison with published material from sites belonging to the Rhine-Weser and other northern Germanic cultural groups can, however, provide some useful insights.

During the Roman period, the Germanic settlement pattern was generally made up of either single farmsteads or small hamlets which were occupied over a relatively short timespan.[834] Tacitus' own brief account describes small villages with timber-built houses whose walls were sometimes 'plastered' with brightly-coloured clays. He also mentions the use of hollowed-out underground caves as living quarters.[835]

Within the present study area, indications are that a variety of settlement types did exist, but excavations on a large scale have been very few. No detailed publication exists of any complete settlement site within the study area itself.

Because of the incomplete nature of the evidence from almost all the settlement sites, providing more than a general date range for the start and end of occupation is not possible. With only a very few exceptions, all the sites can be dated within the second (mostly second half) and third centuries AD.[836]

Whilst the intra-site evidence from the study area is sparse, what does exist does appear to fit into the general pattern of settlement provided by other regions within Germania. The coastal region of the northern Netherlands and Germany and the adjoining areas further to the south and east have some of the best excavated sites to date, with a marked degree of settlement continuity from prehistoric times to the present, thereby providing a useful background for comparison.[837]

Between the rivers Rhine and Oder three different house types have been recognized. Firstly, the pre-Roman Iron Age tradition of aisled

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[834] Todd 1992, 62.

[835] Tacitus, *Germania* 16.

[836] B32 and B41 date to the Late Iron Age and Augustan period. B12, B26, and B39 may well date, at least partly, to the first century AD. Possibly B29 and B30, but certainly B33 contain fourth-century material.

[837] A good summary of Dutch and German sites is given in Krüger 1982, 321-330 (including settlement plans); see also Krüger 1988, 81-90 (including settlement plans); Todd 1992, 62-75. Since the beginning of the 1990s there has been a rise in the number of large-scale settlement excavations in the areas north of the Rhine in the Netherlands.

longhouses (*Wohnstallhäusern*) continued.[838] This house type, is not only the best known, but also the most widely distributed of all house types in Germania.[839] Examples have been recognized throughout the Netherlands and the north-west German plains and coastal areas, on such well-published sites as Feddersen Wierde (Kreis Wesermünde) near Bremerhaven in Germany and Wijster (Drenthe) in the Netherlands. Closer to the study area, in the Rhine-Weser cultural zone, these longhouses have been recognized in Ede-Bennekom,[840] Wehl,[841] Didam,[842] Heeten,[843] and Soest-Ardey.[844]

Secondly, in Westphalia and the Elbe-Saale region, also on the site mentioned above, smaller square or rectangular houses (*Wohnbauten*). These vary in construction from the longhouses in that, although post-built, they have no posts within the house interior.

Thirdly, sunken-featured buildings or *Grubenhäuser*. From the second half of the second century, *Grubenhäuser* start to appear on a number of sites including Wijster in Drenthe, the Netherlands.[845] The smaller settlement at Ede-Bennekom, comprising substantial farmsteads and auxiliary buildings, dates from the second to the fourth century AD.[846] On another site with a long occupation history, Frisian Ezinge, in Groningen, the Netherlands, the longhouse tradition continued after the Iron Age, with frequent renewals of the buildings, until the late Roman period when the buildings were replaced by *Grubenhäuser*.[847]

Within the Roman province, *Grubenhaüser* are clearly absent until the late third and fourth centuries AD. Their appearance there coincides with other material evidence for the arrival of Frankish immigrants. Smaller post-built houses as well as *Grubenhäuser* are found in the extensively-excavated first-second century settlement of Haldern

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[838] A possible *Wohnstallhaus* of Late Iron Age tradition was also found at Essen-Burgaltendorf (B32) within the study area.

[839] See Krüger 1982, 322.

[840] Van Es *et al.* 1985.

[841] Koster 1997.

[842] Carmiggelt 1998.

[843] Groenewoudt & van Nie 1995.

[844] Halpaap 1994.

[845] Van Es 1967.

[846] Van Es *et al.* 1985.

[847] The site remains unpublished. A short discription is given in Todd 1995, 64.

(Kreis Rees) near Wesel in Germany, just to the north of the study area. Many sites, for instance Haldern, also had buildings of other functions, such as storehouses.[848]
The more recent excavations of the multi-period site at Soest-Ardey in Westphalia show an especially dense settlement during the Roman period, uncovering the ground plans of second-third century longhouses and fourth century *Grubenhäuser*, along with other auxiliary buildings (eg storehouses).[849]
The precise distribution area covered by each of the three house types is difficult to ascertain, although chronologically speaking, the *Grubenhäuser* are generally recognized as starting at a later date than the longhouses (see above).
There is evidence, albeit of a limited nature, for all three types of houseplans, as well as other auxiliary buildings, on settlement sites in the study area. Of the 37 native settlements recorded, the vast majority of the assemblages, for 23 sites, are based on the recognition of spreads of finds, mainly pottery, either on the ground surface during fieldwalking surveys, or under the topsoil during non-archaeological excavation work.[850] Of the remaining sites, only eleven have any documented evidence for excavated features and of these, nine contain the remains of sunken features or pits that cannot be further identified.[851] Only five settlements have been more or less systematically excavated.[852]
The settlement remains at Troisdorf (B8), close to the cemetery (A8), were excavated by Rademacher in 1907. A number of pits were uncovered, presumably sunken-featured structures, *c.* 4 m in diameter, and *c.* 1 m deep.[853] Hearths were found in two features. There was also evidence to suggests that the daub walls of the structure had been plastered giving a stucco-effect finish.[854]
Within the 4000 m^2 area excavated at Düsseldorf-Stockum (B26), at least fourteen structures and further rubbish pits were uncovered. These

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[848] Von Uslar 1949.

[849] Halpaap 1994, esp. 237-272 for a discussion of the house plans.

[850] These sites are B5, B7, B9, B11, B13-B15, B16, B18-B24, B27, B28, B30, B32, B35-B37, B39, B40.

[851] B6, B10, B12, B29, B31, B34, B38, B40, B42.

[852] B8, B26, B33, B42 and, of the earlier sites, B32.

[853] Neither the number of pits, nor the ground plan or layout of the site, is recorded.

[854] Uslar 1938, 241: "*Verputz aus Kalkmörtel*". See also Joachim 1987, 5. Von Uslar cites this house as a good example of what Tacitus describes in *Germania* 16.

comprised thirteen *Grubenhäuser*, one of which measured 6 m x 5 m with an east-west orientation. One house, measuring 11 m x 5 m and with a row of double posts along the outer wall, was found in the north-west corner of the site.[855]

At Leverkusen-Schlebusch (B42) an area of c. 9000 m2 was excavated in 1996. Here at least four *Grubenhäuser* and a storehouse were found.[856]

At Essen-Hinsel (B33), a site estimated to have covered an area of 6000m^2, including an area for iron production, twelve buildings were identified during excavations in 1966. These comprised houses, storehouses, and buildings of uncertain function. Three different types of buildings were recognized: firstly, simple post-built square or rectangular buildings, not normally with any evidence for sunken floors or features (buildings 5, 7, 10, 11). Secondly, post-built structures, *Grubenhäuser*, with clear evidence for deliberately sunken floors or features across the whole interior (buildings 1, 2, 3, 6, 12) or only across part of the interior (buildings 8, 9). T. The third type is represented by only one building (building 4) a post-built structure with no sunken feature, but with ditches around the walls. Building 9 (*c.* 5.5 m x 2 m), essentially the second phase of building 8 (*c.* 4.8 m x 2 m), is of longhouse form and the largest structure on the site, which may indicate that it had a more significant function.[857]

In general, the evidence outside the study area indicates a gradual development of the settlement structure from the Late Iron Age onwards. At the end of the Iron Age and during the early Roman period excavations suggest that the majority of settlements were small, more family-orientated sites, comprising either a single or double farmstead with auxilliary structures. Particularly from the early third century AD onwards, larger settlement units, next to the traditional smaller ones, began to appear. These, more community-orientated settlements, may be seen as evidence for general changes in the social organization of tribes within this period. The settlement plan from Feddersen Wierde on the German North Sea coast, one of the most extensively-excavated sites, shows clear signs of social differentiation over its five centuries of occupation.[858] The emergence of large communities is also attested in the Netherlands at Wijster. Here excavations have shown a steadily evolving settlement plan, based on the longhouse, from the first century AD to the fourth century AD, culminating in a nucleated settlement with a spatially

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[855] See catalogue entry in Appendix II for further literature.

[856] Frank 1997.

[857] See catalogue entry in Appendix II for further literature.

[858] Haarnagel 1979.

separate large building or farmstead, presumably for the village elder. Further larger settlements include those at Wehl,[859] Heeten,[860] and Ede-Veldhuizen.[861] At Heeten, large amounts of iron production slag and at least seventeen slag-pit furnaces were also excavated. Such evidence is directly comparable to that found at Essen-Hinsel (B33) within the study area. The interpretation of the settlement at Heeten suggests that it fulfilled a more regional rather than local role, due to the extent of the evidence for iron working and production.

7.3 Evidence for Roman Settlement

The physical remains of Roman settlement or activity are extremely sparse within the study area. The apparent absence of military sites, assuming the distribution of archaeological sites to be a reliable representation of the Roman landscape, is not altogether surprising. Garrisons would have been much more necessary to control the riverine routes and valleys into Germania, for instance the Lippe to the north and the lowlying Nieuwieder Basin further south. The hilly ridges of the *Siebengebirge* and *Bergisches Land* along the length of this stretch of *Limesvorland* would presumably have been deterent enough.
Whilst the majority of the stray and isolated findspots do contain exclusively imported Roman material, the very nature of the find circumstances (the material could have been deposited at a later date) means that very little can be used as reliable evidence for activity in the area, much less occupation.
In total, only five Roman sites have been recognized to date. Two of these can be described as unquestionably military in character. The remains of a military camp in Beuel-Geisler (B4) is direct evidence for troop activity in the study area within the second half of the first century AD. The camp lacked any evidence for internal structures. This suggests it was merely an exercise camp or a marching camp in which either tents were used, or insubstantial wooden structures which left very little trace in the ground. A comparable site, apparently dating to the same period (AD 72-105) has been identified just to the north of the study area, at Rüthen-Kneblinghausen along the Lippe.[862] Interpreted as a marching camp, it also contained no visible traces of internal features. Kneblinghausen has been linked to both the Flavian

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[859] Koster 1997.

[860] Groenewoudt & van Nie 1995.

[861] Unpublished.

[862] Berke 1989; Bechert 1995, 61.

offensives against the Bructeri in AD 77/78 and again in the 90s,[863] as well as the Domitian offensives against the Chatti (AD 83-85).[864] It is possible that the camp in Beuel-Geislar should also be linked to either or both of these events.

The most important Roman site is the late Roman frontier fort of *Divitia* at Deutz on the east bank of the Rhine (B17), directly opposite Cologne (*Colonia Claudia Ara Agrippinensium*). None of the excavations within the fort have produced evidence for a pre-Constantinian date for the fort, or any preceding fort or buildings on the same site. The fort at *Divitia* was built between AD 312-315 during the reign of Constantine, and housed a garrison of 500-600 men, including a mounted unit. The fort was clearly built with a twofold function in mind: firstly, the garrison protected the city on the other bank of the river and secondly, the bridge and the fort formed a bridgehead directly into Germanic (now Frankish) territory. The tasks of such a frontier garrison were the surveillance of the enemy, mobile reconnaissance and, if necessary, the undertaking of active military measures against the Franks. The garrison may not have survived skirmishes with the Franks who took Cologne in AD 355, although the fort shows no sign of being damaged at this period. During the reigns of Valentinian (AD 364-375) and Gratian (AD 375-383) strengthening units were transferred from the mobile army to the frontier, with a garrison of Germanic *limitanei* stationed at *Divitia*. It is quite likely that these *limitanei* would have been recruited from the remaining local population within the study area. After the withdrawal of Roman troops from the frontier at the beginning of the fifth century, the fort shows evidence of being manned by Frankish *foederati*, and possibly accommodating some of the civilian population. After the mid fifth century AD, Frankish settlers moved into the fort.[865]

At Königswinter (B1), to the south of Bonn, the reinforcement of the river bank and so-called harbour installations may well be linked to the transport of stone from the nearby quarries on the Drachenfels (B2). The only other evidence for military industrial activity in the area is from Königswinter-Bennerscheid (B41), but this site was apparently no longer used after the first decades of the first century

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[863] Berke 1989, 64.

[864] Bechert 1995, 61.

[865] See catalogue entry in Appendix II for further literature. See esp. Carroll-Spillecke 1997.

AD.[866] Further apparent harbour installations are located just to the north of Bonn, across the river in Schwarzrheindorf (B3). The site, comprising the remains of a harbour wall and stone buildings, may well be linked to the legionary fort at Bonn, which is almost directly adjacent, on the right bank of the Rhine. Bridgehead counterpoints are known from other military establishments along the major rivers, for instance at Velsen in the Netherlands.[867]
A most interesting single find in the light of the discussion on the nature of the Roman activities on the right bank is the inscribed Roman boundary stone or marker found in St. Augustin- Niedermenden (C9) in 1970. It was found in secondary position in the bed of the river Sieg at a distance of approximately 3.5 km from the (modern) Rhine. It is thought originally to have been positioned in the immediate vicinity on the river bank and because of erosion to have fallen into the river.[868] The inscription reads:

[l]egio prim[a] / Minerv[ia] / [p]ia fideli[s] /
prata / [A]urelian[a] / [a]dampliavat

which can be translated as: " The 1st legion Minervia pia fidelis has enlarged the meadows which were named after Aurelius." The last name probably refers to the Aurelian imperial family, which makes a date of the stone at the end of the second or first half of the third century AD most likely. If we assume that the conclusions drawn from the find circumstances are correct, the inscription forms the clearest evidence so far for Roman territorial claims on or ownership or use of lands on the right bank of the Rhine. Some have interpreted the find as extra support for the existence of a widespread *Nutzland*, solely for military use, in the *Vorland* area.[869] Others, on the basis of the strongly Germanic composition of the rest of the archaeological evidence are hesitant to go that far.[870] The find in itself proves, in my opinion, no more than that there was a need for extensive farm lands, especially directly opposite the larger military establishments like the legionary camps Neuss, Vetera and, in this case Bonn. If the pressure was high enough on good quality cultivated lands on the left bank, and this was more than likely the case bearing in mind the

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[866] B42: See Chapter 3.2 and Gechter & Gechter-Jones 1997. The location of the well-known military tile industries of the *tegulae thransrhenanae*, (known from tile stamps) is still unknown. Most authors agree that it was probably located in the area opposite *Vetera* north of the confluence of the Lippe, just north of the study area.

[867] Hessing 1995, 99-100.

[868] von Petrikovits 1974, 28.

[869] For instance von Petrikovits (1974) himself.

[870] Kunow 1987, 71-74; Kunow 1990.

density of population in the second century AD (see fig. 2.2), adjoining areas on the right bank could have been used. In particular, the grazing of cattle and horses on the low-lying unoccupied basin soils in the Rhine valley could easily be supervised in summer from the camps. Some mooring facilities opposite the camps are in such cases also useful. The meadows would have stretched to 1 km or so eastwards from the Rhine. Near the mouth of tributaries like the Sieg it can be expected that these lands could be extended somewhat further upvalley. Following this model and taking into account that other indicators for permanent occupation such as burials from a more provincial or military type are entirely lacking, a substantial civil or military presence on the right bank is still unlikely. Diplomatic relations and the nearness of the *alae* and legions on the other side ensured a peaceful coexistence of both Germanic and military land use. Because of the lack of properly-documented settlement sites, including archaeozoological and archaeobotanical information, it is, in theory, still possible that the Germanic agricultural economy in the *Vorland*, on the instigation of the Romans, was transformed to have a mainly supply function for the Roman army. However, in other areas in the frontier zone where such a function has been proved, it apparently had such far-reaching consequences on other aspects of these societies, that the change in the whole of the material culture was far greater than there is evidence for in the study area.[871]

7.4 A Comparison of Cemeteries and Settlements in the Study Area

An inherent problem in comparing cemetery and settlement evidence is linked to the 'bias' in the archaeological record. From the 75 cemetery sites and 37 native settlement sites, only three cemeteries can be reliably linked to a nearby settlement. Both settlements and cemeteries lie, at the most, only a few hundred metres apart.[872] These are the Troisdorf sites of A8 and B8, and the Duisburg-Ehingen sites of A56 and B29, and sites A19 and B42 at Leverkusen-Schlebusch. For a small number of sites a link can only be described as probable: A5 and B5/B6 in St. Augustin-Hangelar, A10 and B11 in Rösrath-Hasbach, A18

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[871] A well documented example (Van Es & Hessing 1994; Kooistra 1996, 369-80) is the transformation that took place in the Batavian rural settlement of De Horden, at a distance of ca. 1 km from the Roman fort at Wijk bij Duurstede, in the first and second centuries AD. It is thought that this originally largely self-sustaining late Iron Age mixed agricultural hamlet, had been transformed into a proto-villa type settlement specializing in horse-breeding for the Roman army by the middle of the 2nd century AD.

[872] Other settlements in the Rhine-Weser cultural zone, such as Wijster, Wehl, and Didam, for instance, all lie within a maximum distance of 400 m from the adjoining cemetery (see notes above).

and B20 in Bergisch Gladbach, A74 and B40 in Voerde-Friedrichsfeld and A55 and B28 in Duisburg-Huckingen. Disappointingly, no settlement or settlements can be associated with the cemetery at Rheindorf (A22). Three general factors are considered to have played a role in the choice of site location for both settlements and cemeteries.
Firstly, the location of cemeteries may have been influenced by cosmological factors which may explain why some sites were located close to or within the area of earlier Iron Age burial grounds. This theory is discussed in more detail in Chapter 8.
Secondly, the landscape and topography were crucial considerations. The study area stretches across three geographical units, the *Niederrheinische Bucht*, the *Niederrheinische Tiefland* and the southern bank of the river Lippe.[873] The sites are fairly evenly spread across the region from north to south, the overriding locational factor being the orientation of the sites to the Rhine within the narrow strip of land, stretching no more than *c.* 10-15 km east of the Rhine, which remained at or below 75 m above sea level. Outside this strip, the landscape almost immediately began to change into the less hospitable hilly ranges of the Bergisches Land. Very few sites are found at a height of 75-150 m above sea level. Both cemeteries and settlements are located on the sandy dunes and coversands close to the banks of the major and minor rivers flowing east-west into the Rhine.
The third factor which may have influenced the choice of settlement location was the policy that the Roman province itself held towards the *Limesvorland*. Historical sources mention the clearance of areas on the right side of the Rhine by Vespasian and again under Constantine.[874] As an extension of this it may well be that, particular areas on the right hand banks of the Rhine were specifically designated for resettlement by the Roman authorities. The fact that certain clusters of sites are found adjacent to important provincial centres, such as the legionary forts at Bonn (*Bonna*), Cologne (*Colonia Clavdia Ara Agrippinensivm*), Neuss (*Novaesivm*), Krefeld-Gellup (*Geldvba*), and Moers-Asberg (*Ascibvrgivm*) might support this theory. Leaving biases in the archaeological record aside, this proximity may have been enforced as a means of control. On the other hand, this distribution pattern, may have been instigated by local choice, in order to be near the local markets and population centres.
When comparing the material assemblages from both types of sites, the very nature of the archaeological record associated with burial sites (individual graves, separately documented) as opposed to settlement sites (large scale *planum* excavations, with incomplete documentation and analysis) means burial sites are 'easier' to study. The material

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[873] See esp. Chapter 2.1.

[874] See Chapter 3.3.

assemblages of both settlements and cemeteries show a number of similarities in their composition. The majority of material groups and forms, both imported and native, are found on both types of site. It is possible, however, to identify some significant differences within the material assemblage. Military equipment is one category of find that only occurs in burials. A contrasting picture is also given by the frequency that certain finds groups occur in burials, as opposed to their relative uncommon occurrence in settlements. It seems apparent, for instance, that terra sigillata bowls of Form 1.2 are encountered much more frequently in burial contexts than in settlements. In general, as well as military equipment, all other metal artefacts, including bronze vessels and brooches, are more frequently encountered in a burial context. An explanation for this may well be that metal within the settlement context was recycled, whereas within the burial ritual, artefacts were taken out of their more usual sphere of use and could not be recycled.[875] Without any reliable supporting statistical data, such interpretations remain only tentative. Clearly, only the excavation of future settlement sites with their associated cemeteries using modern recording techniques can shed more light on differential patterns of distribution for particular finds groups, providing more evidence for a better understanding of the function of settlements and the rituals associated with burials.

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[875] See Chapter 5, esp. 5.5, 5.7-8, & Chapter 6.6.

CHAPTER 8 CHRONOLOGY AND CONTINUITY WITHIN THE STUDY AREA

8.1 The Establishment of a Periodization for the Study Area

A necessary starting point for a discussion on the dating of sites and the evidence for continuity and change in the study area, is the establishment of a chronological framework, or periodization, appropriate for the study of the Roman Iron Age within the study area. Various reliable chronologies have been devised for both Germanic Europe and the Roman province. Considering the location of the study area within the frontier zone adjoining both cultural groups, one would initially expect this fact to make the establishment of a periodization all the easier. Unfortunately, this is not the case, as will be discussed below, after a summary of the existing state of research on this subject.

8.1.1 A Periodization for Germania

Over the last century a great many chronologies, based on both relative and absolute dates, have been put forward for the classification of the Roman Iron Age in Germania. The schema for areas further east in Germania are discussed below although, it is immediately obvious that, considering the location of the study area directly on the *limes*, they can be applied less precisely here than in the areas further east for which they were initially intended. Only those schema which have some specific bearing on the interpretation of the material evidence from the study area itself, as well as those considered to be important contributions to chronological research in general, are included. These are presented in Figure 8.1.[876] Attempts to assimilate all the various terminologies and classifications can quickly lead to confusion. Whilst the relative chronology of Germanic material has, in essence, been long-established, relying on the fibulae typologies set out by Tischler, Montelius and Almgren,[877] the conceptions of individual authors about absolute chronology show many more differences of opinion.[878]

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[876] For a fuller overview see Eggers 1955, 233 Abb.12; Godlowski 1970.

[877] Tischler 1878, 14 and further; Montelius 1896, 215; Almgren 1923. 8.1.

[878] For a comprehensive discussion and criticism of all literature on this subject before 1955, see Eggers 1955, esp. 236-8 (or 1976: the same article republished, unchanged except for the addition of a postscript). More recent discussions include Kunow 1983, esp. Chapter 2, as well as a brief summary of the literature in Von Schnurbein & Erdrich 1994, 5-6, esp. note 3.

Essential to the discussion is the fact that, for the whole of Germania, there is no possibility of providing an absolute date based on the native find groups. All absolute dates are based on either historical sources, the dating of coins and terra sigillata, or other Roman imports with a fixed date range for their production. The underpinning foundation of all the schema is, however, to what extent the provincial Roman date for an object's circulation can also be accepted as the date given for its circulation in Germania. This includes the evaluation of such factors as the pace at which stylistic and cultural trends spread and reached particular regions and the variation between methodological attitudes. The possible conservatism and resistance to accepting foreign influences in some areas is rather difficult to assess, but attempts to do so have basically divided researchers into two camps: the followers of a so-called 'short chronology'and the followers of a 'long chronology', the difference being the proposal of a short or long period of circulation for Roman imports between the date of their production and the date of their passing out of use in German territory.

Eggers has presented the fullest, most consistent system of absolute chronology for the Roman Iron Age to date, drawing on a wide and diversified basis of sources. His hypothesis supports a short period of circulation for Roman imports.[879] Following Norling-Christensen[880](a supporter of the 'short chronology') and disagreeing with Ekholm[881](a supporter of the 'long chronology'), Eggers referred to the frequent association of certain Germanic artefacts with certain Roman imported wares, primarily bronze and glass vessels, in a selection of 31 burial contexts[882] as a tool for the establishment of Germanic cultural horizons and as proof of a 'short chronology'. Since he could establish that new Roman import forms were occurring alongside form changes in the Germanic assemblage, he believed that with the help of Roman imported vessels, absolute dates could be given to each Germanic horizon. The absolute dates were mainly taken from the well-dated sites along the Roman *limes*, as well as relying on the chronologies of Roman coins, terra sigillata and glass vessels.[883] Although Körner criticized his conclusions only two years after they

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[879] Eggers 1955.

[880] Norling-Christensen 1940, 140; 1944, 28 and further.

[881] Ekholm 1943, 31ff; 1945, 273ff.

[882] Eggers 1955, 205, Abb.6.

[883] Kunow (1983, 16 note 69), however, states that whilst Eggers did use these chronologies alongside the dating evidence from *limes* sites, he paid little consideration to their conclusions.

appeared in print,[884] Eggers' absolute chronology, based on an A, B, C *Stufe* or phase system, has essentially remained the cornerstone in Germanic studies and has been referred to in this study, particularly since he includes the material evidence for Roman imports from the study area within his research. Particularly relevant for this study are the *Stufe* B2 (50-150 AD), *Stufe* C1 (150-200 AD), *Stufe* C2 (200-300 AD), *Stufe* C3 (300-350 AD).

In his doctoral thesis on Roman bronze and glass vessels imported into Germania libera, Kunow reassesses the underpinning premise of Eggers' methodology for the early Roman period.[885] Although he supports the general idea of a short period of circulation, Kunow's main criticism is that, whilst Eggers' conclusions remained attractive and persuasive, the production periods he gave for Roman imports were much too short, and new examples of vessels were constantly being found both within and outside the empire to indicate longer circulation periods.[886] The tenet of Eggers' research could only be correct if the Roman forms could be seen to be as typical for the Germanic horizon as the German material itself, i.e. if their development and change could be seen to proceed at the same pace. Kunow states that this was clearly not the case. As a rule, Roman vessel forms were made in the empire during a period spanning several Germanic horizons, even if (on the basis of present evidence) they are only found within one horizon in Germania. Roman vessel forms were much more long-lived than the much faster changing German bronzes, such as fibulae and drinking horns and, as a consequence, cannot generally be used to establish the beginning or end of a Germanic cultural phase. Only the much more precisely dated imports such as stamped bronze, terra sigillata and short-lived fibula forms can be of use to give absolute dates.[887]

Recent research has redefined the absolute dates for Eggers' *Stufen* B2 (now 70/80-180 AD) and C1 (now 180- 310/320 AD).[888]

Godlowski suggests, with regard to the Late Roman and Early Migration period in Central Europe, that the constant recurrence of the same combinations of forms and stylistic features forming universal horizons both in the case of native wares and Roman imports, implies that changes were occurring at basically the same rhythm over

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[884] Körner 1957.

[885] Kunow 1983, esp. Chapter 2. Kunow, as well as offering a detailed criticism of Eggers' work, also cites the relevant literature and discussion on the subject since 1955.

[886] Kunow 1983, 15-17.

[887] Kunow 1983, 113.

[888] See Joachim 1987, 15, esp. notes 71-2.

extensive areas.[889] He sees the unifying influence of the Roman civilization, the earlier La Tène substratum, trade and military contacts that were unusually active at that time, and frequent migrations of whole tribal groups as being the causal factors. Although there may perhaps have been some delay in the acceptance of new trends in Northern Europe, being further removed from the most active cultural centres, Godlowski proposes that there is no essential difference in the chronology of the Late Roman period in Northern and Central Europe, and that these should be considered within the same system.

However, Godlowski accepts that there are too few reliable points of reference to make absolute chronology more precise. The dating of Roman period finds in Central Europe relies on two categories of sources: terra sigillata and coins, the dating of other Roman imports being too vague to form a proper foundation. A limitation in this respect is the chronology of terra sigillata which is not reliably established, particularly for the later Roman period.[890]

8.1.2 A Periodization for the province of *Germania Inferior*

The location of the study area immediately adjacent to the *limes* suggests, at the very least, a close relationship with the province, if not actual inclusion within it. This means that classifications for the periodization of the provincial Roman era ought to be of some relevance.

Those used in the past have been traditionally based on purely historical horizons.[891] Willems' discussion of the Roman Lower Rhineland and Eastern River Area of the Netherlands is referred to extensively here, being seen as one of the most useful summaries of current research and the inherent problems.[892] Caesar's campaigns between 57 and 51 BC are usually taken as a relevant boundary between the Iron Age and Early Roman period along the Lower Rhine, but as Willems notes, whilst these events must have disrupted native society, as yet there is no archaeological evidence for Caesar's activities in the area, nor is there anything known of the period 50-12 BC.[893] The arrival of Drusus in 12 BC, to prepare for the German campaigns of Augustus, is seen as a more suitable date for the beginning of the

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[889] Godlowski 1970, 98-100.

[890] Godlowski 1970, 101. See also Chapter 5.2 above.

[891] See also Chapter 3.3.

[892] Willems 1986, 357-460.

[893] Willems 1986, 23.

Early Roman period in the Rhineland and Eastern River Area (see Fig. 8.1). A process of interaction had begun at this point, although its tangibility in terms of archaeologically testable hypotheses is minimal in its early stages.[894]

One suitable dividing line between the Early and Middle Roman periods is seen as being the Batavian revolt of AD 69-70 which Willems describes as the final episode in a process of consolidation, after which the blessings of *Pax Romana* could finally be enjoyed.[895] Although Willems chooses the recall of Corbulo from his expeditions across the Rhine by Claudius in AD47, generalized to AD 50, as the end of the Early Roman period, a decision which meant the abandonment of expansionist plans and the consolidation of the frontier system along the Rhine, his other suggestion of *c.* AD 70 is viewed for the present research as a more convenient boundary, especially when trying to recognize it archaeologically, since this division of the early from the later periods would be synonymous with pre-Flavian to Flavian transition which is also a major division in typochronological schemes. It can also be argued that the emergence of a clear military and administrative structure within the province during the Flavian period and the integration of the area into the empire exerted a significant influence on the lives of the inhabitants.

For the end of the Middle and beginning of the Late Roman Period it is difficult to choose a specific date which was clearly a turning point. Here it seems sensible to agree with Willems who uses a generalized date of AD 270, signifying the death of Postumus in AD 268.[896] After his death, the old system that he had tried to keep going came to an end. The last decades of the third century saw the onset of completely different military, administrative, social and economic circumstances. For the end of the Late Roman period historical information is sparse but not absent. Willems marks the reign of Honorius as the last time that any central authority was displayed in the province. Either the crossing of the Rhine by the Vandals in AD 406 during his reign, or his death in AD 423 can be taken as the final turning point.

8.1.3 The Application of Current Periodizations to the Study Area

In assessing the two methods of periodization as summarized above, their greatest drawback is clearly the lack of any correspondence between the two approaches. The historical-based framework for the province is in sharp contrast to the object-based frameworks for Germania. None of the historical events recorded in the province are

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[894] Willems 1986, 24.

[895] Willems 1986, 24-5, who also cites Van Es 1981, 215.

[896] Willems 1986, 26-7.

explicitly linked to contemporary changes in material culture.[897] Therefore, even though the study area is situated within the frontier zone adjoining the province, the lack of any reference to archaeological objects, in particular developments within pottery forms, means that a purely historical framework cannot be directly applied to the study area. The object-based periodization developed for Germania are more useful in that many of the same objects occur in the study area. The problems occur, as already implied above, when one attempts to apply too rigidly chronologies developed for regions much further east. The very proximity of the sites to the imperial frontier supports a much shorter circulation period (a 'short chronology') for Roman imports, not least because of ease of access and contact with the province.[898]

What is understood by a short circulation period in relation to dating grave goods found within burials can, however, vary depending on the type of artefact, the material it was made of, its primary function, its secondary or even tertiary function in the burial ritual and possible additional values that can be ascribed to it. Pottery in general, for instance, is perishable as compared to metal objects and a lifespan of one or two decades can hardly be expected under normal circumstances. The evidence from the burials in the study area, for example, shows that all the more or less complete terra sigillata bowls of Form 1.2 were found in graves dated, on the basis of other finds, before or around the latest suggested date for the production of these specific forms.[899] This supports very much the concept of the short chronology. Fragments of the other bowls of the same form, however, are still present in graves dated after AD 250/260, dated on the basis of associated colour coated beakers with barbotine decoration (Form 5).[900] Even in graves dated to the fourth century AD, small sherds of Form 1.2 bowls are present. In these contexts, however, the provenance of the sherds from the graves is uncertain

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[897] One important exception is Gechter's (1979)work on brooches, but this applies to the earlier Augustan period which has little relevance to the present study.

[898] See, for instance Joachim 1987, 10, where he puts forward a short period of circulation for terra sigillata within the cemetery of Troisdorf (A8), based on the proximity of the province. For Roman imports see Chapter 5.

[899] The generally accepted end date for East Gaulish terra sigillata production, with the exception of Argonne wares, is set around AD 270.

[900] See A22 Grs.4, 5, 6, 12, 25, 249.

because of inconclusive documentation.[901] This could indicate either a longer than average lifespan for certainly valuable or highly-prized pots like the highly decorated terra sigillata bowls, or alternatively a certain secondary value for sherds of terra sigillata in daily life or burial ritual after the pots had broken,[902] or finally, the intrusion of residual sherds (tertiary use) from older pyres into younger grave assemblages. It is on the basis of this evidence that a broader end date is given for a grave when its dating rests on only a single datable imported object or fragment.

8.2 Evidence for Continuity from the Late Iron Age

The problem of defining the Late La Tène within the study area, in contrast to the abundant remains from the Hallstatt period and evidence from the earlier La Tène periods (A-C), has been discussed in Chapter 3.2. To postulate that the lack of material, either from settlements or burials, that can be dated with certainty to the last half of the first century BC, that is La Tène D2-3, indicates a break in continuity in the settlement pattern, or a population decline, would be at best simplistic, and possibly inaccurate.
Clearly there is a need for research into the identification and definition of new findspots both within the backlog of unpublished museum and private collections as well as in the field. Equally, a reassessment of the chronology of the known Late Iron Age sites in the study area may be necessary, for example, for the end dates of the Late La Tène settlement at Porz-Lind,[903], the fortified settlements[904] of Bensberg-Erdenburg (covering an area of 2.5 ha) near Bensberg,[905] and the Petersberg (covering an area of 7.5 ha) near

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[901] These small sherds of terra sigillata Form 1.2 are documented for the fourth century graves (A22 Gr.27, A22 Gr.31) but were not found in the inventory when doing this research (see catalogue entry under ii). In the inventory of A22 Gr.264 another Form 1.2 sherd was found, which was never mentioned in the original publication (see catalogue entry under iii).

[902] See, for instance, Brandt 1983 on the distribution of terra sigillata "pick-ups" (small sherds) from the Tiberian/Claudian forts in Velsen (province of North Holland, the Netherlands) over first and second-century native rural settlements after the dismantlement of these forts by the Roman military.

[903] Joachim 1980; 1982a, 161-2.

[904] For terminology see Roymans 1990, 194-9 and Fig. 8.12.

[905] See Joachim 1974, 67-8, Abb.7-10, and 81 note 38 for further literature.

Königswinter,[906] as well as a more precise dating for the group of twenty burials from Rheindorf[907].
Two brooches may be the only published artefacts from the region that could possibly be dated within La Tène D2-3. The brooch of Form A4.1 in A22 Gr.237 can be dated earlier than the first century AD, although the lack of any other associated artefacts apart from the cremation itself hinders a satisfactory interpretation of the grave.[908]
A hoard found close to Grs. 2, 3, and 4 in Troisdorf (A8) apparently contained a Nauheim-type brooch dating to the Late La Tène period, although most recently Joachim has seriously doubted the reliability of the find circumstances and all previous publications of the find. He notes that other artefacts apparently found in the same assemblage, have parallels from other cemeteries that date to a much later period (Eggers' *Stufe* C1/2).[909] Rademacher had previously mistakenly identified the hoard as the remains of a Sugambrian grave, dating before the resettlement of the tribe to the left bank of the Rhine by Tiberius in AD 8.[910] Werner suggests the brooch does date to the period immediately preceding the Roman period, the form itself not appearing before 50 BC and being superceded by new forms such as the Aucissa brooch in the Augustan period.[911] Gechter, in contrast, states that the small number of brooches found to date does not enable the construction of a reliable date range for its use. He goes on to testify to the longevity of use of the brooch type, stating that examples have been found in the Roman period forts in Haltern and Neuss.[912]
At present, with due regard to the inadequacies and limitations of the material record available for analysis, it is true to say that no cemetery within the study area has conclusive evidence to suggest a continuity of useage from the Late Iron Age into the Roman period. Of all the 75 known Roman period burial sites within the study area, the recorded evidence suggests that only 20 (27%) of these sites were located either in, next to or very close by an earlier Iron Age

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[906] Kersten 1937; Kahrstedt 1950, 64 note 8; Joachim 1982b, with earlier literature.

[907] Von Uslar 1964.

[908] See Catalogue A22, Gr.237 and Chapter 5, esp. 5.8.2.5.1.

[909] See Joachim 1987, 21.

[910] Rademacher 1922, 221-2.

[911] Werner 1955, 173.

[912] Gechter 1979, 77-8.

cemetery.[913] Of these 20 sites, 5 (25%) were singularly-occurring burials (Burial Type 1), 8 (40%) were cemeteries of less than 5 burials (Burial Type 2) and only 7[914] (35%) were cemeteries containing 5 burials or more (Burial Types 3 and 4). The sites are all listed in Table 8.1.

Only 8 (40%) of the sites were within or near La Tène period cemeteries.[915] Of these, only 3 can be dated to the last century BC, that is La Tène D,[916] but none with any certainty to the La Tène D2-3 period. Only in Rheindorf is there real evidence for the use of the same location. Three Roman period graves (Grs. 270, 271, and 272) were found within the group of Late La Tène burials, located just to the south of the middle group (M) of Roman period graves.[917] The three graves, however, date between the second half of the second century or early third century AD, meaning a gap of at least three hundred years between the two phases.[918] The recent discovery of two late Iron Age settlements (B32 and B41) in the study area containing imported Roman pottery dating to the Augustan period have been discussed in earlier chapters.[919] They also offer some new insight into the continuity problem. Both sites seem to exist in the La Tene D3 period and continue into the first decades of the first century AD. From the available evidence it becomes clear that the occupation breaks off before AD 20, and that both sides were not reoccupied, or in one case possibly at a much later stage.[920] From the assemblages recovered from the 40 settlement sites dating from the late first century AD onwards, only 5 (12.5%) contained earlier Iron Age material (see Table 8.2). Bearing in mind the incomplete nature of the record the observations above lead to the conclusion that there is no clear evidence for

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[913] Inevitably, the reliability of these numbers is severely constrained by the *ad hoc* manner in which such finds were recorded.

[914] A40 is included here, although the number of burials is not certain (Burial Type 2/3).

[915] A7, A13, A15, A16, A19, A22, A54, A56.

[916] A13, A19, A22.

[917] See von Petrikovits & von Uslar 1950; Herrnbrodt *et al.* 1955-6; von Uslar 1964.

[918] There is no published plan showing the location of these graves. For further discussion on the continuity of Rheindorf from the Iron Age onwards see also 8.5 below.

[919] See for instance Chapter 3.2, 7.3 and 8.2.

[920] There is evidence for a second-third century Germanic cemetery on site B32.

continuity between *c.* AD 10-20 and the last decades of the first century AD. Krause, however, does put forward a case for continuity from the Hallstatt to Carolingian period (certainly in the surroundings) for the site of Duisburg B29.[911]

There is no published research for the Rhineland that deals with the problem of continuity in detail. An interesting model is, however, put forward by Roymans working in the Meuse-Demer-Scheldt region (hereafter MDS region) of the southern Netherlands.[912] In his article, Roymans presents a model for continuity based on both the physical and cosmological aspects within the regional landscape as a whole. The model deals with the history, or what he refers to as the 'cultural biography', of a landscape. It attempts to trace general patterns in the culture-bound perception of the landscape from the late prehistory to the modern period and to gain an insight into transformations which have occurred through time. Specifically relevant in this context is the hypothesis that the perception of landscape was experienced more in mythical terms. Roymans puts forward the notion of a sacral, cosmologically-embedded ordering of space that can be applied to both pre-Christian (Celto-Germanic, Roman) and later Christian cultural traditions. The model supposes a large measure of continuity, not so much within a chronological framework, but rather from the point of view of native (tribal) ideologies and attitudes. The model is based on the fact that, in the MDS region, approximately half of the presently-known native-Roman cemeteries are situated on or alongside an urnfield.

Roymans suggests that the general pattern indicates a positive appraisal and appropriation of the past landscape by the native-Roman population. The fact that the prehistoric urnfield cemeteries seem to have been fully incorporated into the native-Roman cultural landscape by the population is taken to imply that their conceptions about sacred space and the manifestations of the divine in the landscape were very similar to those of the pre-Roman population. The status of urnfields as territorial markers and their role in symbolising the descent, ancestry and identity of a local group still constituted a core element in the mythical ordering of the Roman period landscape. In theory, the idea that archaeologically visible sacred places would have acted as focal points for the ordering and interpreting of the surrounding landscape, one of the main criticisms of Roymans' model must be the lack of evidence for the use of the urnfields as a burial

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[911] Krause 1982a, 96-7, 110-1, 113-4 nos. 15-17.

[912] Roymans 1995a, 2-24.

location from the sixth-fifth centuries BC until the Roman period.[923] In spite of the hiatus of some five hundred years, Roymans does not think that the perception of the urnfields changed in this period, he explains their abandonment as being primarily due to a demographical drop.[924]

In contrast to this theory, Fontijn puts forward new evidence for continuity from the Early Iron Age based on the results of the large-scale excavations in Nijmegen over the last decades.[925] He suggests that there are indications that changes occurred in the meanings attached to urnfields in the Middle and Late Iron Age. Two clusters of Middle Iron Age graves were identified but, significantly, were spatially separated from the earlier urnfield. He also notes that the Middle and Late Iron Age graves around Nijmegen were all loosely scattered or clustered in small cemeteries. His explanation for this new phenomenon is that a change occurred in the Middle and Late Iron Age in the role of graves in structuring the landscape. The large size of the urnfields stressed both the collectivity of the local group as well as the individuality of the group member. From the Early Iron Age onwards, the collective aspect seems to decrease. The monumentality of graves also decreased (chieftains graves being the only exception). Burial mounds were increasingly replaced by flat burials. Although the evidence is as yet too scarce to be conclusive, Fontijn's research suggests that the low numbers of graves for these periods in the southern Netherlands may have more to do with a present-day inability to recognize graves in the field rather than Iron Age population decline.

The present state of knowledge for the study area means that the contrasting models of both Roymans and Fontijn can equally have relevance for an understanding of the study area. The situation for the reuse of urnfields in the Roman period in the MDS region as presented by Roymans compares with that of the study area where the link between urnfields and Roman period cemetery is encountered even more frequently: with the exception of A13, all the burial sites were within or near extensive Hallstatt urnfield cemeteries (95%). In three interesting cases the Roman period graves were 'secondary' burials, apparently deliberately dug into the burial mound over the Hallstatt period primary burial.[926] Equally, the spatial separateness of the

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[923] Comments on Roymans' article are published by Bender 1995, 25-27; Gurevich 1995, 28-30; Lemaire 1995, 30-32, with a further response by Roymans: 1995b, 32-35. See also Fontijn 1996, 77-87.

[924] Roymans 1995a, 7-9 & note 3.

[925] Fontijn 1996, 77-87.

[926] A9 Gr.11, A15 Gr.1, A19 Gr.1.

twenty Late La Tène burials in Rheindorf can be viewed in the light of Fontijn's hypothesis. The reliability of either model can, however, only be properly tested after a systematic survey of the find material already excavated is carried out, combined with more field work. The reasoning behind one important point put forward by Roymans still remains unclear. After a break in use of approximately five hundred years, whether it be due to depopulation or a new choice of cemetery location, why were the urnfields chosen to be 'reincorporated' into the landscape as the locations for the new cemeteries during the Roman period?
Due to the recent discoveries of sites B32 and B42 the scarcity of material from the latest stages of the Iron Age and the beginning of the Roman period may be put down to a lacuna in research, and not to a complete depopulation of the whole study area in this period. The historical sources which note Julius Caesar's systematic destruction of existing tribal structures, involving the extermination of the Eburones in 53 BC and the movement of tribal groups like those of the Ubii, Chatti and Sugambri in the following decades could be evidence supporting the possibility of large-scale migration of the local population in the study area in the same period, resulting in a more or less complete depopulation around the second decade of the first century.[927] Chronologically, there seems to be at least an apparent correspondence with the historically known movement of elements of the Sugambri from the left to the right bank of the Rhine. The archaeological evidence for the introduction of new pottery and brooch forms, towards the end of the first century AD at the latest, also suggest a break from earlier Late Iron Age/Early Roman traditions.[928] Kunow sees this as being clearly the result of new immigration.[929] There might also be a case for the idea that, at least in some cases, Iron Age burial grounds were recognized by the new immigrants and reused to strengthen and legitimize their own territorial claims.[930]

8.3 Continuity within the Roman Period

8.3.1 The Limitations of the Archaeological Record

The dating of the Roman period finds groups has been dealt with extensively in Chapter 5 and on the basis of this, the evidence for the date or date range attributed to individual sites is set out in

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[927] See Chapter 3.2.

[928] See Chapter 5, esp. 5.2-3 & 5.8.

[929] Kunow 1990, 89.

[930] See also Chapter 10.

detail in the catalogues, as well as being presented here in Tables 8.2-8.4 for cemeteries, settlements, isolated, and stray finds respectively. A summary of the salient points rather than further detailed discussion per site is therefore all that is deemed necessary here.[931]

The relative chronology associated with the Germanic pottery is useful only in that it can indicate a broad date range for a site. As stated above, the absolute chronology of all the Germanic as well as the Roman sites relies on the dating of Roman imports, especially pottery. The imports, however, present a number of significant limitations. For instance, the date range attributed to a particular imported pottery form, even for terra sigillata if the potter is not known, is often too wide to enable very close dating of a particular. Such a lack of data can inhibit chronological distinctions to be made between within or between cemeteries.

Quantitatively, Roman imports do not cover the whole period of research within the study area and are also not present on every site. The earliest sites in the study area traditionally have very few or, quite often, no imports within their assemblages. At the present, the earliest sites containing Roman imports, primarily terra sigillata, cannot be dated with any reliability before the last quarter of the first century AD. A later, early second century AD date, can equally not be ruled out. It may well be that a number of the early graves or settlement sites with only Germanic pottery (diagnostically with form I vessels) should be dated earlier.

Although, in comparison, the number of imports from second and third century AD sites is in general much higher, the spectrum remains narrow, giving limited scope for dating. Within the third and fourth centuries AD, the number of imports, within burial contexts in particular, is again very small. Except for the rare inclusion of a coin, absolute chronology is forced to rely too heavily on a very limited spectrum of pottery forms, principally the colour-coated beakers. For the late second and third centuries, Oelmann's publication of vessel types found in the Roman fort of Niederbieber, Rhineland-Pfalz, is still traditionally referred to as the standard reference for Roman pottery in the Rhineland.[932] Even though his work was published more than eighty years ago, there are still relatively few works that have provided reliable typologies that can carry some of the more common forms over the 'mental block' of AD 260 (the end date of the fort at Niederbieber) securely into the fourth century AD.

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[931] A brief summary of the datable sites is included in Kunow 1987, 69-70; 1990, 89.

[932] Oelmann 1914.

8.3.2 Dating the Sites

In total, 175 sites have been identified in the study area. This comprises 75 burial sites (43%), 42 settlement sites (24%) and 58 isolated and stray find sites (33%).[933] Analysis of the information in Tables 8.2-8.4 clearly shows that of these 175 sites, only 94 sites, scarcely 55%, could be closely dated, due to the constraints discussed above, as well as the general problem of inadequate documentation. Of these 94 sites, 44 (47%) are burial sites, 26 (28%) are settlement sites and 24 (25%) are isolated and stray find sites.

The datable sites can be divided between four broad phases and are represented on the relevant distribution maps:[934]

- late Iron Age - early first century AD (*Stufe* A/B1);
- the first - early/mid second centuries AD (*Stufe* B2);
- the second - early third centuries AD (*Stufen* B2-C1);
- the later third-fourth centuries AD (*Stufen* C2-C3).

The isolated find of an Augustan coin dating to 7 BC (C45) is not attributed to any phase. Its very early production date does not preclude a much later date for deposition.

At the moment, phase 1 is only represented by two sites, the settlements B32 and B41. They have been discussed in Chapters 3.2 and 7.4. In section 8.3.1 it has been concluded that there is little evidence to support continuity between this phase and the later ones.[935]

The distinction between sites belonging to phase 2 as opposed to phase 3 is rather vague, especially since an appreciable number of sites cannot be given a closer dating than the second century AD. An attempt is being made, however, to distinguish between those sites that could have already existed in the first century AD and those that certainly did not.

With this in mind, of the 94 dated sites, only 18 (18%) can be placed within the second phase, spanning the Flavian to Hadrianic periods (Fig. 8.2). This includes 12 burial sites and 5 settlement sites and 1

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[933] See Chapter 4.2.

[934] No single site need necessarily be exclusive to one particular phase, and could span two or three of the phases. The nature of the dating evidence precludes a closer dating for the vast majority of the sites.

[935] A distribution map for this phase didn't seem appropiate. The locations of the sites of this phase can be found on the overal map in figure 8.2.

Roman camp (B4). Of these, 8 sites are exclusive to this phase.[936] The picture changes fundamentally with the onset of the second century AD, with 65 (69%) of the datable sites belonging to the third phase (Fig. 8.3). The 36 burial sites can be further divided into 6 sites that appear to concentrate in the second century,[937] 22 sites that concentrate within the late second- (early/mid) third century,[938] and 8 sites that span the whole phase.[939] Of the 18 settlement sites, none are exclusively second century, a possible 6 appear to concentrate within the late second - (early/mid) third century,[940] and 12 span the whole phase.[941] Of the isolated and stray finds, 11 appear to date to this phase, although the find circumstances mean that the deposition date remains uncertain.[942]

Yet another change occurs in the later Roman period. Only 13 (14%) of the datable sites belong in the fourth phase (Fig. 8.4). The number of burial sites decreases dramatically to only 4 sites.[943] The settlement sites are at Deutz (B17) and Duisburg (B34). The number of isolated and stray finds total 8 sites.[944]

The evidence as set out above clearly implies that striking changes took place within the occupation history of the *Limesvorland* spanning the first - fourth centuries AD. It is interesting that only a single site, Rheindorf (A22) spans the whole period of research. Possible explanations for these changes are discussed in Chapter 10.

8.4 The Post Roman Period

Reliable evidence for continuity from the Late Roman period into the Merovingian, or Frankish period is as difficult to find as that for

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[936] A1*, A2, A5*, A7, A8, A9, A11, A15, A18, A22, A60*, A68, A74*, B4*, B6, B24*, B39*, B40*. An asterik indicates exclusive to the phase (also in further notes in this section).

[937] A2*, A7, A9, A21*, A25*, A63*.

[938] A4, A14, A16, A19, A20, A27, A30, A32, A35, A38, A42, A45, A50, A51, A52, A56, A61, A62, A64, A65, A66.

[939] A8, A10*, A11, A18, A22, A23*, A55*, A68.

[940] B9, B14?, B27?, B31, B37, B38.

[941] B6, B8*, B10, B15, B16*, B18*, B20*, B23*, B26*, B29, B30*, B33.

[942] C3, C9, C12, C14, C23, C35, C39, C43, C46, C49, C56.

[943] A22, A58*, A66*, A72*.

[944] C4, C5, C6, C7, C36, C37, C44, C49.

the Late Iron Age- Early Roman continuum. Historical sources indicate that at least the area along the river had been cleared of Germanic settlements by the emperor Constantine (AD 306-337).[945]
Only 2 (3%) of all the burial sites contain Frankish graves within the same cemetery: A8 with twelve Frankish graves (second half fifth-first half sixth century AD) associated with the earlier cemetery[946] and, apparently site A61, although the exact location of the Frankish graves in relation to the single Roman period grave is not recorded.[947] The discovery of two small roller-stamped decorated sherds in Gr.146 in Rheindorf (A22), although obviously contamination in that particular context, may be the only evidence to suggest Frankish activity in the vicinity of the cemetery.
Only a possible 4 (10%) of all the settlement sites can be associated with evidence for Frankish activity or settlement on the same spot or very close by. B29 apparent shows evidence for continuity from the Hallstatt period to the Carolingian period. 'Medieval sherds' are vaguely referred to on sites B18 and B30. These could be of any date. Possible Frankish settlement remains have, however, been recognized in the proximity of the Frankish cemetery in Troisdorf (A8), coupled with incidental stray finds of Frankish date across the whole area excavated by Joachim in 1982.[948]
The vast majority of sites, therefore, show no evidence for Frankish activity either on or close by the Roman period sites. Of the small number of Late Roman sites, not one shows any evidence for continuity beyond the later third or fourth centuries into the fifth and sixth centuries AD. It might be argued that a cultural tradition of moving settlement bases, and therefore the associated cemetery sites, within a region could mean that these later sites have yet to be found. More likely, however, is a model that suggests a rapid, but decisive, decrease in population of the region in the Late Roman period. The implications of this statement will be discussed below and in Chapter 10.

8.5 The Chronological Development of Individual Cemeteries

8.5.1 General Remarks

The chronological development at a local level can be followed by means of the dating of individual graves within the various

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[945] See Chapter 3.3.

[946] Joachim 1987, 16-19, 33-36.

[947] See catalogue entry in Appendix I.

[948] Joachim 1987, 18-19, 38.

cemeteries. The larger cemeteries, that is those with more than 12 burials, all show a more or less similar development (see Table 8.2: A7, A8, A9, A18, A22, A56). In attempting to pinpoint the earliest Roman period burials in the study area, there is no reliable evidence for the dating of any grave before the Flavian period.[949] Even the presence of graves before the late-Flavian period is questionable. In the following period (*c.* AD 90-150) the number of graves is relatively small (see Table 8.2: A15, A68, A74). The majority of the well-dated graves fall within the date range AD 150/180-270. In most cases it is possible to make a division within Eggers' *Stufe* C1, between the period AD 160/180-250 and AD 250-310/320.[950] There seems to be evidence for a clear decline in the number of burials in the second half of the third century AD. Only cemeteries A22, A58, A66, A72 and possibly A12 have any burials dating to the period AD 270-350. In only in A22, A66 and again possibly A72 are there any graves that can be dated after AD 350. Exceptions to this pattern are A8 and A61 where although the original cemetery apparently ceased to be used at an earlier date, there is evidence to suggest its reuse, or establishment of a new cemetery at a later moment (in the second half of the 5th century or later).

With some caution this general trend, that corresponds with the chronological picture for all sites in the region (see Chapter 8.3 above), can be explained by demographic developments. Such an interpretation necessarily remains tentative because the number of archaeologically recognizable graves within a particular cemetery does not necessarily compare with the actual number of burials that originally took place.[951] As has been put forward in 8.2 above, changes in the burial ritual practised can lead to archaeological 'invisible' graves within certain periods. This being said, in contrast to the late Iron Age, on the basis of the dataset from the study area, it should not be assumed for the general period AD 70-450 that such significant changes occurred in the burial rites practised as to significantly affect the chances of recognizing graves.

8.5.2 Individual Dating of Troisdorf and Rheindorf Burials

In the two largest cemeteries of Troisdorf and Rheindorf (A8 and A22)

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[949] A22 Gr.237 & A22 Gr.259 may possibly be an exception, although a pre-Roman date is also possible. See 8.2 above and the catalogue entries in Appendix I.

[950] In Table 8.10, the phases C1a and C1b have been used for Rheindorf (A22).

[951] This is certainly known to be the case in Rheindorf (A22), for instance. See catalogue entry in Appendix I.

a further refinement of the chronological ordering of graves is possible. Tables 8.5 and 8.6 have been produced for Troisdorf and Rheindorf respectively using conventional methods of dating, that is on the basis of dating the associated grave goods. Interestingly, both cemeteries appear to have begun contemporaneously. That is to say, the begin date of both cemeteries on the basis of the recorded graves lies in the last quarter of the first century AD, and more probably around AD 90. Gravefield *S* in Rheindorf (A22) does seem to contain a number of earlier graves (A22 Gr.262, Gr.237, Gr.259).[952] On close examination, however, it is debatable whether these should be seen as forming part of the Roman period Germanic cemetery. Their location on the very edge of the excavated cemetery, in combination with the unusual composition of their grave contents, both support the argument that the three graves may actually be of earlier, prehistoric date. A dating in La Tène D for all three is most probable, although for A22 Gr.262 a much older, even Bronze Age date, cannot be ruled out.

The vast majority of the burials in both Rheindorf (A22) and Troisdorf (A8) can be dated within the period between AD 120 -240. There is no evidence to suggest any burials taking place in Troisdorf after AD 240. Later burials are recorded, however, in Rheindorf, albeit a much smaller number.

For Rheindorf (A22) a statistically logical ordering of the graves has been produced by a combination of correspondence analysis and seriation.[953] It was expected that the results would be of chronological significance, considering the goods results achieved in comparable analyses on a number of provincial Roman cemeteries in Lower Germany.[954]

In the statistical analysis all the grave goods were included that were present in more than two graves in the cemetery. The division and reference to the grave goods in the seriation is based on that set out in Chapter 5. The results from the analysis give a less consistent picture than was hoped. Therefore, one must be careful not to place too much trust in the outcome for establishing a more detailed internal chronology for Rheindorf. The initial picture given by the graph of the correspondence analysis indicates an extremely close clustering of the dots representing the graves. A clear parabola, which indicates a reliable seriation, is absent. Even the application of various selections on the components in order to remove any influences that have an unbalanced bearing on the general picture give

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[952] The original division into the separate gravefields *O*, *S*, *M* and *W* was made by Von Uslar (1938). Fig. 8.7.

[953] The seriation has been produced using the Bonn Seriation program designed by I. Scollar (1991; last update 1998).

[954] For example, Haalebos 1990; Bridger 1996 .

an inadequate result. The outcome of the seriation is very similar to that of the correspondence analysis. Table 8.7 shows no regular diagonal sequence. The correlation coefficient of the result of the analysis, 0.7185%, is relatively low. A reliable outcome would be closer to 1.0%. Even the removal or combination of a number of components (grave goods) gives no visually clearer picture. Various explanations for the disappointing outcome can be given. Firstly, the composition of the grave good assemblages offers too few leads for a more detailed chronological ordering. Within the typologies of a number of important find groups, such as Germanic pottery, bronze vessels, and the brooches, exists too large an overlap between the different forms and subforms. A second important factor which may have had an influence on the result is the falling out of the majority of the earliest graves in the primary database for the correspondence analysis and seriation. The main reason for this is that the spectrum of grave goods from the earliest graves (AD 70/90-120) comprises in the main of forms that only appear once or twice in the cemetery. These relatively uncommon forms cannot be included statistically in the seriation. In addition, the graves out of this first phase also contain, in general, fewer grave goods than those out of the later phase.[955] If, in addition, these fewer grave goods can hardly be distinguished from those from later phases, as is the case, for instance, for general categories such as GPOT, BROOCH, RPOT etc., then their statistical invisibility in Table 8.7 can be seen as a logical consequence.

The majority of the graves in Table 8.7 apparently date within a relatively short timespan of a hundred years, between AD 150 and 250. Although the pattern of the grave goods does not show sufficient leads to enable a statistically reliable differentiation within this period, it is possible that in future other conclusions might be possible on the basis of an improved typology within, for instance, the Germanic pottery assemblage. This being said, the outcome of the present seriation is not totally without significance. The conclusions drawn earlier (in Chapters 6.8 and 8.3) that no large-scale changes took place in the mid-Roman period in the study area is at least not contradicted by the evidence from the largest cemetery of Rheindorf, if only because of the absence of any clear development in the patterning of the grave goods.

For the final phase of Rheindorf (second half third century - fourth century AD), the seriation does, however, appear to offer some leads. In the bottom right hand corner of Table 8.7 is clustered a small group of graves that seems to distinguish itself from the rest of the dataset. Characteristic for this group is the presence of late terra nigra vessels of form Chenet 342, terra sigillata beakers of form

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[955] See Chapters 6.6 & 9.2-3.

4.1/Dechelette 72, coarse ware cooking pots of form Oelmann 89 and related forms, colour-coated beakers with white barbotine decoration, and, more surprisingly, bronze Hemmoor type buckets, glass beads, bone combs and pig bones. The appearance of combinations of these finds in graves indicates that the *terminus post quem* for these particular graves might fall in a slightly later period than that suggested by the conventional dating of the individual finds. Where this could be the case, a note has been made in the respective catalogue entries in Appendix I. This is also reflected to some extent in Table 8.7. The outcome of the seriation could also have consequences for the general dating of the above-mentioned finds groups in the study area as a whole. Where this is the case, because of the unreliability of the seriation, only a short note has been made of any possible revisions to the dating in the relevent sections of Chapter 5.

The second largest cemetery in the study area is that of Troisdorf (A8). As stated above, the period of use of the cemetery overlaps almost completely with that of Rheindorf, with the exception of the fourth-century phase that is only present in Rheindorf. In addition, the finds spectrum in Troisdorf is in general more limited that in Rheindorf. Both factors suggest that a computerised seriation for Troisdorf is unlikely to add any further information to the discussion. For this reason, no seriation of this cemetery has been made. The same is true of the other larger cemeteries in the study area (A7, A9 A18 and A56).

8.5.3 Horizontal Stratigraphy

An excavation plan is available for only four cemeteries. The plans from A56 and A10 (Figs. 8.5 and 8.6 respectively) are of little use for a discussion on horizontal stratigraphy. Even for Troisdorf (Fig. 8.7), Joachim could discover very few clues for directions of growth or development within the cemetery.[956] His conclusion is that spatial development within the cemetery was based on the use of contemporaneous family areas, with the possibility of a certain level of segregation between male and female burials. The validity of these conclusions is discussed further in Chapter 9.1.4. The evidence for chronology also enables some additional comments to be made. In choosing a location for the earliest graves (A8 Gr.49, Gr.5, Gr.16, Gr.34, Gr.54)[957] it appears that, in the beginning, maximum use was made of the total area that remained in use throughout the Roman period. In subsequent phases the area demarcated by the earliest

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[956] Joachim 1987, 14-5.

[957] NB. For Troisdorf (A8), the grave numbers cited in the text refer to the catalogue entry for the site in Appendix 1 and not to Joachims's excavation report (1987).

graves in filled in rather than expanded. The latest dated graves (A8 Gr.20, A8 Gr.24, A8 Gr.26 change numbers) are located close together in the south-western corner of the cemetery, adding to the already dense concentration in this area. A similar development, starting in the initial phase by the demarcation of the total area intended for ritual use by means of a maximum spacing of the earliest graves, and followed by the filling in of the area in between shows many similarities with the spatial development of many Hallstatt period urnfields in north-western Europe.[958]

At first sight, the situation in Rheindorf appears to be more complicated (Fig. 8.8 and Table 8.8). In the first phase (AD 70/90-120) burial takes place in the gravefields *O* and *S*. It is possible that the southern part of *M* as well as *W2* and *W3* were also brought into use not long after this date. The following phase saw the filling in of *O*, *W3* and the southern part of *M*. Grave fields *O* and *S* probably passed out of use after around AD 200. After this date the location of the burials shifted its emphasis to the western grave fields (*W1*, *W2*, *W3*). The part of grave field *M2* lying to the north of the road cutting east-west through the cemetery, appears to be an extension that occurred in the final phase of the cemetery, after AD 250.

It remains unclear to what extent the excavation plan of Rheindorf actually reflects the original situation of the cemetery to its full extend. Therefore, no conclusions can be drawn as to whether the cemetery as a whole, representing the total ritual landscape, was demarcated in the earliest phase. If this be the case then some of these earliest graves, around the periphery, have either been destroyed, or remain undiscovered. Alternatively, the current excavation plan suggests a number of distinct clusters which could be interpreted as individual nuclei in which parallel developments took place. Von Uslar discusses the possibility of separate grave fields for individual family or kinship groups, possibly coming from different settlements within the region.[959] With this in mind, the internal development of grave field *O* is directly comparable to that of Troisdorf. As in Troisdorf, the earliest graves in *O* are situated in the centre of the cluster as well as around the periphery.[960] In Chapter 7.2 a point has already been made about the evidence for the use of larger nucleated, or community-orientated settlements in more northern regions of Germania within the third century AD. It may well be that Rheindorf should be seen as a cemetery within such a developing settlement pattern.

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[958] Hessing & Kooij forthcoming.

[959] Von Uslar 1938, 167.

[960] For instance, in the centre: A22 Grs.136, 139,143, 175, 220; in the periphery Grs.106, 117, 118, 183, 187, 206, 227.

8.6 Demographic trends

The probable later start date for *W1* and *M* in Rheindorf may either be an indication of an influx of new immigrants to the area, or the splitting up of an existing settlement group around the mid-second century AD. The steep rise in the average number of burials per year around this period (see Table 8.9) rather lends force to the former explanation. It is unlikely that a more than four times higher reconstructed population size at the end of the second century AD, in comparison to the earliest phase, can be explained by natural growth within the existing resident population.[961]

It is questionable whether the picture sketched above for Rheindorf can also be applied more generally to other sites within the study area. With this in mind, it is interesting that the start date for the cemetery of Duisburg-Ehingen (A56) also falls around the middle of the second century AD. In addition, the number of graves from Troisdorf (A8) that date to the middle, and second half of, the second century AD, is significantly larger than in the period before.[962]

A simultaneous influx of new groups into the study area from elsewhere in the last quarter of the first century AD is supported archaeologically by the almost complete absence of evidence for continuity of occupation from the Late Iron Age to the Early Roman period, as well as the break in the continuity of the form spectrum within Germanic pottery in relation to the local Iron Age tradition.[963] Such an immigration at this period is also historically feasible when set against the background of the change in Roman policy towards the Germanic border and the area beyond at the end of the first century AD.[964]

Arguments, archaeological as well as historical, for a possible second immigration wave in the third quarter of the second century are still too insubstantial to be given much weight here (See also Chapter 9.3). Further research is needed on this point.

The population within the study area appears to have reached its demographic optimum around the beginning of the third century AD. This

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[961] The reconstruction of the size of the population is based on the formula developed by Ascadi & Nemeskeri 1970: $P = k+(D \times e)/t$, whereby P is the population size, k is a correction factor, usually 10% of the outcome of the division (this is optional), D is the number of burials, e is the average life expectancy, t is the timespan over which the cemetery is used.

[962] Joachim 1987, 15 & Taf. 4.

[963] See Chapter 5.2.

[964] See Chapters 3.3 and 10.

does not appear to have had any significant effect on the local settlement structure. On the basis of the total number of recorded burials per cemetery, it would appear that the majority of the population still lived as family units within settlements comprising one or two farmsteads. As stated above (8.5.3), it could well be that the cemetery of Rheindorf was an exception. The minimum size of the population using the cemetery at the end of the second century AD was approximately 40 (see Table 8.9). It is also possible that Rheindorf was not an exception, but is merely one of the better preserved or more extensively excavated cemeteries.[965] It should be noted that the very low number of children's burials recorded inevitably influences any calculations for a minimum population size. What is clear, however, is that the more or less contemporary existence of the various spatially separated clusters or gravefields in Rheindorf, is an indication for the communal use of the terrain by the inhabitants of several, possibly also spatially divided, nuclei. The long tradition of ritual use of the landscape around Rheindorf, with archaeological remains and burials dating back to at least the Neolithic, may well have been the very reason for its attractiveness, giving the site a central position within a wider than usual area. After the middle of the third century the burial evidence from Rheindorf indicates a sharp demographic decline. The number of graves that can be dated with certainty to the fourth century AD is only eight.[966] At least one of these graves (A22 Gr.36) can be dated after AD 350 on the basis of the presence of rosette-shaped belt fittings.[967] Whilst it cannot be discounted that more late Roman graves are still to be found north of the excavated gravefield of *Mitte* (*M*), on the basis of the evidence recorded to date, it is unlikely that the use of the cemetery continued much after AD 350. The size of the population using the cemetery at this period would not have comprised more than one or two family groups. Within this latest period Rheindorf is no longer an exception, if indeed this was the case, but rather fits into the general pattern of rural Germanic settlement.

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[965] It is possible that the cemetery of Niederpleis (A7) was just as extensive as Rheindorf. See catalogue entry in Appendix I.

[966] A22 Grs. 29, 31, 35, 36, 40, 244, 250, 255.

[967] See Chapter 5.7.4.2.

CHAPTER 9 PATTERNS OF SOCIAL DIFFERENTIATION WITHIN THE FUNERARY DATA

9.1 The Differentiation of Male and Female Burials[968]

9.1.1 The Anthropological Remains

Attempts at sexing human remains, both skeletons and cremations, is always accompanied by difficulties. Researchers vary in their optimism in sexing cremations, the success of which lies for a great part in the degree of fragmentation and deformation of the bone, as well as the presence of characteristic morphological elements within the sample. Whilst it is often easier to identify male rather than female remains, juveniles and infants cannot be sexed by morphological analysis.[969] Where possible it is obviously useful to have access to sexed bone remains and use this to back up archaeological information, although problems can still occur.

For only the two largest cemeteries within the study area, Rheindorf (A22) and Troisdorf (A8) can any useful results be achieved from a detailed analysis of sex and age. These are the only two cemeteries with a suitably large number of burials for which results from an anthropological analysis can be compared with an analysis of the associated grave good assemblage. For both cemeteries the cremated bone was analysed without any prior knowledge of the associated grave goods to avoid any bias within the results.[970]

Whilst the sex of a number of cremated remains from other burials within the study area can be identified with varying levels of certainty on the basis of grave goods alone, the majority of the remaining graves are relatively sparsely furnished. In addition, for no other cemetery within the study area has anthropological analysis of the cremated remains been carried out. The lack of comparative data therefore prevents an extrapolation of the results into a general picture for the study area.

In Troisdorf, cremated bone was recovered from 53 (83%) of the 64 Roman period graves. From these 53 samples, anthropological analysis identified 57 individuals or burials, whereby 4 graves are double

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[968] A short discussion of this subject has already been published by the author (Waugh 1993).

[969] For generally accepted procedures see: Workshop of European Anthropologists. Recommendations for Age and Sex Diagnosis of Skeletons, in: *Journal of Human Evolution*, 9, 1979. 517-549.

[970] An analysis of Troisdorf has previously been published, Joachim 1987; Wittwer-Backofen 1987. the analysis of the cremated remains from 244 graves from Rheindorf was undertaken by Dr. P. Caselitz (Hamburg, Germany) and will be published elsewhere.

burials (A8 Grs. 11, 24, 42, 59).[971] A differentiation on the basis of gender identified 16 (28%) male, 19 (33%) female, and 6 (10.5%) child burials.[972]
In total, the sex of 45 individuals could be differentiated on the basis of the combined results of cremated bone and associated grave goods analysis: 19 (42%) male, 20 (44%) female and 6 (13%) child burials (see Table 9.1 and Fig. 9.1). In only 2 female burials, however, does the anthropological and grave good analysis give the same result (A8 Grs. 27 and 34).
For Rheindorf, cremated bone survives from only 118 (43%) of the 273 graves.[973] From these 118 samples, anthropological analysis identified 122 individuals, whereby 4 graves are double burials (A22 Grs. 53, 80, 160, 251). A differentiation on the basis of gender identified 15 (12%) male, 12 (10%) female, and 24 (20%) child burials.
In total, the sex of at least 106 individuals or burials could be differentiated in Rheindorf on the basis of the combined results of cremated bone and associated grave goods analysis: 41 (38.5%) male, 41 (38.5%) female, and 24 (23%) children. The identification of five further burials is uncertain, since there is no anthropological evidence and the grave good assemblages include both male as well as female elements (Grs. 71, 73, 83, 102, 225). The idea that some or all of these graves were double burials cannot be excluded (see Table 9.2 and Fig. 9.2). As in Troisdorf, correspondence between the two sets of results is poor. In only four individual burials, one male (Gr.130) and three female (Grs. 70, 74, 255) is there reliable anthropological and grave good evidence that give the same result. In its defence, however, there are also few indications for contradictory results.[974]

9.1.2 Sex-Specific Burials in the Study Area

Statements on sex-specific artefacts are particularly relied on where anthropological evidence is not available. Here, an assessment will be

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[971] See Wittwer-Backofen 1987 for a more detailed discussion of the anthropological analysis.

[972] The numbers cited within Wittwer-Backofen 1987 and Joachim 1987 unaccountably differ from each other. The numbers cited here are primarily based on Wittwer-Backofen's catalogue and not on her Tables 1-2. Joachim's Table 3 does not contain the child burial from Grave 11 (my numbering), nor the evidence from the graves excavated before 1982.

[973] See also Chapter 6.5.

[974] See 9.1.3 below for further discussion.

given as to the usefulness of grave goods as criteria to sex burials.[975]
The grave goods that are either used to identify burials, or are present with burials that have been identified anthropologically, are set out for Troisdorf (A8) and Rheindorf (A22) in Tables 9.1 and 9.2 respectively. Traditionally 'male' goods are seen to be objects of militaria (in this study this includes belt fittings, armour, weaponry and horse harness fittings), razors, drinking horns and some knives.[976] In fact, for Troisdorf and Rheindorf, excepting the presence of razors in Rheindorf, militaria are the only category of find that can be reliably used to identify a male burial. In comparing the two tables there is a striking distinction between the two cemeteries: only 2 (10.5%) of the individual male burials in Troisdorf contain militaria, compared with 26 (70%) of the individual male burials in Rheindorf. The implications of this evidence will be discussed further below, although an important factor is clearly that many of the burials belong to the earliest phase in Rheindorf and, in part, precede the foundation of the Troisdorf cemetery.
Traditionally 'female' goods are seen to be objects used for textile working (for instance, spindlewhorls, sewing needles, and weaving swords), jewellery (other than brooches) and ornaments (hair and clothing pins, bracelets, necklaces) and caskets.[977] Again, the burials within Rheindorf contain many more defining elements within the grave good assemblages. One main problem argued by Breitsprecher, is that for Germanic cemeteries within the Roman period, a gender-specific burial ritual can only be identified on a local level, with no uniform patterns existing on a regional level. A local identification of gender-specific objects, such as spindlewhorls and weaponry with female and male burials respectively within the Lower Elbe-Oder area, cannot be used as proof that these objects were overall gender-specific.[978] Whilst spindlewhorls are traditionally interpreted as female, Foster cites evidence for a very different function for such an artefact, as a flywheel for a drill, which

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[975] An important recent work on this subject is Breitsprecher 1987, which gives a detailed analysis of the problems involved in attempting to define gender-specific burials in the Roman period in northern and central Germania. See also Chapter 6.6 above.

[976] See Breitsprecher 1987,2, and 29 Abb.8 for a list of typical male objects found within Germanic graves.See also Chapter 5, esp. 5.7 & 5.17.

[977] See Breitsprecher 1987, 2, 32, 34, and 33 Abb.10 for typical female objects found within Germanic graves. For caskets see von Uslar 1938, 166. Also here Chapter 5, esp. 5.9-12, 5.15-16.

[978] Breitsprecher 1987, 222-3.

significantly contradicts this assumption.[979]
Ubiquitous to both sexes in both cemeteries, although again to a greater extent in Rheindorf, are knives, whetstones (both occurring together in two graves in Rheindorf), shears, combs, gaming pieces, brooches, single or small numbers of beads, Germanic and Roman pottery.[980] Neither within the Germanic nor the Roman pottery assemblages is there evidence to suggest a sex-specific preference for any particular form. In Rheindorf particularly, since it spanned such a long period, the changes in form appear to be much more reliant on development based on chronological factors. Joachim suggests that profiled brooches of Form A4.2.2 (Almgren fig.101) and knee brooches of Form A4.3.3 (Almgren fig.144) occur mainly in female burials in Troisdorf, and compares this with the picture presented by the cemetery of Kemnitz near Potsdam, Germany.[981] Looking at the evidence, however, this seems a weak argument, especially since the Form A4.2.2 brooch is associated with a possible male, according to the anthropological analysis (A8 Gr.60).[982] In addition, of the seven form A4.3.3 brooches, only two occur with females (A8 Grs.4 and 36), two with males (A8 Grs.21 and 51) and three in graves containing gender-unspecific children (A8 Grs.42, 50, 55). A similar pattern is presented in Rheindorf: one male burial (A22 Gr.107), three female burials (A22 Grs.123, 151, 200), two double burials (A22 Gr.160, 225) and three child burials (A22 Grs. 129, 140, 169). In neither cemetery does a convincing pattern emerge to suggest a gender preference for a certain brooch form, or that male or female burials contain on average more brooches. Breitsprecher's hypothesis that two (i.e. a pair) or more brooches in a grave is generally denoted as female cannot, therefore, be supported here.[983]
Joachim states that, in Troisdorf, many of the male burials (81.3%) contained significantly fewer grave goods than the female burials.[984] On average, the female burials contained more pottery, particularly Germanic vessels and terra sigillata, especially Form 1.2 bowls (Table 9.1). The same general pattern appears to be true in Rheindorf (Table 9.2). However, in Troisdorf, metal vessels are more commonly associated with female burials, whereas a contrasting picture in

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[979] Foster 1993, 210.

[980] See Chapter 5, esp. 5.2-3, 5.8, 5,13-4, 5.17, 5.19, & 5.21.

[981] Joachim 1987, 8-9; Geislar 1984, 147-8; Gebühr & Kunow 1976.

[982] A8 Gr.60. See Joachim 1987, 32 Gr.56: Wittwer-Backofen 1987, 52 & Tab.1 Gr.56.

[983] Breitsprecher 1987, 2, 32.

[984] Joachim 1987, 9.

Rheindorf suggests metal vessels were more common in male burials. There is no significant preference for a particular form.
A problematic group of burials are the double burials. In Rheindorf, in the graves where two individuals can be identified anthropologically, the grave good assemblage can only be linked with one sex (A22 Grs.53, 80, 160, 251). In contrast, the identification of double male and female burials on the basis of grave goods alone (A22 Grs.71, 73, 83, 102, 225) remains uncertain without the extra back up of anthropological verification.
An interesting group of burials are those of the children. For these, gender cannot be identified anthropologically and thus relies solely on the grave goods. In Troisdorf, four of the graves (A8 Grs.11, 24, 42, 59) and in Rheindorf three of the graves (A22 Grs. 80, 160, 251) are found in double burials. The problem outlined above of the general inability to reliably associate grave goods to either of the individuals, also applies here. Within the individual burials in Rheindorf, a similar pattern to the adult burials is given for the inclusion of pottery and metal vessels. Shield fittings, normally associated with male burials, were found in three graves (Grs.150, 178, 183). Alternatively A22 Gr.95, interpreted as female on the basis of the grave goods alone, may well have been a child's burial. This assumption is based on the fact that the grave contains a miniature Roman flagon, as well as a miniature brooch and a figurine (a toy?). As has previously been stated, however, figurines of children in graves may also have belonged primarily to the devotions of women pleading for either fertility or, alternatively, the good health of the children that were still living.[985]
Several grave assemblages are rather problematic in their interpretation. In Troisdorf, for A8 Gr.54 anthropological evidence suggests a female burial, but the associated grave goods assemblage contains a handgrip from a shield. In Rheindorf A22 Gr.46, anthropologically possibly male, contains hairpins which are traditionally interpreted as female. Again A22 Gr.9, although identified anthropologically as possibly female, contains a razor traditionally regarded as a male artefact. Foster highlights the dangers of being too dogmatic in our association of objects with genders. The inclusion of mirrors in male burials, she suggests, is not at variance with what we know about Iron Age men. Toilet sets were regular inclusions in Hallstatt C warrior burials in Bavaria, and preserved bodies from the bogs of northern Europe indicate the emphasis men could place on having carefully manicured nails and well-groomed hair.[986] Such an interpretation could cast doubt on the

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[985] Chapter 5.20.

[986] Foster 1993, 209.

assumption that A22 Gr.264 in Rheindorf was necessarily female.[987]

9.1.3 Evidence for the Spatial Clustering of Sex-Specific Burials

Wittwer-Backofen claims that the clustering of graves within Troisdorf shows a clear spatial differentiation across the cemetery, with male burials being located mostly in the north and female burials mostly in the south. This pattern begins to break up in the west and along the northern edges of the cemetery (Fig. 9.1).[988] This theory is fairly unconvincing. The northern area does indeed appear to contain more male burials (12 males, 5 females, 3 adults of uncertain sex), but the area to the south of the central axis appears to be mixed (8 males, 14 females, but 9 adults of uncertain gender). Children appear throughout the cemetery. The southern part of the cemetery gives more a picture of burial in family or social groups.
A clustering of possible family groups is also the pattern presented in Rheindorf (Fig. 9.2).[989] Detailed interpretation is hampered by the fact that there remain a large number of sex-unspecific burials within each gravefield, and the locations of A22 Grs. 245-273 are not recorded.

9.2 Wealth and Status Differentiation

9.2.1 Germanic Society in the Historical Sources

Numerous publications have discussed the significance and reliability of the primary historical source for information on early Germanic social order, Tacitus' *Germania*. Only a brief account will, therefore, be given here.
Bazelmans defines early Germanic society as "an original democracy", in that, whilst various classes did exist, there is little historical evidence of rigid class divisions.[990]
The structure of early Germanic society as described by Tacitus in *Germania* is seen, like most barbarian societies, to be based upon the family unit and groups of interconnected families or kin. Both economically and politically there was only a difference in degree between the nobility and the large group of freemen within the tribe, or *civitas*. The aristocracy did not have a monopoly on power or public

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[987] See Chapter 5.12.

[988] Also Wittwer-Backofen 198,7 Abb.1 & 3.

[989] The clustering of family groups is discussed by von Uslar 1938, 166-7.

[990] Bazelmans 1991, 107.

positions. Men of free birth formed a tribal assembly which took major decisions regarding peace and war, judged the most serious criminal cases, and filled certain elective offices. Over the free men was a class whom Tacitus called *principes*. They often formed a council which discussed matters affecting the whole tribe. A place among these *principes* was earned only by those who could claim noble birth or whose fathers had performed outstanding services. From their ranks were chosen military chieftains, kings and most probably priests. Only as *principes*, acting as the representatives of the people, did they have the right to maintain a *comitatus* or, in German, a *Gefolgschaft*. The *Gefolgschaft* was a retinue of warriors made up of freemen who, by swearing an oath of allegiance, put themselves in a subordinate position to the leader. The *Gefolgschaft* breached the long-standing sense of unity based on ethnic and kinship similarities, and replaced it with a bond of reciprocity, friendship and loyalty between the leader and the follower which took no account of membership of a certain kinship group or tribe. In a society geared to warfare, certain individuals and families would have means and opportunities of acquiring more wealth, and thus a higher social position than others. Such a 'military democracy' was the most advanced form of society which a Germanic tribe could attain without becoming a society with class differences.

Social differentiation does not seem to have been marked in the pre-Roman Iron Age in Germania, but the arrival of the Romans on the Rhine and Danube stimulated many changes in the relations between different levels in barbarian society, particularly in its upper echelon.[991]

9.2.2 Archaeological indicators for social status

In many prehistoric and early historic cemetery studies, attempts to analyse the evidence for social differentiation as reflected in the burial ritual of a particular cultural group or society normally concentrates on the examination of the following four main variables:[992]

Firstly, the grave form and the energy expended in building the grave and any associated monuments or features;

secondly, the positioning of the grave within the cemetery, including its orientation;

thirdly, the treatment of the body before and during deposition;

fourthly, the quantity and quality of the grave goods.

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[991] Important publications outlining Germanic society are Thompson 1965 and more recently Bazelmans 1991, who also lists the majority of useful German publications on the subject. See also Todd 1995.

[992] Bridger 1996, 261 note 1383 gives extensive literature references on the subject.

Following from Jones' argument for the need to identify local, regional and inter-regional patterns within the burial ritual, and the search for explanations for anomalies recognized within these patterns, it can be proposed that the variables listed above are influenced by aspects of social differentiation."[993]

The opportunities for applying all four variables to the cemeteries and burials within the study area are, however, limited.

The most widely publicised and frequently referred to theoretical underpinning for the first variable is Tainter's energy expenditure model, whereby a direct relationship exists between the investment made into building the grave by the surviving relatives or followers for the benefit of the deceased, and the social ranking of the deceased during his lifetime."[994] Tainter's model is discussed and criticised at length by Pader, who argues that the amount of energy expended is not necessarily always indicative of social ranking, but can also reflect differential attitudes to different groups in society, for instance children and adults."[995]

Within the study area no evidence remains for the presence of individual monuments, if indeed they ever existed. Only a very small number of reliable, complete, plans exist for the excavated cemeteries. From the plans that do survive, for Rheindorf (A22) and Troisdorf (A8), for example, it appears improbable that significant above-ground markers, or excavated features such as ring-ditches did exist (see Chapter 8, Figs.8.7-8). Although there is no evidence for graves cutting through earlier graves, suggesting that the graves were recognizable on the surface, the distance between most of the graves is too small to have accommodated substantial markers or mounds.

The second variable, the positioning of the grave, has less to do with the energy factor, but much more to do with the hypothesis that the elite were constantly seeking ways in which to differentiate themselves from the masses. A very effective, and simple, manner of doing this was by creating a spatial division within a cemetery for the burial of different social classes."[996]

For the latter two variables, the fact that the limited variations in grave type within the study area appear to have very little relation to the quantity and type of grave goods, or the gender of the deceased, are discussed below. Only the quantity and quality of grave

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[993] See Chapter 6.2.

[994] Tainter 1973, 1975, 1976, 1978.

[995] Pader 1982, 60-2.

[996] See in particular Lohoff 1994. Many examples of this phenomenon can be found within the Roman province. Also Hessing 1993.

goods (variable 4) from Rheindorf (A22) and Troisdorf (A8) offer possibilities for further analysis.[997] It is, however, necessary to keep in mind that, will all types of grave goods, the inclusion of specific forms, or alternatively the number of different forms included, may not have so much to do with deliberate selection, but rather with the relatively haphazard survival of objects after being burnt on the pyre, as well as the care with which the pyre remains were collected for deposition.

9.2.3 Statistical Analysis of the Grave Goods

For Rheindorf (A22), the largest cemetery within the study area, an attempt has been made to recognize patterns of variation in the set of variables relevent to the dataset. A statistical analysis of the grave goods was undertaken using the Windows software program Winbasp, part of the Bonn Seriation and Archaeological Statistics Package developed by I. Scollar specifically for cemetery analysis.[998] Part of this package is a social status module, which, on the basis of a quantitative and qualitative analysis of grave goods, can be used to indicate the existence of ranking patterns within the burials of a cemetery or cemeteries.

To obtain a quantitative analysis of the so-called 'richness' of a burial, the number of artefacts per grave were counted, omitting such items as nails.[999] For this purpose, commonly occurring types are ascribed a quantitatively lower value than types that occur rarely within the cemetery. This value is derived from the average number of all grave goods within the grave in which the type is found.

A direct relationship appears to exist between the number of grave goods per grave and the sum of status indices for the artefact types in the graves. Examples of grave goods with a relatively high quantitative status index (where there are >9.5 artefact types per grave) are, for instance, bronze vessels of Forms 4.2 and 5.1 (Hemmoor type buckets and bowls of Eggers Type 82 respectively), bronze bracelets, distaff elements, brooches of form A.5.3.2 (cf. Almgren fig.208), imported Roman coarse ware of Form Oelmann 89, Germanic pots of form IIB, and pig bones.[1000]

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[997] For further references on the theory relating numbers of grave goods to social ranking see Bridger 1996, 261 note 1383.

[998] I. Scollar 1991: Bonn Seriation and Archaeological Statistics Package, version 4.1, Remagen. See also Chapter 8.5.

[999] These may have been used in a coffin or have been in timber used on the pyre. See Chapter 5.23.

[1000] See Chapter 5, 5.3.6.3.2, 5.2.3.1, and 5.22 respectively.

The second approach was to obtain a qualitative analysis of the graves. This is based on the fact that a 'quality measure' is applied to each artefact type occurring in a grave. Certain artefact types are given a higher value, or weight, than others. For Rheindorf (A22), Roman imports, interpreted as prestige goods, are generally given a value of 2, double the value given to native goods (=1). Exceptions to this are metal artefacts (weaponry and armour and bronze vessels), jewellery (beads, bracelets) and personal ornaments/objects (including gaming pieces). All these have been given a value of 3. Precious metals, for instance silver, and figurines, which appear to be exceptionally rare finds, have been given the highest value of 4. This has been done as a working model based on the assumption that, firstly, imports are more difficult to obtain than locally-made artefacts, secondly, that metal vessels are even more difficult to obtain than other imports and have a certain recyclable value and thirdly, that jewellery and militaria are representative of a certain social standing. This is of course a very subjective and personal approach, as there is, of course, very little clue as to the precise significance of particular artefacts in the past within the burial ritual. Ascribing a higher value to imported goods carries with it the implication that these were not only relatively scarce, but had a value that was widely accepted within the social group. This appears indeed to have been the case throughout the study area, and is confirmed by the comparison between burial and settlement material. For instance, terra sigillata Form 1.2 decorated bowls whilst not scarce in the burials, are apparently less common in the settlements.[1001] Their frequent occurrence in graves may well be to do with their widely accepted value within the specific social group. Both the quantitative and the qualitative analyses were carried out on the total dataset from Rheindorf.[1002] In addition, a 'mixed analysis' was carried out, whereby the results of both the quantitative and qualitative analysis were statistically compared. The difference between the two sets of results proved minimal, the picture presented

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[1001] See Chapter 5.3.1 & Chapter 7.4.

[1002] Artefacts which are given the status *iii* within the catalogue were not included in the dataset since proof of their belonging within a grave assemblage is seen to be too unreliable for them to be included here. These artefacts were found under the relevant find number for the context and were sometimes listed in the museum inventory, but were not listed in any previous publication. In such cases the finds may well have originally come from another context, but were at some stage incorrectly stored.

being quite consistent.[1003]
The results of the mixed analysis have been presented in Appendix IV, in which the ordering of the graves runs from a low to a high score ('poor' to 'rich'). A summary of the scores is to be found in Figure 9.3. In addition, Figure 9.4 gives an overview of the graves ordered according to the number of grave goods per grave.
In the mixed analysis approach, the results show an even, logical build up from a very broad-based graph of low-level values, rising gradually to a higher value level.
A very small number of graves, eleven in total, clearly stand apart at the apex of the graph in Figure 9.3 and Appendix IV due to their high scores in the mixed analysis (all >90): Graves 1, 25, 62, 69, 80, 95, 102, 253, 254, 258, 272. These may well be interpreted as 'richer' graves (see Table 9.3).

9.3 Conclusions

The pattern that presents itself from the evidence for Rheindorf strongly suggests the presence of an homogeneous group within the cemetery, with very little indication from the grave goods alone for the marked definition of a strong ranking within the cemetery. Only a small group stands out as slightly richer than the majority of the burials.
There is apparently little evidence to indicate that male or female burials more readily reflect higher status. The eleven highest value graves contain a fairly even mix of both males and females. Grave 80 is quite significantly the highest scoring grave in the whole cemetery with a score (320.56) that exceeds that of the next highest scoring grave by 134. Even if its score was divided by two or three, due to the presence of two or three burials in the grave, the grave would still be one of the highest scorers in the cemetery. The social implications of the grave good evidence alone, however, cannot be supported by evidence for any of the other variables, for instance the form and size of the grave, or a significant positioning of the grave within the cemetery.
Identifiable male and female burials have an equal mix of low and high scores. The grave good assemblages from the *c.*30 individual male burials containing weaponry and armour, so-called warrior graves, do not themselves give any indication of the presence of a "warrior elite" within the cemetery. The vast majority score less than 50 and therefore appear in the lower half of the graph. There does, however,

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[1003] The differences between the results when finds of status *iii* are included or excluded from the dataset is also minimal. Only a very small number of 'rich' graves fall from the highest categories within the graphs when the status *iii* finds are excluded.

appear to be a certain clustering within the graves containing militaria. All graves containing shield fragments (except for A22 Gr.78 which is questionable) come from gravefield *O*. The ten graves containing other types of armour and weapons, and another eight graves containing fragments of military belts (with the exception of A22 Gr.164) all come from the other gravefields, i.e. *M*, *W2*, *W3*, and *S*.[1004] It appears to be that in the earliest part of Rheindorf, in gravefield *O*, there are indications for a homogeneous group of warriors buried in typical early northern Germanic tradition. This group may be evidence for the existence of a *Gefolgschaft* group as discussed above. From the second half of the second century AD onwards, this type of burial seems to be quite suddenly replaced by a more heterogeneous group of weapon graves. The clear spatial and chronological differentiation between the two groups could be another indication of a new influx of settlers in the area as previously discussed in Chapter 8.6. The later group of burials were equipped with provincial Roman militaria. Although continuation of the *Gefolgschaft* and the Germanic martial tradition cannot be excluded, auxiliary military service within the provincial Roman army seems also possible. Personal military service may not always have been necessary. Such objects, that may have then been used to symbolize a certain status or rank, may have been acquired by other means, such as by trade or as personal gifts.

Another criterion widely used to determine the level of socio-political complexity is whether social position was ascribed of achieved. According to Pader, in a hierarchically organised society it is expected that individuals will be buried in accordance with their social position, which along with such factors as group affiliation would tend to cross-cut age and sex differences. However, even in ranked societies lower status persons might follow egalitarian level principle. The small number of individual children's burials also have low scores. Children buried with objects they could not have earned themselves are taken as indicators not only of a hierarchically-organized society, but also of ascribed social positions.[1005] In Rheindorf, such a situation is reflected in the inclusion of military equipment in children's burials (A22 Grs.183, 150, 178).[1006] It must be kept in mind, however, that with children, such artefacts may not reflect their own status, but rather that of their parents. In both Rheindorf and Troisdorf there are very few children's burials. This fits into the general picture of the Lower Rhine and Germania within

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[1004] See Chapter 5.7.

[1005] Pader 1982, 61-2, with further refs.

[1006] See also Waugh 1993, 302.

the late prehistoric and Roman periods.[1007] The lack of such burials may be an indication that a completely different ritual was associated with the majority of children.[1008] If so, this would be another indication that a certain status was only acquired at a certain age. In analysing the cremated remains from Troisdorf (A8), Wittwer-Backofen suggests that a certain initiation ritual, or rites of passage, were necessary in order to acquire a certain status and be officially recognized as a full member of society, with the accompanying right to burial in the cemetery. She supports this theory by stating that newborn and very young children in particular are completely absent in the cemetery.[1009]

Returning to the eleven high-scoring graves, only two of these, A22 Grs. 1 and 253 within gravefield *M*, belong to the earliest group of burials in this part of the cemetery. It remains a possibility that these graves, both unusually 'rich' in grave goods when compared to other contemporary graves, may be examples of so-called founding burials, rich burials that became the focal point for further burials at the beginning of use of gravefield *M*. Again, it is possible that these burials coincide with the arrival of a new group around the middle of the second century AD.

Eight of the remaining nine graves date to the late second - third quarter of the third century AD. Only one grave (A22 Gr.25) might date from a generation or so later.[1010] The amount of Roman imports (the higher scoring artefacts) within graves has clearly risen, reaching its peak by the second half of the third century AD.[1011]

The more frequent deposition of Roman imports from the late second century AD onwards can be interpreted as an indication of closer contacts across the frontier. This may have been due to the start of unrest within Germania, leading up to the Frankish invasions. The Roman province inevitably sought to strengthen its diplomatic ties and contacts with the native tribes living in the buffer zone in this period. The tribal groups living in the buffer zone would also have come under pressure from the migrating Germanic tribes to the north and east. It can be argued that more significant contact with the

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[1007] This information will be published by Hessing *et al.* (forthcoming). A good example of a Roman period cemetery within the province where a large number of children, including newborn and very young children is that of Valkenburg, Zuid-Holland, the Netherlands (the site is in the process of being written up by the author).

[1008] Wittver-Backofen 1987, 59.

[1009] Wittwer-Backofen 1987, 59 & Tab. 2.

[1010] See Chapter 8.5.4.

[1011] See for instance Chapter 5.3.

province during this period would also have been beneficial in strengthening their own position. Alternatively, more contact would almost inevitably have led to the wider-availability of certain products. This could have had an effect on all levels of society unless appropriate social constraints were in place to prevent this. This may have been especially true concerning behaviour deemed acceptable in ritual situations. Such considerations remain unrecognized in the material archaeological record.

Van Lith and Randsborg argue that social stress, of whatever kind or reason, leads to a rise in competition which is expressed at burial when more artefacts are deposited with the deceased. Although burials are also part of the symbolic system, the investment in them is social at its core. Burial investment is a product of both social wealth and social stress and not, as usually interpreted, of the wealth factor alone.[1012] This problem of interpretation remains within the material record. As Trow states, although concentrations of imported prestige items reflect the increasing wealth of native centres, the absence of such imports need not indicate a lack of prosperity. Social political or religious motivations might cause the deliberate exclusion of imported prestige items.[1013]

Pader also denies that an individual's treatment at death is necessarily a reflection of the position occupied in a status system in life. She states, to the contrary, that the patterning in burial ritual is unlikely to be directly linked to everyday empirical experience, criticising the majority of models dealing with this subject as oversimplifying the complexity of the social systems represented.[1014]

The evidence from an analysis of grave good evidence alone, whilst presenting a valid model for a socially egalitarian society, should, however, be treated with care. As already discussed in Chapter 7.4, future analysis should concentrate on combining burial data and settlement evidence, from sites excavated in the same locality. Such research is essential in order to acquire an appropriate level of detail in the analysis. that social differentiation did exist within Germanic society, at least to some level, is reflected in settlement evidence from outside the study area. Sites such as Feddersen Wierde and Wijster do appear to show, in the size and complexity of excavated house plans, indications for differentiation that may reflect a level

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[1012] Van Lith & Randsborg 1985, 437-8.

[1013] Trow 1990, 104. This opinion is also shared by others, for instance, Pader 1982, 56; Bridger 1996, 261-2 and note 1385 with further refs.

[1014] Pader 1982, 54.

of social ranking.[1015]

[1015] See Chapter 7.2.

CHAPTER 10 SYNTHESIS

10.1 Introduction

The main purpose of this study has been twofold. Firstly, to investigate the nature of the Germanic society occupying the so-called *Limesvorland* zone of the southern part of the Lower Rhineland German province, and to identify its significance and development throughout the Roman period. Secondly, to investigate the evidence for interaction with the Roman province on the left bank of the Rhine. The primary intention has been to assess the evidence presented by the surviving material culture in order to identify any ways in which the inhabitants of the region can be seen to have adapted and changed, and to attempt to identify the particular stimuli or events that led to these changes.

The largest part of this research has dealt with assessing and describing the recorded archaeological evidence for material culture within the area under study (Chapters 4-7). In Chapters 6-9 some explanations have been proposed for both the patterns and the apparent abnormalities that were identified in the material record. The intention of this final chapter is to use these analyses and explanations to present some conclusions and hypotheses related to the more specific aims of the research as set out in Chapter 1.3.

10.2 The Establishment of Typological and Chronological Definitions for the Material Evidence

The main part of this study has concentrated on providing typological and chronological definitions for, firstly, the sites and findspots and, secondly, the finds from within the study area. As has been discussed in Chapters 4 and 5, the state of the archaeological data at the outset of the research was extremely varied. The previous, more than one hundred year long, tradition of collecting and studying the archaeological remains from the study area has led to a heterogeneous and divers assemblage of material and records. In order to undertake any statistical analysis on the data in order to allow interpretation at a higher level, it was necessary to reassess the material and present it in a more standardized and uniform manner.

In seeking to present the material assemblage it has been chosen, as far as possible, to use the most relevant existing material typologies for material in Germany and the Low Countries (the Netherlands and Belgium), rather than to attempt to create new classifications. There are evident advantages as well as disadvantages to such an approach. The most important advantage is that, in this manner, comparisons can be more easily made within the material culture in other regions, especially those surrounding the study area (see Chapter 5). Another

advantage is that the setting of the study area within the wider perspective of the border, or frontier, zone as a whole has been maintained and strengthened. In addition, being able to make use of existing work has meant that the study could also concentrate on the historical analysis of the results, an element that often gets pushed into the background in studies based on the large scale classification of material evidence.

In recognizing the advantages in using existing typo-chronologies one should not, however, ignore a number of significant problems involved in such an approach. For instance, in a number of sections in Chapter 5, attention has been drawn to the often somewhat arbitrary distinctions that are used to classify Germanic pottery as opposed to imported Roman pottery. This is particularly the case when discussing the Gallo-Belgic wares, especially the late terra nigra-like vessels.[1016] It is also sadly the case that unlike in Britain, in Germany, Belgium, and the Netherlands, a crucial comparative area for this study, research into pottery of the Roman period has no particular priority within the archaeological field in general. Very little organized research has concentrated on the identification of production centres for local and regional wares, or the reconstruction of distribution networks and the refinement of typo-chronologies.[1017] Science-based research into subjects such as fabric analysis equally have almost no foothold. This has clearly been a disadvantage to the study of the Germanic pottery in general.[1018] On the one hand it should certainly be seen as a compliment to von Uslar that recent important publications still use his typology for Germanic pottery fifty years on, such as Joachim's publication of Troisdorf and Halpaap's report on the settlement at Soest-Ardey.[1019] On the other hand, it can equally be seen as rather worrying that, in more than fifty years, it has apparently not seemed necessary to put such an important and extensive assemblage of material under greater scrutiny. Recent research into the Iron Age pottery of the western Netherlands and the Iron Age and Roman period handmade pottery of the northern Netherlands have shown what can be achieved.[1020] The understanding of the Germanic pottery from the present study area would greatly benefit from a similarly supra-regional research approach to differentiate

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[1016] Chapter 5.3.2. See also Chapter 5.2.1 for the problems in identifying wheelmade and handmade pottery.

[1017] A recent exception is Künzl 1997 on the Trier motto beakers.

[1018] Chapter 5.2.

[1019] Von Uslar 1938; Joachim 1987; Halpaap 1994.

[1020] Van Heeringen 1992 & Taayke 1992; 1995 respectively.

local and regional variations: for instance, across the whole of central and northern Germany and the eastern Netherlands. The visual analysis alone of the material from the study area is, unfortunately, inadequate for reliable comparisons to be made.
The use of existing typo-chronologies has meant that the choice of adopting a 'short' or a 'long' chronology model for the circulation period of specific artefacts, particularly imports, has far-reaching consequences for the construction of a periodization. In general, the proximity of the study area to the Roman province has lead to the adoption of a short chronology model.[1021]
The more detailed definition of the types of findspots, mostly on the basis of material finds, is an accepted standard procedure for conducting regional surveys. In this respect, use has been made of previously published procedures.[1022] The same is true for the definition and classification of grave types.[1023]
In this study, the ordering of finds, findspots and sites forms the basis for the picture of chronological development in the study area, as presented in Chapter 8. From a more regional point of view, the evidence has been used to answer questions on continuity and discontinuity during the period 100 BC - AD 500. In this regard, a number of clear demographic changes can be judged to have taken place around 50 BC, in the last quarter of the first century AD, in the second half of the third century AD, the second quarter of the fourth century AD. Although mainly based on an analysis of the evidence from the cemetery at Rheindorf (A22), as well as these dates, another possible change appears to have taken place around the second half of the second century AD. As a working model in this study, these changes have been seen as taking place fairly rapidly. Appropriate explanations for this hypothesis have been sought in the historical reconstructions of events in the region.
A major problem for the construction of all the models discussed above is the lack of detailed documentation for the majority of the sites. In the few cases where the existing dataset is detailed enough to allow further analysis, for instance from Rheindorf (A22), it appears that the general picture does hold true. This, however, often leads to the 'vicious circle' of a self-perpetuating argument, since the general picture itself is often based on these larger sites. Even in Rheindorf, the most frequently occurring finds groups, such as the Germanic pottery, terra sigillata, and brooches offer an inadequate basis for statistical analysis when studied within their current typo-chronological frameworks.

[1021] See discussions in Chapter 5, esp. 5.3.1, & Chapter 8.1.

[1022] In particular Willems 1986. See Chapter 4.

[1023] See Chapter 6, esp. 6.1 & 6.4.

10.3 Environmental, Topographical and Strategical Factors Affecting Settlement

The form and extent of occupation within a particular area is determined to a large degree by prevailing environmental factors during pre-industrial periods. Within a primarily agricultural society, such as occupied the study area, the products of the land must be able to sustain the population. Man is, however, also capable of a high level of adaption when faced with adverse conditions. The choice of location within the present study area was clearly influenced by the proximity of good arable land. Riverine sediments which were, in general, better drained than further down river,[1024] the fertile loess soils of the lower and middle Rhine terraces and the valleys of its tributaries would have formed the most suitable areas for settlement, from early prehistoric periods onwards. It is precisely in these zones that the majority of sites are located (see fig. 2.2). Since evidence for continuity of occupation is lacking, prospective newcomers were able to make use of only relatively recently abandoned cultivated land. Water was readily available, as was woodland, as a source of firewood and construction material. The poorer soils of the higher-lying woodland area, particularly in the east of the study area, were unsuitable for cultivation. The expanse of these higher-lying areas would have functioned as a natural eastern barrier for settlement expansion. Further studies is needed into the agricultural economy, especially in regard to crop-growing and animal husbandry.[1025]

Other activities, for instance the extraction of naturally-occurring ores, salts and stone are, compared to the adjacent areas to the north and south, relatively scarce, and probably played no significant role in the native economy of the area.[1026] Location choice based purely on

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[1024] The situation in the study area is strikingly different to that, for instance in the River Area of the Netherlands (Willems 1986). There is no question within the study area of a wide delta area, comprising many active river courses. Whilst the Rhine did reroute its course on a number of occasions (see Chapter 2), the effects would have been fairly minimal. The development of the landscape in this region can therefore be seen as less dynamic than that in the Dutch River Area, for example. This situation would have allowed for a relatively static settlement pattern.

[1025] See, for example, Kooistra 1996, for a comparative picture from the area between the Rhine and the Meuse.

[1026] In Westphalia as in the regions to the north of the Rhine in the eastern Netherlands the winning and production of iron was a local activity that gained in regional significance from the third century onwards (Groenewoudt 1997). although a potentially extensive iron-working site has been excavated at Essen-Hinsel (B33), as yet there is

subsistency-guided factors can potentially come into conflict with the prevailing political or military-strategic situation, particularly within a border zone.

The question is often asked, how great was the strategic significance of the occupied zone along the Rhine for the Romans? Very rarely is this question turned around to ask how significant the area was for the Germanic peoples. Since the time of Caesar in the formative years of the Empire, the study area regularly figured in the front line of Roman strategic activities. The most important routes from and into Germany lay, however, to the north and south of the area itself.[1027]

The 10 km wide strip of land stretching eastwards from the Rhine that constituted the most favourable settlement zone in the study area, was relatively small and was geographically isolated from the core areas of the most important Germanic tribes (for instance, the Chatti, Cherusci, Bructeri, and Suebi) further to the north and east. The area was enclosed by the wide hilly and mountainous range of the *Bergisches Land* and the *Siebengebirge* as well as the river Lippe to the north. The Lippe, particularly in the first decades of the first century AD was seen by the Romans as a frontier itself (see fig. 3.2). From this vantage point, it was apparently relatively easy for the Romans to control and isolate the population to the south.

Whether the depopulation of the area in the first half of the first century AD was most likely a conscious military strategic decision related to Germanicus' campaigns against the Cherusci (AD 14-16) and the abandonment of the forts along the Lippe.

Once the situation had begun to stabilize again, around the middle of the first century AD, it is possible that the Romans did at first actively prevent the recolonization of the area. Such an action is supported by the information Tacitus gives for events at the same period for a similar area further down river.[1028]

Events such as the Batavian revolt meant that there was no reason for the Romans to change their policy. Tribes on the right bank of the Rhine, such as the Usipeti and the Tencteri, whose territories were close to the present study area (see Fig. 3.3) had almost immediately given their support to Civilis in AD 69. After the end of the uprising the Romans would certainly have seen them as a security risk. There are, however, no historical references known to suggest that any reprisals were carried out against these tribes. After more than a

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little evidence to argue for its importance other than on a local level. In Hessen, for instance, an important salt production centre was located near Bad Nauheim since the Middle Iron Age (Süss 1973).

[1027] See Chapter 3.3. Also, for example Baatz 1997.

[1028] See Tacitus, *Annals* 13, 54. See also Kunow 1987, 64; 1990, 87-88.

hundred years of recurring aggression against the Roman army, their military role appears to have suddenly come to an end. The military campaigns of the Flavian emperors were concentrated mostly on their eastern neighbours, the Bructeri.[1029] It is possible that these very campaigns hold the key to the explanation for the recolonization of the study area at the end of the first century AD. If it can be said that the aggressive attitude of relatively small tribes such as the Usipeti and the Tencteri was for the most part a reaction to the pressure exercised on their own territorial lands from further east, then, in the form of the *Limesvorland*, the Romans would have had the solution close at hand. As part of a long term policy of pacification, it is possible that at least some parts of the Usipeti and Tencteri tribes were allowed to move into the *Vorland*. Not only did this signify new areas for settlement for the tribes, but also an ally close by against their offensive eastern neighbours. The Roman actions against the Bructeri in the last quarter of the first century AD can, in this context, be seen as a flanking strategy to allow the resettlement of the *Vorland* to take place.

Considering the size of the military presence in the Rhineland as an aftermath of the Batavian revolt, it is very unlikely that such a small group of Germanic settlers, relatively isolated geographically within the study area, would have posed any great threat. This especially if they had fallen into a certain state of dependancy. In addition to this, the area apparently was of either little or no great economic value for the Romans across the Rhine. Evidence for the economic or military exploitation of the area by the Romans, even in the second and third centuries, is limited. Of the two military sites in the area, one had only a temporary character (as an exercise camp, Beuel-Geislar B5) and the other (late Roman fort at Deutz, B17) fulfilled a bridgehead function in direct relation to the occupation on the left bank of the Rhine. There is, therefore, no evidence to suggest that the study area became an integral part of the frontier. After the end of the first century AD there is no evidence to suggest any active interference to safeguard the security of the area. As suggested by Kunow, by the end of the first century AD the Romans had created a situation that can be described as a client relationship.[1030] Whether the incoming settlers viewed their relationship with Rome in the same terms remains the question. A similar situation can be put forward for the northern banks of the

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[1029] See Chapter 3.3.

[1030] Kunow 1987a. For the theoretical concepts associated with client relations see, for instance, Luttwak 1976; Whittaker 1994.

Rhine in the Dutch River Area (see fig. 7.1).[1031] Here again, only in the last quarter of the first century AD is there evidence for a growing number of native settlements that were clearly not seen as a threat to the province. The Romans' primary concern was the control of the riverine transport and invasion routes through the area.[1032]
By the middle of the third century AD this situation had clearly changed, with the increasing number of settlements in the eastern Netherlands and the adjoining part of Westphalia, to the north of the study area, beginning to pose a potential threat. Around this period settlement in the study area itself appears to have reached its demographic optimum.[1033] Shortly after, the defensive concept of the *limes* broke down. From this moment on the evidence suggests a rapid demographic decline in the study area. It is possible that the study area, just as in the Augustan period, reacquired the character of a 'through zone'. There is certainly no indications to suggest this settlement decline was brought about by direct military intervention from the Romans, i.e. recreating a buffer zone as in the first half of the first century AD. That being said, the study area was not completely unoccupied in the fourth century AD. It is doubtful whether the Romans would still have considered the inhabitants of the study area to be allies at this time. The Roman fort at Deutz was founded at this time, in an attempt at providing some view over the movements of the Germanic inhabitants, but primarily as protection for Cologne. The function of Deutz was never one of defence for the right bank of the Rhine, and was certainly not for its protection. Its primary function was that as the last (or first) fort in the defence-in-depth system for the province.

10.4 The Nature of Germanic Society in the Region

Although a regional research programme into evidence for Late Iron Age occupation is necessary, the material remains studied within the framework of this research indicates towards a clear discontinuity in the settlement pattern in the study area between the first and last decades of the first century AD. The most important archaeological evidence for this is:
- the almost complete absence of material remains dating to the post-Augustan and pre-Flavian period;
- the relatively small number of sites, cemeteries as well as

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[1031] In contrast to the present study area, the evidence here comprises mostly settlement remains.

[1032] Hessing 1995.

[1033] See Chapter 8.

settlements, in which both Late Iron Age and Roman period remains have been found;
- the contrast in form spectrum between the local pottery of the Late Iron Age and that of the Middle Roman period;
- the presence of completely new brooch forms, in comparison to Late Iron Age forms, in combination with the absence of early Roman forms in common use in the Lower Rhine area to the west, such as the *Augenfibula*, *Aucissafibula* and the *Kappenfibula*.

Of course, each of the above arguments on their own are not convincing enough, but taken together gain enough strength to support the hypothesis that only after the last quarter of the first century, and possibly even after the last decade of the century, did any large-scale recolonization take place. The historical background to these events has been discussed above and in Chapter 3. As a logical follow-up to this argument the question of the ethnic origin and composition of these immigrants can be raised.

Both the material remains and the evidence for the reconstruction of the burial ritual offer some points of reference. In the first phase (AD 90-150), finds groups such as the Germanic pottery and brooches, militaria and other pieces of personal equipment, such as razors and pins, for instance, show clear parallels to material from other areas associated with the Rhine-Weser cultural group. Characteristic for this material culture during this period is the large-scale homogeneity within the material remains over a large geographic area, stretching in an east-westerly direction from the Elbe to the Rhine, and in a north-southerly direction from the Weser and Ems rivers to the *Siebengebirge*. Insofar as it is possible, on the basis of the current state of knowledge, to make any distinctions, there are clear parallels between material from the study area and regions to the north and north-west, the southern part of Lower Saxony, Münsterland and the eastern Netherlands.[1034] In addition, there are also some comparisons to be made with the North German coastal area.[1035] Any comparisons to be made with the areas to the east and south of the study area are less clear. The burial ritual itself, with the presence of shield fragments, fragments of metal vessels, and the frequent inclusion of drinking vessels for instance, is clearly Germanic. This is in stark contrast to the ritual displayed in graves on the left hand side of the Rhine, within the province: the form spectrum in handmade pottery, the presence of ditched enclosures around graves, the different grave good pattern. The same holds true for other aspects of the material culture, of which the structure of the

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[1034] See for instance, Reichmann 1979; Halpaap 1994.

[1035] See Chapter 5.

settlements and the absence of *Grubenhäuser*are just two examples.[1036] In conclusion, it is highly likely that the ethnic composition of the population in the study area was of West German origin in this period, probably immigrants from the north-west. A second wave of immigrants, arriving shortly after the middle of the second century AD, cannot be ruled out.[1037] These late first century changes correspond more or less with the movements of the Tencteri as described in historical sources and illustrated in Figures 3.1 and 3.3.

Based on a study of the pottery, the inhabitants of the study area were apparently part of a larger, closely linked group of tribes, stretching in a belt north of Rhine from Utrecht in the Netherlands to Frankfurt in Germany. As well as the Tencteri, these tribes include the Chamavi, the Tubanti and the Chattuarii. These can be distinguished from tribes such as the Frisii and Chauki further to the north, and the Bructeri and Chatti further to the east. In the first two centuries AD the West German tribes that were closely related culturally, probably had a rather loose relationship, both politically and militarily. By the middle of the third century AD, at least from a Roman perspective, these tribes began to rise up as a much more closely-knit power: the Franks. By this time, tribes such as the Ampsivarii and Bructerii were probably part of this larger group. Around AD 256/257 the Franks crossed the Rhine for the first time, probably from within or nearby the study area. Archaeological evidence for this invasion has been found in excavations in Krefeld-Gellep (*Gelduba*), opposite the study area on the left bank of the Rhine.[1038] Were inhabitants from the study area part of this invading group? There are two possible answers to this question, depending on how we view their relationship with the neighbouring Romans:

- either this relationship was still so crucial for their existence that the inhabitants fled over the river into the province in the face of the Frankish threat or,
- the inhabitants were a part of the Frankish confederation and were part of the invading forces.

The rapid demographic decline visible in the study area at this period, indicates that some sort of emigration did take place. Excavations of the settlement of Leverkusen-Schlebusch (B42) suggest that evacuation took place in an orderly fashion, with no evidence for plundering.[1039] The fact that the area was not completely abandoned, however, is evidence to suggest that the latter explanation is the

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[1036] see Chapters 5, 6, 7, & 9.

[1037] See Chapter 8.

[1038] Kunow 1987, 81-82.

[1039] Frank 1997.

more likely. Only after the following wave of invasion, in the second half of the fourth century AD was the depopulation of the area more complete.

From the study of the burial data, new insight has been gained into the social structure of the native population within the study area. Bazelman's model for Germanic society, as discussed in Chapter 9, can be confirmed for the most part, and more details can be added. There are few indications to support the existence of a highly-stratified society. Family and kinship groups apparently formed both the social and economic core of the society. On the basis of the burial remains, the position that women and children seem to hold in society is illustrative of this. The burial pattern, which is probably a reflection of the settlement pattern, is made up of units that appear to correspond to extended family units. Evidence in the burial ritual for the apparently important role of a communal drinking ceremony, could be symbolic for the existence of family gatherings, the intention thereby being to strengthen social links and to give formal expression to the role of the head of the family in safeguarding the relations at the *pagus* and the tribal level. With regard to an existing exchange network for goods, one must ask to what extent the head of the family was dependent on the tribal hierarchy. The proximity of the *limes* and the presence of a market economy in the province, probably offered more opportunities for individual trade than within the Germanic areas further to the east.

The existence of binding structures on a higher level symbolized by, for example, formalized central places or chieftain-like burials, have not as yet been established for the study area. The presence of a highly militarized group within the cemetery of Rheindorf (A22), in contrast to the lack of such a group in other cemeteries, seems to support the *Gefolgschaft* theory. On the basis of this evidence, a certain central place function for the associated settlement (as yet not identified) cannot be ruled out.

Taking into account the relatively small population,[1040] the inhabitants of the study area were probably a sub-group of a larger tribe whose core territory lay outside the study area: possibly in the *Vorland* region directly to the north of the Lippe where the density of population was greater.

The common occurrence of militaria in graves could be seen as an indicator of a martial element in society. Within the grave ritual most of the militaria seem to have a primarily personal association with the deceased. Such a military appearance is to be seen as symbolic for the status and role that men ideally fulfilled in

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[1040] Assuming the presence of *c.* 80 cemeteries, each serving on average two families of six - eight persons, then the total population would be *c.* 1000 persons in the second century AD.

Germanic society. The role of the warrior was clearly linked to status. How often and where the role was actually carried out was probably irrelevant. It is important to note that the presence of military equipment in graves is not necessarily proof for the existence of a war-like society.
Although provincial military Roman imports are present in later graves, this cannot be taken to mean automatically that the deceased served in the *auxilia* of the Roman army.

10.5 Levels of Interaction and Romanization

Whatever interpretation we give to the function of the Roman *limes*, it is clear from the archaeological material found in the study area that the *limes* was certainly a cultural barrier. Differences can be seen in the ethnic background and social structure of the peoples living on either side of the Rhine. There is, however, clear archaeological evidence for the crossing of peoples and the exchange of goods. The most obvious evidence for this is the presence of provincial Roman imported goods within Germania.[1041] The question as to whether this influx of goods was the result of organized trade, trade on a more individual level, diplomacy, war booty or, alternatively, bringing back personal belongings after service in the Roman army, cannot be answered conclusively. The fact that the stream of imported goods appears to have increased sharply in certain periods, for instance with terra sigillata in the last quarter of the second century AD, can support the idea of organized trade combined with diplomatic contacts. The Roman military equipment, as well as the (possibly) male-orientated drinking service pieces, may be indications of contact via military routes. On the other hand, the variation in the spectrum of material goods found within the settlements and cemeteries more readily suggest individual contact, very probably within the markets of Cologne and *vici* near the military forts along the Rhine. The enormous economic demand for goods within the province undoubtedly had some beneficial effect on the local population within the study area. The growth of the population within the second and first half of the third century AD may well have been a consequence of this.[1042] As has

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[1041] The import of Germanic goods into the province has received very little attention to date, with the exception of the commonly-cited trade in amber from more northerly regions. Research into the distribution pattern of, for instance, Germanic brooches within the frontier provinces may well give more insight into the nature of the contact between the two adjacent regions.

[1042] If the relationship had been such that it was unbeneficial for the local population of the study area, for instance that they were forced into a relationship of slavery or servitude, it is unlikely that the population would have grown at such a rate as that suggested

been stated, evidence for the integration of the economic basis of the *Vorland* with that of the province are absent. The near absence of coinage, particularly the bronze coins as evidence for daily transactions is in stark contrast to the adjacent province and is directly comparable with other non-monetarised Germanic regions.[1043] In this context is perhaps illustrative that the exploitation of the few natural resources within the area, such as the stone quarries on the Drachenfels in Königswinter (B2) was undertaken by the Romans themselves. Since, apparently, this material was not seen as being of significance for the local population, such activities were not experienced as being competitive.

The question as to the role and function of the imported goods within Germanic society can be answered more readily. It appears that only those goods that could be most easily assimilated into local use found their way into the *Vorland*. These replaced local products due to the attractiveness of their higher technical standard of manufacture (for instance militaria, bronze vessels, and wheel-turned pottery) and their higher decorative value (for example, decorated terra sigillata bowls of Form 1.2, colour-coated beakers, enamelled brooches, and caskets). There is little evidence for the inclusion of new, Romanized, elements within daily life, for instance in eating habits, clothing, house building, the organization of agriculture and stock-breeding, infrastructure, and religious beliefs.

This contrast is best illustrated by the evidence for the burial ritual, since it is assumed that this was closely related to the cultural identity of a particular group. In essence, the burial ritual within the *Vorland* remains German. The grave types, the layout of the cemeteries, as well as the spectrum of grave goods all reflect a Central Germanic cultural background. There is no clear evidence for the adoption of Roman religious or ritual influences. In the same period on the other side of the Rhine new elements were regularly introduced into the burial ritual. The use of *busta*, cist graves, and the transformation from cremation to inhumation burial are all examples of new grave types. In addition to these, the use of tombstones, walled and ditched enclosures around the graves, and the more structured layout of cemeteries along roads changed the visual appearance of provincial Roman cemeteries dramatically.

The inclusion of goods such as oil lamps, incense burners and coins can be seen as typical expressions of a more Classical mortuary practice. None of these elements reached the *Vorland*. The burial ritual shows that the level of Romanization in the *Limesvorland* cannot be deduced from the quantity of imported goods present in the study

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by the material evidence.

[1043] See, for instance, Berger 1995, 100-1.

area. Rather than the evidence for the inclusion of imported goods within the existing patterns, support for Romanization is best sought were imports are a reflection of the introduction of new patterns of behaviour.
Despite that fact that the amount of imported goods found in the study area is much higher than that found in regions further to the north and east, it should not be assumed that the level of Romanization was exponentially higher closer to the Rhine. The level of Romanization within the *Limesvorland* remained low, and strikingly so when compared to the adjacent border zone within the province. Indeed, there was apparently no significant growth in the level of Romanization within the whole 250 year period of contact between Germanic settlers living in the study area and the Roman province.

10.6 The Validation of Historical Reconstructions

Existing archaeological literature pays much attention to the concept of a military buffer zone along the border.[1044] In some instances such ideas appear to be heavily influenced by modern perceptions of a 'no man's land' between warring sides. On the basis of the archaeological evidence, such extreme views cannot be upheld for the *Limesvorland*. The concept of a buffer zone can, however, be applied to the area if approached from a limited perspective, if defined as a diplomatic creation. The buffer zone itself was certainly, from a cultural point of view, more German than Roman. If the area can be said to have been military in character in the second and third centuries AD, this must be seen as a reflection of the attitudes of the resident Germanic population. From the end of the first century AD onwards, there appears to have been little direct Roman intervention within the area.
Evidence for the exploitation of the area in its entirety as a military *Nutzland*[1045] is scarce, despite the discovery of the so-called *prata Legionis* inscription in St.Augustin-Niedermenden (C9). At most, some selected pasture land may have been used, in the areas directly opposite important military installations.
Developments in the area in the later Roman period can also be viewed in the light of events within the Germanic rather than the Roman world. The gradual increase in pressure from the movements of tribes within Central Germany pushing further and further westwards had a direct influence on the decreasing possibilities for settlement within the study area.

[1044] See Chapters 1 and 3.

[1045] See von Petrikovits 1979 for an explanation of this term.

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