A cultural perspective on Merovingian burial chronology and the grave goods from the Vrijthof and Pandhof cemeteries in Maastricht

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Chapter 1

The Typology and Chronology of Merovingian Graves and Grave Goods and the Cultural Aspects of Material Culture: A Renewed Debate on Burial Chronology

This chapter aims at the evaluation and redefinition of the chronological debate in Merovingian archaeology. In doing so, the integration of two separate lines of research is required: the typochronological research of grave goods as it is practised for a long time in early medieval burial archaeology, and some aspects of the more general and broadly developed theoretical debates on funerary customs and the meaning of material culture in various social contexts. The attainable length of the chronological burial phases is probably the most prominent discussion in the current chronological debate, and the quest for short chronological phases seems to be a research goal on its own. Burial and the selection of objects from the material culture of the living for funerary rites, however, is a social practise that consists of variability in choices. The contemporary chronological debate is characterised by the lack of a thorough awareness of certain relevant cultural variables and their influence on chronological results and therefore the possibilities for refined chronologies. The scholarly ambition for short chronological phases will be analysed in relation to the backgrounds of the chronological method of seriation in particular, which is generally accepted as a reliable method for the dating of graves on the basis of their contents. The problems and shortcomings of this method are of a practical and statistical nature, but they also relate to the absence of identified cultural variables as indispensable components of the chronological debate, especially when short chronological phases are the goal. A detailed discussion of these variables and their place in the chronological debate will shape the discussions in the following chapters. First, however, their precise identification, their relation with a chronological method such as seriation, and their contribution to the redefinition of the chronological debate will be explored.

1.1 The burial chronology of the Merovingian period: Content of the current debate

The chronology of the Merovingian period is in the archaeological discipline of this period mainly based on grave goods from more or less extensive cemeteries and should therefore be defined as the burial chronology of this period. Although the methodology of Merovingian burial chronology is, at least according to the list of publications of the last few decades, a fashionable subject, the results of the discussions are rather one-sided. 11 The current chronological discussions in early medieval archaeology in France and Germany, where the majority of the cemeteries were excavated, concentrate mainly on the refinement and adjustment of the existing typologies, the possibilities of the refinement of the chronological phases, and the adjustments of the absolute dates ascribed to these so-called ‘Stufen’, ‘Schichten’ or ‘Phasen’, from now on referred to as phases. The application of the chronological methods themselves, seriation and horizontal stratigraphy, are already discussed in detail, and their practical and

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11 This is probably due to the fact that ‘method’ was not distinguished from ‘methodology’. The explanation of the technical and practical aspects of chronological methods and the ongoing adjustments of the chronological results alone do not shape the chronological debate; the underlying assumptions of the methods and their relation with relevant cultural aspects of early medieval life, death and material culture require reflection in order to validate chronological results.
technical backgrounds are no longer part of the recent debate. Although the techniques of seriation and horizontal stratigraphy are in fact simple, this chapter illustrates that their underlying assumptions and the need to incorporate relevant cultural variables into the chronological validation of their results are subjects that are underestimated in the chronological debate. Only the chronological method of seriation will be the subject of discussion in this chapter, which was developed and used for chronological analysis in France and the Rhineland area (Germany), for reasons that will be explained later on. Nevertheless, the conclusions in this chapter also relate for the majority to other statistical dating methods and the method of horizontal stratigraphy. At times it was thought that especially seriation was an instrument that made it possible to create relative chronologies of graves in an objective way. It is now acknowledged that this objectivity is false, although this conclusion did not actually change the practise of chronological analysis. A more general shared opinion is that the relative chronology of the early medieval period is one of the most refined and fundamentally accurate chronologies in the archaeological discipline, and that the available amount of burial data on which it is based is so comprehensive that new finds will not change the chronological insights dramatically when they are included in new seriations. This general shared optimistic opinion may explain why the majority of the participants of the chronological debate concentrate on further refinement of typologies and absolute dating.

The leading 'methodological' discussions are on the one hand part of more detailed publications of a cemetery or a cluster of cemeteries, and on the other hand, they are publications that deal with the subject on its own. The founding works of early medieval chronology are those of Werner (Münzdatierte austrasisce Grabfunde, 1935) and the elaboration of this work by Böhner (Die fränkischen Altertümer des Trierer Landes, 1958), who developed a method to construct a typo-chronology of grave goods that was based on the finds in the region near Trier (Germany). This method (often referred to as 'combinational analysis') was in fact a basic form of seriation. Thereafter, most of the publications that dealt with the typo-chronology of graves and grave goods relied on this work of Böhner, without concerning too much about theoretical backgrounds and the methodological problems of chronological analysis. The most important publications of cemeteries in which it is explicitly mentioned that methodological issues are considered and discussed are those of the cemeteries of Rübenach (Neuffer-Müller and Ament, 1973), Rübenach and Mayen und der Pellenz (Ament, 1973; 1976a), Schretzheim (Koch, 1977), Ardenne and Meuse (Périn, 1980), Zur Chronologie merowingerzeitlicher Frauengräber in Südwesteulesswdeutschland (Roth and Theune, 1988), Pleidelsheim (Koch, 2001) and in particular, in the publication of the cemeteries of the lower Rhineland area (Siegmund, 1998) and the successive work of the Franken Arbeits Gruppe (Müssemeyer, Nieweler, Plum and Pöppelman, 2003). However, the discussions in these publications are, as already mentioned, mainly concerned with the adjustments of existing typologies and absolute dates, and with complementary statistical methods that are considered to provide objective proof for the chronological significance of the results.

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12 The method of computerised seriation in Merovingian burial archaeology is, for example, extensively discussed by Périn (1980), Ihm (1983), Herzog (1987) and Roth (1994). For an extended general introduction to chronological methods with specific attention to seriation, see O'Brien/Lyman (1999). The method of horizontal-stratigraphy is especially discussed by Ament (1973; 1976; 1977) and Koch (1977). It is also referred to as the chorological or topo-chronological method; this method is developed and used especially for the chronological analysis of the cemeteries from Southern Germany. The object-types are plotted out on the cemetery plan from which the development of the cemetery (the chronological phases) can be extracted. The application of this method requires specific conditions: the cemetery has to consist of a regularly developed cemetery plan through time and it has to be excavated completely. This chronological method has been combined with the method of seriation (Roth/Theune, 1988; Koch 2001; Stauch, 2004).

13 Müssemeyer et al. 2003, 13.

14 See for example Legoux/Périn/Vallet 2004.

15 See Chapter 4 of this thesis for a more detailed discussion of the methodological considerations in some of these works.

16 Both a discussion of the method of seriation and horizontal stratigraphy and the combination of the two methods can be found in these publications. See Chapter 4 for a detailed discussion of the application of both methods in the studies that were used for the chronological analysis of the finds from Maastricht.
Figure 4. Steuer's possibility scheme: The 'possible funeral time span' of graves (after Steuer 1998, 141)
The chronological discussions that are not embedded in the publication of a cemetery primarily focus on the evaluation and adjustment of the phases, as Böhner published them.\(^{17}\) Altogether, the onsets for an encompassing chronological debate in which the assumptions behind the methods used are combined with material aspects of social life, the selection of objects for funerary rites, and their influence on chronological analysis are only sporadically mentioned in these publications.

An exception from this overview is the in 1977 published article of Steuer (Bemerkungen zur Chronologie der Merowingerzeit) in which the importance of the assessment of the ‘burial time span’ is introduced (Figure 4). The burial time span refers to the minimum length of time in which graves can accurately be dated when the interrelation of cultural aspects such as the various acquisition moment of objects, the circulation period of objects and the age at death are taken into consideration.\(^{18}\) This article can be appreciated for the awareness it creates regarding the problems of Merovingian burial chronology. The methodological and theoretical conclusions of Steuer, however, are hardly ever followed or elaborated on by other scholars working in the field, despite the observation that the article is frequently cited.\(^{19}\) Steuer himself elaborated on this subject in a more recent article (Datierungsprobleme in der Archäologie, 1998), in which he eloquently added the problems concerned with the quest for short chronological burial phases. These articles could form the foundation for a further development of the chronological debate, despite the fact that some important subjects were not, or not thoroughly, explored by Steuer. Further investigation of the backgrounds of the aforementioned cultural variables is of particular interest for the development of the chronological debate.

It can be concluded that the current chronological debate in early medieval archaeology predominantly revolves around one question: How short can the chronological phases actually be? The consequences of the incorporation of cultural variables into the current chronological debate for especially the validation of short phases will be discussed in the following sections. First, the underlying assumptions of the complete process of seriation as a chronological method will be analysed in relation to the creation of short phases. How do the current discussions of typology, relative dating and absolute dating relate to the construction of short phases, and what is missing in these discussions? Which cultural aspects of early medieval society and burial practises subscribe or challenge the cultural reality of these short chronological phases? Can these discussions form the chronological debate, and will they create a platform to sustain this debate in early medieval archaeology? How can supplementary and independent data such as the analysis of the skeletal remains find a place in this debate and in future research?

1.2 Chronological methods and the quest for short chronological phases: A conflict?

The chronological methods, which are generally used in contemporary Merovingian mortuary archaeology for the creation of isolated typo-chronological schemes, are seriation and/or horizontal stratigraphy. Both are performed on the basis of a typology of the objects from graves. The subsequent steps that are required to create a chronology on the basis of these methods are carried out separately, but are ultimately considerably entangled. The choices made in each of them are of great influence on the final appreciation of the obtained chronology. The majority of Merovingian cemeteries do not meet the requirements to be analysed successfully by the chronological method of horizontal stratigraphy,\(^{20}\)

\(^{17}\) See for example Martin, 1989. A new chronology scheme was, for example, proposed by Ament, 1977.


\(^{19}\) Theune also made the observation that Steuer’s thoughts are often referred to but never employed (1999, 25). One of the most explicit rejections of Steuer’s thoughts as relevant considerations for chronological research can be found in the work of Pépin (1980, 195-198). The assumption that the dead were buried with their inalienable personal possessions and that these objects are not subject to inheritance practises implies, according to Pépin, that disturbing cultural aspects such as those discussed by Steuer are of minor influence on chronological analysis. The majority of archaeologists who are involved in chronological research subscribe this basic assumption (see also Siegmund, 1998, 222-223), and Steuer’s cultural variables as a consequence never obtained a solid position as matters of reflection in the chronological debate.

\(^{20}\) See note 16.
and their chronological analysis depends on seriation. The result of a seriation is a sequence of graves and their contents, which is generally interpreted as a chronological sequence (Figure 5). The method of seriation forms the basis of most of the publications in which the chronological analysis resulted in short burial phases. Given that seriation is a statistical method that averages the processed data, but at the same time seems to provide sequences of graves on the basis of which refined chronology schemes could be created, it is decided to focus on this method, which was mainly applied and developed for the chronological analysis of the cemeteries in the Rhineland area in Germany and in northern France. The main question to be answered here is how the chronological seriations and their underlying assumptions relate to the construction of short phases and to the presumed cultural reality of the obtained chronological sequence and these short burial phases.

Figure 5. The sequence of graves as a result of seriation. The graves are plotted on the x-axes, the objects on the y-axes. The boundaries that are drawn in the sequence represent the relative chronological phases to which eventually absolute dates are attached. The occurrence of the grave goods (object-types) over the phases represents their circulation period (after Legoux 1998, 171).

The various steps for a chronological seriation are first, the creation of a typology, second, the actual statistical process of seriation on the basis of this typology, third, the construction of relative chronological phases of graves by drawing boundaries in the obtained sequence, fourth, the assignation of absolute dates to the relative chronological phases of graves, and finally (when possible), the combination of the chronological results with the results of the additional methods of horizontal and vertical stratigraphy. After this, the absolute chronological sequence of graves and grave goods is

21 Böhner (1958) introduced the combinational method, which developed into a much more refined and computerised procedure of seriation, the method commonly applied nowadays.

22 Vertical stratigraphy, however, is not widely used as an additional chronological method for the analysis of Merovingian cemeteries, since they rarely developed in layers.
translated into a typo-chronology scheme (a scheme of phases with their characteristic object-types) in order to present conveniently arranged results. That the outcome of a seriation is already for the greatest part decided in the typological choices made in the first step is generally acknowledged. It is often also stated that the created relative sequence of graves and grave goods of the Merovingian period generally represents chronological reality. It is only the exactness of the absolute dates, it is argued, that remains open for discussion. It can be questioned whether relative dating is always accurate and involves fewer problems than absolute dating; in fact, absolute dating involves an additional set of methodological problems. The problems of both relative and absolute dating with seriation become apparent in the following discussion of the problematic relation between the scholarly ambitions for short chronological phases and the (statistical) limitations of chronological methods. In doing so, three levels of information that can be read in a chronological seriation of graves are identified. The information that becomes obscured in the statistical processing of graves and grave goods is defined for each of these levels, as are their related assumptions and problems regarding the chronological significance of the obtained sequences and the historical reality of short chronological phases (Table 1).  

<table>
<thead>
<tr>
<th>The contents of a chronological seriation</th>
<th>Obscured information</th>
<th>Problems: Chronology and short phases from a cultural perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Graves</td>
<td>- Biological sex</td>
<td>- Similarity is contemporaneity?</td>
</tr>
<tr>
<td>The relative and absolute sequence of culturally gendered graves</td>
<td>- Age at death</td>
<td>- Phase boundaries and absolute dates: scholarly constructs</td>
</tr>
<tr>
<td></td>
<td>- Ordering variables other than time</td>
<td>- The exactness of the positions of graves in the sequence</td>
</tr>
<tr>
<td></td>
<td>- Empty graves</td>
<td>- Absence of independent data</td>
</tr>
<tr>
<td></td>
<td>- Graves with one object</td>
<td>- Burial with personal possessions and a rapid replacement of objects as cultural reality?</td>
</tr>
<tr>
<td></td>
<td>(-Disturbed graves)</td>
<td></td>
</tr>
<tr>
<td>2. Objects</td>
<td>- Unique objects / singular features</td>
<td>- Morphological changes in object groups: Do they always relate to time?</td>
</tr>
<tr>
<td>The range and distribution of object - types</td>
<td>- Recurring object -types in a grave</td>
<td>- Refined typologies for cultural analysis, crude typologies for chronological analysis</td>
</tr>
<tr>
<td></td>
<td>- Unknown cultural criteria</td>
<td></td>
</tr>
<tr>
<td>3. Circulation</td>
<td>- The circulation period of individual objects</td>
<td>- The average representation of circulation</td>
</tr>
<tr>
<td>The average circulation periods of object -types</td>
<td></td>
<td>- Limited knowledge of circulation as a social process</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Various categories of objects equal various processes of circulation?</td>
</tr>
</tbody>
</table>

Table 1. The three levels of information in a chronological seriation of graves and grave goods in relation to the statistical and cultural limitations of the creation of short chronological phases.

1.2.1 The chronological ordering of graves

The first level of information is identified as the actual chronological ordering of graves, as it is obtained by the method of seriation (Table 1). A seriation of graves is an arrangement of a number of graves on the basis of their contents (grave goods assemblages), which are classified as a series of object-types. The greater the resemblance of the grave goods assemblages, the closer they are placed in relation to

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23 See Theuws (2001, 196) for a more detailed discussion of the problematic aspects of this ‘translation’.
25 Ament 1977, 133; Steuer 1977, 398.
26 See Theuws (2001, 196-197) for some remarks regarding the problems of absolute dating on the basis of coins.
27 The three levels of information together illustrate the limited set of data (compared to the content of the burial remains from the Merovingian period) on which chronological analysis is based. The position of the grave goods in relation to the body, the types of grave structures, the orientation of the graves, the position of the grave in the cemetery, and the types of grave markers, etc. have rarely been incorporated into seriations for chronological analysis.
each other in the seriation sequence. Only graves with two or more finds can be processed in a seriation; a grave with none or only one find cannot be ordered in relation to other graves. The graphical representation of a seriation shows the ordered sequence of graves on a diagonal line, which is believed to represent a chronological sequence (Figure 5). An interpreted chronological seriation consists of the division of this continuous relative ordering in chronological phases to which absolute dates are attached. The average circulation periods of object-types can be established on the basis of this construct. It is usually thought that the regular change through time of the composition of the grave goods assemblages (and also the gradual change in the morphological features of objects) is the ordering principle of the created sequences. This is based on the supposition that the higher the degree of similarity between grave goods assemblages is, the more likely it is that they date in the same chronological period, which is in fact the main underlying supposition of a chronological seriation. Regarding the short chronological burial phases as a representation of cultural reality implies an additional set of assumptions. It implies that the objects that were used as grave goods rarely have deviant or prolonged circulation periods in the period prior to their deposition, and, especially with regard to the short phases (15-30 years), that the objects underwent a relatively rapid rate of replacement; they were in circulation as long as approximately one generation. These assumptions relate to the presumed nature of the relation between grave goods and the deceased; the deceased were buried with their inalienable personal possessions. Hence, a rapid change of approximately one generation of grave goods repertoire can be observed in the burial evidence. Aspects of this fundamental cultural assumption, which is a requirement for the construction of short chronological phases, will be discussed later in detail. First, the general chronological significance (similarity equals contemporaneity) of the sequences obtained by seriation will be discussed.

The phasing of burial moments provides opportunities to reconstruct the timely change of grave goods depositions and therefore the reconstruction of the development of funerary rites. However, is this what the seriations of graves on the basis of their contents show? A seriation is generally considered to represent an average of dates of object production, use, and deposition. With regard to the underlying assumption, that similarity equals contemporaneity it will be illustrated below that comparable graves can hypothetically date in different chronological phases and vice versa, that dissimilar graves can date in the same chronological phase, especially when short phases are created (Table 2). The examples illustrate that a seriation does not necessarily represents a sequence of actual or averaged burial moments. The problem of the basic chronological assumption (that similarity equals contemporaneity), the disregard of underlying cultural variables in the chronological debate, and the problems concerned with the aim to create short chronological phases all become visible in these two examples. It can be concluded that with the method of seriation, graves can be dated in the phase of their actual construction, but also at a substantial time before their construction, because the acquisition moment of the objects (what causes assemblages with which one is buried to be similar, assuming that contemporaneous objects show considerable resemblance) in these examples is dated. This is problematic when conclusions are drawn on the circulation period of objects (they can be in the

28 Graves containing only one or no objects can find a place in the grouping of graves by the chronological method of horizontal stratigraphy.
29 The graphical result of a seriation shows the grave numbers on the x-axes and the object-types on the y-axes.
30 The average data of a seriation is phrased, for example, by Dickinson as: “…a Correspondence Analysis of burial assemblages ‘averages’ dates of artifact production […] with dates of use and dates of deposition” (Dickinson 2002, 79-80).
31 This basic assumption should be tested with vertical stratigraphy (O’Brien/Lyman 1999, 4). The possibilities to test chronological orderings against vertical stratification, however, are scarce for Merovingian cemeteries.
32 See also Steuer 1998, 136-140.
34 Comparable examples were also presented by Steuer (1998 136-140, 142, Abb. 5) on the basis of which the theoretical problems of short chronological phases were illustrated. The two examples in this thesis are hypothetical, and very probably a simplification of reality, in order to explore which cultural variables need to be part of the chronological debate and require further research. Further exploration of these cultural variables is underexposed in Steuer’s work.

19
possession of a person for an extended period of time without this being shown in a seriation) or when claims are made about rapid changing grave goods repertoires. A seriation therefore shows the similarities between grave goods assemblages, which, however, is not necessarily the same as contemporaneous burial phases. On the basis of the examples, it becomes apparent that a seriation of burial phases should rely on the newest objects that were added to the assemblages and that these should have been extracted from the material culture in circulation at that moment. This means that these objects have no life-time connection with the deceased, but were selected to suit the burial practise of that moment; the so-called occasional objects. Contemporaneous burials should contain some ‘occasional’ objects that are considerably similar in order to create an ordering of burial moments. It remains questionable whether it was a general practise to deposit ‘occasional’ objects with the dead in Merovingian times. This is not yet explored in the chronological debate, and accepting that seriations are averages of production, use and deposition does not completely solve this problem, as the examples have illustrated. These examples are hypothetical with a variety of cultural assumptions behind them. In order to answer the question of whether a seriation can result in chronological phases of burials, it will first be discussed which ordering principles other than time could cause assemblages to be similar or dissimilar and how exact the position of a grave in a sequence from a more practical point of view actually is.

Example 1: Dissimilar graves date in the same chronological phase

<table>
<thead>
<tr>
<th>Woman 1</th>
<th>Woman 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of birth: 530</td>
<td>Year of birth: 585</td>
</tr>
<tr>
<td>Acquisition objects: 14 years (year 544: phase 4)</td>
<td>Acquisition objects: 14 years (year 599: phase 7)</td>
</tr>
<tr>
<td>Age at death: 75 years (phase 7: 605)</td>
<td>Age at death: 15 years (phase 7: 600)</td>
</tr>
<tr>
<td>Date objects: phase 4</td>
<td>Date objects: phase 7</td>
</tr>
<tr>
<td>Real date grave: phase 7</td>
<td>Real date grave: phase 7</td>
</tr>
</tbody>
</table>

Example 2: Comparable graves date in different chronological phases

<table>
<thead>
<tr>
<th>Woman 1</th>
<th>Woman 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of birth: 530</td>
<td>Year of birth: 530</td>
</tr>
<tr>
<td>Acquisition objects: 14 years (year 544 phase 4)</td>
<td>Acquisition objects: 14 years (year 544: phase 4)</td>
</tr>
<tr>
<td>Age of death: 15 years (year 545: phase 4)</td>
<td>Age at death: 75 years (year 605: phase 7)</td>
</tr>
<tr>
<td>Date objects: phase 4</td>
<td>Date objects: phase 4</td>
</tr>
<tr>
<td>Real date grave: phase 4</td>
<td>Real date grave: phase 7</td>
</tr>
</tbody>
</table>

Table 2. Two examples of graves of women that can date in different or corresponding chronological phases, depending on the moment of object acquisition and the age at death.35

The ordering principle of gender is obvious for the graves of the early medieval period, and seriations are performed separately on the graves of men and women.36 There are strong indications that the age

35 The moment of object-acquisition at the age of 14 is hypothetical and chosen for illustrative reasons; the practise of formalised acquisition of objects is only scarcely discussed for the Merovingian period. However, it can be assumed that the acquisition of the wide variety of objects that are known from the Merovingian period relates to various moments in the life cycle of persons (see Chapter 3 in this thesis for a further discussion of this subject). The phases and their length in the table are based on the lower Rhineland phases of Siegmund (1998).
of the deceased is also decisive for the range of objects deposited with him or her.\textsuperscript{37} This implies once more that dissimilar graves (contemporaneous burials of women or men of different age groups) can date in the same phase. The burials of a 60-year-old woman and a 20-year-old woman may be contemporaneous. However, if their grave goods represent their cultural age, they have different appearances and may be placed considerably apart in the obtained sequence. If these contemporaneous graves do not have shared object-types, they will never be connected in a seriation, and can consequently be interpreted as chronologically different. If this is the case, seriations should be performed separately on gender and age groups. It can be imagined that contemporaneous burials may have deviating appearances for various reasons. One of the key questions in the chronological debate should relate to the expected singular influence of time, which causes graves to be similar or dissimilar in appearance.\textsuperscript{38} In addition to age, this can also be influenced by the social or economic position, cause of death, number of children, etc.\textsuperscript{39} Such distorting influences of a cultural character are also not solved by accepting that a seriation provides ‘averages’. The discussion on the relative and absolute phases in a seriation of graves is not only technical and statistical, but is also related to social life and to the choices of the survivors regarding the construction of a desired image of the deceased. The degree to which the components of social life disturb the chronological picture as constructed by archaeologists should be integrated in the chronological debate. The chronological accuracy of the orderings obtained by seriation or other chronological methods can only be substantiated by independent evidence such as vertical stratigraphical sequences of the ordered graves and scientific research such as radiocarbon dating.\textsuperscript{40}

Next to the chronological significance of a sequence of seriated graves (similarity is contemporaneity), the chronological significance of short phases (15-30 years) can also be questioned. The construction of phases with absolute dates in a seriation makes it possible to assign graves to one specific phase. A phase represents a limited period of time in which the associated assemblages of grave goods (=grave) are more comparable to each other than to assemblages in other phases. The division of the seriation in relative chronological phases and the assignment of absolute dates to these phases is a scholarly construct.\textsuperscript{41} The boundaries of the relative phases are based on the disappearance of certain object-types or the appearance of a new set of object-types in the sequence of graves. Generally, however, no clear-cut ‘groups’ can be identified in the sequence of graves in a seriation. Clear procedural steps are not described for the drawing of such boundaries in a continuous sequence of graves. Dickinson rightly mentions that “There is also an inevitable tension between sorting data in a CA seriation to accent continuities and in a grid-square matrix to emphasize relative phases”.\textsuperscript{42} Absolute dates are attached to these boundaries by coin-containing graves, dendrochronological data and historically dated graves. Both the establishment of relative phases and the assignation of absolute dates to these phases reveal methodological problems.\textsuperscript{43} It is generally acknowledged that every boundary drawn is too strong and does not meet historical reality, and that these chronological divisions are merely an analytical tool.\textsuperscript{44} These general acknowledged remarks, by which the modelled and

\begin{itemize}
  \item \textsuperscript{36} The identification of a grave of a woman or man in most studies is based on the gender associations of the grave goods. When available, the determined biological sex of the buried persons is often used for comparison. The ’neutral’ graves are in a seriation processed with either the graves of the men or women.
  \item \textsuperscript{37} Halsall 1995; 1996; Stoodly 2000; Stauch 2008.
  \item \textsuperscript{38} Multi-dimensional statistics do not necessarily solve this problem because knowledge about ordering variables and the way to translate them into typologies stands at the basis of this problem. See Chapter 4 for an example of how multi-dimensional ordering is used on the basis of Siegmund’s typology of the Rhineland area.
  \item \textsuperscript{39} The search for meaningful correlations between the assemblages of grave goods and certain biological variables is promising in this respect.
  \item \textsuperscript{40} Steuer 1998, 143-145. Next to the renewed interpretation of the vast number of coins, he mentions the possibilities of radiocarbon dating and dendrochronology in relation to the age at death for the evaluation of the constructed and generally accepted chronological phases. See Stutz (1994) for a realistic point of view regarding archeometric methods (radio carbon dating, thermoluminescence, and dendrochronology). She claims that these methods do not offer absolute dates because of their imprecision; the obtained dates should always be interpreted against the background of their archaeological context (Stutz, 1998, 103). Narrow chronological burial phases require detailed independent dates to be tested, and it is questionable whether these detailed dates can be obtained.
  \item \textsuperscript{41} Steuer 1977, 380.
  \item \textsuperscript{42} Dickinson 2002, 80.
  \item \textsuperscript{43} Theuws 2001, 195-197.
  \item \textsuperscript{44} Steuer 1977, 379-381.
\end{itemize}
averaged character of the results of a seriation are accepted, do not correspond to the quest for short chronological phases, which assumes a regular and rapid replacement of the object assemblages that can also be read in a seriation. Researchers who question this regularity promote longer chronological phases (generally 50 years or longer). They also concede to the need for chronological boundaries for analytical reasons, but believe that long phases are less in conflict with historical and cultural reality, and that relatively long phases are therefore a preferable basis for further analysis of the burial remains.

Although chronologies and chronological phases are constructions, it can be stated that they represent the development of the grave goods assemblages over the course of time to some degree. However, what is the chronological significance of short phases? It can be questioned whether a seriation provides sequences that are exact enough for the creation of short phases. Hence, the exactness of the position of the graves in the sequences must be questioned. A seriation is performed only on a selection of the once existing, but also of the currently available data. This means that if all the objects, including those that have decayed (wood, textile, etc.), lost through post-excavation processes, and those that could not be incorporated in the analysis as a consequence of statistical requirements, were incorporated in the seriation, the place of the graves in a sequence obtained by seriation could change dramatically. This could also occur when the typology used is adjusted into a more refined or coarser classification, and when other features of the burial evidence such as grave structures and orientation of the graves are integrated in the chronological analysis with the method of seriation.

The obtained sequence is a result of scholarly choices; it is not even close to a direct reflection of the reality of deposition. The short phases are created on the basis of this incomplete and manipulated dataset. How can the position of a grave in a seriation be perceived? I think a seriation appears to represent a very general chronological ordering of graves, rather than a precise one because the close proximity of graves is only based on a relative comparison of a selection of the total burial evidence, of what the grave contents once were, and of archaeologists’ choices regarding the burial evidence. A precise ordering and nearly exact positions of graves should be the starting point when short phases are the aim, and therefore the availability of the complete set of burial data that was once present. This dataset, however, is only fragmentarily available for archaeologists. Ascribing a historical reality to the refined chronological burial phases of graves should be dealt with cautiously, as the two aforementioned examples taken from a cultural perspective have already illustrated. Nonetheless, the results of chronological seriations are regularly published as relatively precise results.

Apart from the descriptive typology, the analytical result of a chronological seriation is generally presented in two ways: in a list of dated graves, in which the graves are restricted to one (sometimes more than one) phase, and in a typo-chronology scheme that represents the subsequent chronological phases with their characteristic contents in the form of object-types, i.e. the chronological change of the object-types. The average circulation period for most object-types is limited to the phase of their most frequent occurrence in a seriation, and the typo-chronological scheme is often published as the ‘final result’ of a chronological analysis of a cemetery. This typo-chronology scheme is a simplification of the descriptive overview of types and their associated dates. When the circulation periods of the object-types are considered independently (as is often done in studies of cemeteries without their own seriations and which rely on other typo-chronology schemes for the chronological analysis), it becomes difficult to restrict the dating of the graves to one phase solely on the basis of this information. It appears, for example, that most of the object-types in the graves of Siegmund’s phase 5 (Rhineland phase 5: 555-570 AD) are not restricted to this phase; they also occur in phases 3, 4, 6 and 7.

46 In some typo-chronology schemes, the occurrence of object-types in multiple phases is illustrated by an arrow that crosses the phase boundaries, and in some typo-chronology schemes this is not represented. In the latter, the object-types are graphically restricted to a single phase. See also Steuer, 1998, 130-135, Abb. 2-3.
47 Theuws 2001, 196.
48 Siegmund 1999, 180-195, 204-205. He clearly states that the establishment of chronological groups of graves is necessary for research purposes, but that the presentation of his typo-chronology scheme does not support the so-called ‘phase model’. However, his graphical depiction of the 12 Rhineland phases with their characteristic object-types
basis of this information alone, it would be difficult to assign the grave to only one phase. A discrepancy exists between the exact position of a grave in a sequential ordering of graves with created phases (boundaries) and the length of time in which the grave can possibly date according to the circulation periods of its contents (object-types). The exact dating of a grave to one phase can consequently only be realised by a seriation (or other chronological method), not on the basis of available typo-chronologies.

This discrepancy can best be illustrated with the opposition between the ‘phase model’ and the so-called ‘battleship model’. The premise behind the phase model is that certain grave goods assemblages exist together during a specific period of time. They appear and disappear quite rapidly, after which they are replaced by another series of grave good assemblages. The battleship model contrarily assumes that much more overlap exists between the occurrence and disappearance of various object-types. Moreover, the various circulation periods of different but contemporary object-types are also considered. The battleship model is generally accepted as the most plausible model to represent the development of material culture through time, although the typo-chronological schemes as a result of an analysed seriation are often published as if they represent a phase model. When the battleship model is accepted, phases (especially short ones) are more difficult to create and are more ‘artificial’ compared to the change in material culture according to the ‘phase model’. The paradox is that the battleship model is preferred over the phase model, but that the latter provides a solid basis for (short) chronological phases and that the results of seriation are often handled as if they represent such a phase model. Apart from the comment that his creation of short distinct phases should not be interpreted as a phase model, Siegmund does not make further reservations about the seemingly sharp boundaries. On the contrary, he relates some essential cultural conclusions to the ‘observed’ rapid change in material culture, as will be illustrated below.

The construction of legitimate short chronological phases from a cultural perspective requires a limited period of time between the acquisition of contemporary objects and their burial with the deceased. The limited period of time between the acquisition of contemporary objects and burial, as illustrated in the examples, applies to death at a young age. This relates to the assumption that the dead were buried with their personal belongings, of which it is thought that the majority acquired the dress-related items in particular in their teens and early twenties, and that these items remained inalienable personal possessions thereafter. No research has actually questioned how and at which moment object assemblages from Merovingian graves were constructed. Was this in the course of life, in the early stages of life, or just before death? It further remains questionable whether the creation of assemblages of objects at approximately the same moment implies a degree of similarity, and what the variation is in the process of object assembly and subsequent burial. Although multiple models can be utilised, the debate on burial with personal possessions in particular becomes important with regard to these questions, as will be discussed in Chapter 2.

Summarising, the problems of the validation of the chronological results that are obtained with the method of seriation, and especially the cultural reality of the short burial phases, relate to the specific nature of burial evidence (incomplete, selective), the underlying problems of (statistical) procedures (typologies and seriations average the data, which is already a selection of what was originally present), and to the absence of considerations from a cultural perspective.

is the representation of a genuine phase model. Siegmund explains his typo-chronology scheme as an analytical tool. This was already more thoroughly discussed by Theuws (2001).

49 Theuws 2001, 196.
50 The ‘battleship’ model as a point of departure is often explicitly mentioned. See for example Roth/Theune (1988, 9) and Siegmund (1998, 178), although he mentions that for some objects the ‘phase model’ seems more justified; some objects appear and disappear nearly exclusively together.
52 This may be due to the fact that it is generally acknowledged that chronologies of graves and grave goods are a “sort of mid-way point…” between the production and the deposition of objects which, however, is not necessarily considered to be problematic for chronological research (Hines 1999, ix; Steuer 1998, 139-140; Dickinson 2002, 79-80). According to Hines (1999), this is only problematic when the assemblages to be studied are large and inconsistent.
1.2.2 The object-types in graves

The second level of information in a chronological seriation of graves involves the presence of the defined object-types (Table 1). The individual grave goods need to be classified as a range of object types in order to perform a seriation of graves on the basis of their contents. Both the graves and the typological groups require some statistical conditions. The objects that are unique and occur only once in the burial evidence are not included in the analysis. The defined object-types have to consist of a reasonable number of individual objects for their statistical workability. The main contribution to the chronological debate from a cultural perspective regarding typologies deals with the discussion of the significance or meaning of the identified object-types, and therefore with the question of whether the morphological characteristics on the basis of which they are classified represent a temporal development. The uniqueness of Merovingian grave goods (hardly any object is entirely similar to another) requires an artificial grouping to make them suitable for statistical processing. Object-types can be defined in a fluid scale from very general to very specific depending on the research goals set and the statistical requirements. The variability of Merovingian grave goods offers various classification possibilities. Consequently, every typology scheme can be regarded as subjective and theory-loaded, and every typology scheme will result in another sequence of graves. If a seriation is intended to produce a chronological ordering of graves, the grave goods should be classified accordingly. Is it possible to create such an unambiguous chronological typology for all the grave goods? Can the position of graves in a chronological sequence change considerably when the underlying typology scheme is altered? What does this reveal about the aim for short chronological phases?

The underlying assumption of a chronological typology is that categories of objects show a morphological change through time, which is captured in the defined subtypes of each category. Garnet disc brooches, for example, are a specific group of objects. The subtypes with associated dates in, for example, Siegmund’s typology scheme are:

- **Fib.1.1**: (Rhineland phase 3/4) Kleine Almandinscheibenfibel; rund, einzonig, vier und mehr Zellen
- **Fib.1.2**: (Rhineland phase 4) Kleine Almandinscheibenfibel; Vierpaßform
- **Fib.1.3**: (Rhineland phase 4/5) Almandinscheibenfibel; rund oder rosettenförmig; zweizonig
- **Fib.1.4**: (Rhineland phase 5) Almandinscheibenfibel; rund oder rosettenförmig; zwei- oder dreizonig; in der Mitte tiefe Felder ohne Almandineinlage
- **Fib.1.5**: (Rhineland phase 6) Große Almandinscheibenfibel; rund, dreizonig, engzellig mit Almandinen belegt
- **Fib.1.6**: (Rhineland phase 8) Schiebenfibel Kaarst Grab 12.1

The subtypes represent the temporal change of the morphological characteristics of an object-type. It can be assumed that the evolutionary premise very generally applies to the material culture from Merovingian cemeteries. The definition of broad typological groups (only ‘garnet disc brooches’ without subtypes) makes the problem of the chronological significance of object-types less substantial (disc brooches, for example, disappear from the burials in the seventh century), but the disadvantage is that it will be more complicated to create short chronological phases in the obtained orderings of graves. The

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53 Only the occurrence of an object-type in a grave can be read in a seriation of graves, not the frequency of its occurrence in a grave. The difference between ‘occurrence seriation’ and ‘frequency seriation’ is described by O’Brien and Lyman (1999). Archaeologists of the Merovingian period work with ‘occurrence seriation’ because the multiple occurrence of an object-type in a grave does not occur often enough that it can form the basis of a statistical ordering. Moreover, the multiple occurrence of one object-type in a grave is rarely considered as a chronologically significant feature.

54 See Périn (1980, 129-136) for a detailed description of the statistical requirements for seriations.

55 O’Brien/Lyman (1999) refer to chronologically significant types as historical types, and offer an interesting discussion of the construction and meaning of types, especially in relation to seriation.

56 This evolutionary change as a characteristic of chronological types is extensively described by O’Brien and Lyman in their chapter on archaeological types (1999, 23-58). See also Périn (1980, 156-164) and Jensen/Nielsen (1997, 30-31).

creation of short chronological phases requires refined chronological typologies such as the classification of the garnet disc brooches of Siegmund. Can these be obtained for all the sorts of objects?

Although new typologies were presented after the pioneering work of Böhner, hardly any methodological or theoretical discussion about the chronological validation of the typological criteria can be found. Their dates are a derivative of the sequences of graves that have been obtained by past chronological research. The most important works in early medieval archaeology that discussed the subjectivity and chronological significance of typologies are those of Siegmund, the Franken AG, Périn, and Koch and Stauch for Southern Germany.\(^{58}\) Siegmund and the Franken AG, however, are the ones who explicitly investigated the chronological significance of the selected criteria.\(^{59}\) It is difficult to solve the question of whether the specific, detailed characteristics of objects are actually significant temporal aspects. Siegmund presented some tests to prove this significance.\(^{60}\) The danger of circular reasoning, however, is very much present, since independent data such as radiocarbon dates and detailed vertical stratigraphy, which could provide proof for the validity of the more or less narrow date-ranges of object-types, are only sporadically available.

The construction of a typology, however, is indispensable for different research purposes. This manipulation of the dataset in order to perform statistical procedures and to handle the often huge amount of material, disguise the specific features of individual objects. The conclusion that a typology already averages the variation makes it even more urgent to question the exactness of the position of a grave in a sequential ordering. A seriation on the basis of a typology is already the second step in which averages are averaged again. This conclusion argues in favour of the creation of a general reconstruction of Merovingian burial phases. The broader a typological group is defined, the more the specific characteristics of objects are obscured. Broad typological groups are probably the best point of departure for the creation of meaningful, although general, chronological results, which can form the basis of the cultural analysis of the development of the funerary rite over a period of approximately three to four centuries.

However, the wide variety of objects and their appearances are specifically suitable to be analysed from a cultural perspective. Härke, for example, discovered a significant correlation between the length of knives and the age at death.\(^{61}\) The length of the knives was hardly ever considered a significant typological criterion, which is, as now can be concluded, justified for chronological analysis. What would happen to the positions of graves in a sequence if the underlying typology was, for example, altered with refined subtypes on the basis of the length of the knives? The graves of old and young men who died in approximately the same period would not be identified as contemporaneous graves on the basis of this refined classification of knives. Features that are indicative of the age at death should therefore not be incorporated in chronological classifications. It can be imagined that specific features of other sorts of objects also relate to the age at death, or perhaps other social categories, but these correlations have not yet been discovered. This is another example on the basis of which the accuracy of the chronological results of a seriation, especially the refined ones, can be questioned. General typologies are less sensitive to the influence of features that are more significant for other aspects such as the age at death than they are for time. However, broad chronological phases are a consequence of this choice. The conclusion is that refined chronological typologies can in fact only be created when the chronological significance of all the classified features is known; otherwise, it is a hazardous undertaking. Next to insights in their chronological significance, it would be interesting to discover how specific features relate to biological variables such as gender, age and pathology. For such cultural research questions, refined classifications are the preferable option. Various tests can identify the correlations between very specific features such as decoration motives and colour nuances, as well as between such features and biological variables of the dead. Such specifics, however, should not form the typological

\(^{58}\) See Chapter 4 for the discussion of their ‘chronological’ typologies.


\(^{60}\) Siegmund 1998, 121-127.

basis for chronological analysis. The obscured individuality of objects, on the other hand, is in particular related to the problems of the averaged circulation periods of the constructed object-types.

1.2.3 The circulation of objects

The third level of information that can be extracted from the results of a seriation is the various circulation periods of object-types (Table 1). The graphical depiction of a chronological seriation of early medieval graves and their contents, which is divided into absolute chronological phases, apparently offers an easy way to determine the period during which object-types were deposited as grave goods (Figure 5). This is often referred to as the circulation period of object-types because it is considered to represent their averaged period of production, use and deposition.62 Such conclusions, however, are based on the results of seriations of which the chronological accuracy and the chronological meaning of the assigned phases, especially the short ones, are now questioned. The circulation period of an object-type in a seriation is often used to substantiate the temporal limits of that object-type.63 As previously mentioned, the chronological meaning of an object-type is a requirement for a chronological seriation, and one should consequently be aware of some degree of circular argumentation. The main question for now is how object circulation from a cultural perspective relates to the requirements for short chronological phases. Which research questions regarding the circulation of objects should be added to the chronological debate? What do short phases imply with regard to the circulation (production, use and deposition) of objects?64

![Figure 6. The representation of the average circulation periods of object-types and the variation in circulation periods.](http://encarta.msn.com/media_461546925_761572159_-1_1/Seriation.html)

The primary circulation is the circulation of objects, which includes the start, growth and end of production, followed by a period in which they are still frequently used and exchanged (Figure 6).66 After this period, objects can stay or be reintroduced in circulation for various reasons. It is evident that short

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62 The point has to be made that the appearance of an object-type in a relatively high number of graves does not equal a longer circulation period, although it may appear as such in a seriation.
63 Müssemeier et al. 2003.
64 When objects are clearly older pieces within an assemblage of grave goods, they are removed from the seriation. It should be questioned whether the mixture of older and younger objects in an assemblage can always be identified. This will be further discussed in Chapter 3.
65 From: http://encarta.msn.com/media_461546925_761572159_-1_1/Seriation.html.
chronological phases are theoretically incorrect when it frequently occurs that similar objects (of the same object-type) have both short and prolonged circulation periods (a high degree of variation in their circulation periods); consequently, the phases do not represent the actual burial moments, and the objects can be in circulation considerably before and after the phases in which the type is dated. The actual primary circulation period of the object-types and the prolonged circulation of the individual objects are difficult to determine outside the context of the burial evidence, for hardly any large production centres are known (centralised production, as in the Roman period, did not exist) and similar objects from contexts other than cemeteries are scarce in considerable quantities. Circulation, therefore, is a subject that requires further theorisation. The complete set of early medieval grave goods is extensive in variety, and the circulation period of all the groups of objects should be perceived differently. A general distinction is often made between 'personal' items such as dress-related objects and portables such as seaxes, swords and purses, and more 'impersonal' objects such as pottery, glass and furniture. The definition of such categories is an attempt to define the nature of the connection between the objects and the dead, and they imply various trajectories of circulation. On the basis of such categorisations, it can be suggested that a common pot has a less complex and different circulation period than, for example, a sword. General categorisations probably oversimplify the role of material culture in social life. The theoretical and cultural backgrounds of production, distribution, exchange, acquisition, use and transmission and how they relate to funerary activities should be integrated into the chronological debate, and will as such be further discussed in Chapter 3.

On the basis of the discussion of the three levels of information in a seriation, it can be concluded that the exactness of the position of the graves in a seriation can be questioned; partly because the method (typology and seriation) averages and obscures information, but mainly because the chronological analysis is performed on incomplete and manipulated data. The historical reality of the short burial phases, which are created on the basis of these results, is questionable. This is even more so because it was concluded that a series of cultural variables were not fully explored in relation to the chronological analysis. The investigation of both the nature of the connection between grave goods and the deceased (such as for example the concept of personal possessions), and the variety of the associated circulation of objects are identified as essential components of the chronological debate, and they will receive further reflection in the next chapters. However, first, what are the opinions of the participants of the chronological debate regarding their ambition for short or long chronological phases in relation to these cultural components of the chronological debate?

1.3 Reconsidering cultural variables and the quest for short chronological phases: A conflict?

It was concluded that the central discussion in the current chronological debate aims at the highest possible refinement of absolute chronological phases. This can be observed in the development of the typo-chronological schemes in early medieval archaeology. Whereas the first schemes of Werner (1935) and Böhner (1958) consisted of chronological phases of approximately 50 years or more, some of the recent typo-chronologies consist of phases as short as 15 years. It is claimed that these short burial

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67 Damage and repairs can be informative for the time an object circulated before its deposition as a grave good. For a good example, see Von Richthofen (2000).
68 Steuer 1977, 386-387.
69 Dress-related objects are often assumed to be more connected with a person's life than, for example, pottery or glass vessels.
70 These suggestions are very subjective and based on the presupposition that the rare occurrence and valuable material component of objects make them more likely to be cherished for a long period. Further discussion of this subject can be found in Chapter 3 of this thesis.
71 Although infrequent, the prevalence for the construction of longer chronological phases is expressed in recent research, for example, in Stoodly (1999) and Lucy (2000).
72 This development was observed by Steuer (1998). Next to the schemes of Werner and Böhner, phases of approximately 50 years were published by Ament (1977), Périn (1980), and Koch (1977). The more recent typo-chronologies with shorter phases can, for example, be found in the work of Siegmund (1998), Müssemeier et al. (2003), Koch (2001) and Stauh (2004). See Chapter 4 for a detailed discussion of the creation of their typo-chronology schemes.
phases come close to representing the historical and cultural reality of the early medieval period. This implies that a rapid and steady change in the appearance of the grave goods assemblages can be observed, and that objects with a prolonged or deviant circulation period were rarely deposited as grave goods. In other words, it is assumed that the short phases reflect the already long-lasting supposition that the dead were buried with their inalienable personal possessions. That this presupposition was originally falsely based on historical sources is generally acknowledged, but it is still considered a sort of logical, unquestionable custom and persists as a major assumption (with the current assumed cultural reality of the ‘observed’ short phases as evidence), especially in the chronological debate. From a theoretical point of departure, however, another cultural reality can be imagined.

Two contradicting works regarding their expressed prevalence for short or long chronological phases can serve to illustrate the general ideas in early medieval archaeology with regard to the cultural aspects that were identified as important components of the chronological debate in the previous sections. The realistic length of chronological phases is explicitly related to certain cultural aspects of early medieval society in both the work of Siegmund (1998) and Steuer (1977; 1998), although from different standpoints. The fact that contradicting standpoints have already been expressed implies that the historical reality of the current chronological schemes can be questioned. Siegmund came to his ‘cultural’ conclusions after his construction of the typo-chronology for the lower Rhineland area (Germany) with short chronological phases as an important (cultural) result. Steuer chose a theoretical starting point, for which he identified a number of relevant cultural variables, to discuss the realistic length of chronological phases. Their contradicting points of view are best illustrated in Table 3.

<table>
<thead>
<tr>
<th>Siegmund 1998 (based on the created Rhineland chronology)</th>
<th>Steuer 1977; 1998 (based on a theoretical discussion)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short phases: 15-45 years</strong></td>
<td></td>
</tr>
<tr>
<td>Graves that are alike date in the same phase</td>
<td>Graves that are alike can date in different phases</td>
</tr>
<tr>
<td>Chronological homogeneous graves: majority</td>
<td>Chronological homogeneous graves: can exist</td>
</tr>
<tr>
<td>Chronological heterogeneous graves: rare</td>
<td>Chronological heterogeneous graves: can exist</td>
</tr>
<tr>
<td>Short circulation period of objects</td>
<td>Long circulation period of objects is possible</td>
</tr>
<tr>
<td>Old objects are sporadically used as grave goods</td>
<td>Old objects can be used as grave goods</td>
</tr>
<tr>
<td>No inheritance</td>
<td>Inheritance is possible</td>
</tr>
<tr>
<td></td>
<td><strong>Long phases: &gt; 50 years</strong></td>
</tr>
</tbody>
</table>

Table 3. The opposite standpoints of Siegmund and Steuer with regard to the length of chronological phases in early medieval burial archaeology.

Despite their opposite perspectives, it seems that both Siegmund and Steuer share one assumption which, however, is not explicitly mentioned: Persons in the early medieval period were buried with the personal belongings that they acquired during their lifetime. In Steuer’s model, this can be concluded from his concern with the various acquisition moments of certain objects (which were assumed to have been kept after acquisition) and the consequences of this for the chronological analysis of grave contents (Figure 4). In his most recent article on this subject, this can be read in a phrase such as “Immer ist die Fundkombination irgendwann im Leben der gestorbenen Person zusammengekommen und am

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73 Siegmund 1998, 222-223. See for example the title of the latest publication of Legoux, Pépin and Vallet, ‘Chronologie normalisée du mobilier funéraire Mérovingien entre Manche et Lorraine’, which suggests that the final phase of typological and chronological refinement is entered.


75 Steuer’s basic theoretical ideas can be found in his article from 1977. The central problem of short phases is formulated in his article from 1998.

76 Steuer 1998, 141, Abb. 4.
Schluß dann als Totenausstattung ins Grab gelegt worden”.77 In Siegmund’s work, this is expressed by phrases such as “...mit jedem Tod wurde eine Trachtausstattung der allgemeinen Benutzung entzogen, mit jeden neuen Leben wurde auch die Herstellung einer neuen Trachtausstattung notwendig”, and considering a rare example of a chronological heterogeneous grave, “Diese etwa um 560 n. Chr. zu datierenden Stücke dürfte sie erst in höherem Alter erworben haben”.78 To assume that persons are buried with their personal possessions implies that the acquisition moment of objects in life and their subsequent appropriation as inalienable personal possessions, which were consequently not transmitted through practices of inheritance or other forms of transmission, become interesting and important subjects of research that require a place in the chronological debate. What do Siegmund and Steuer think about the acquisition and ownership of objects?

The supposition that people are buried with their personal belongings in the work of Siegmund (short phases) implies a set of assumptions regarding the acquisition moment of objects, and it also implies that similarity equals the contemporariness of grave construction, i.e. that relatively similar assemblages of grave goods can be restricted to short chronological phases. Siegmund assumes that objects that were related to the adornment of the body (clothing) and weapons were acquired in life. Siegmund believes that the rapid change of available and acquired objects in life is reflected in the burial evidence. Early medieval people were, according to Siegmund, fashion-conscious people. The few examples of temporal heterogeneous assemblages of grave goods are explained by the (presumed and not substantiated on the basis of skeletal remains) high age of the deceased. Their high age makes it possible to see the rapid change in fashionable objects reflected in the assemblage they acquired through their lifetime. These examples, however, are exceptions. Siegmund thinks that it was unusual to keep objects that became out of fashion. In Siegmund’s opinion, dress accessories and weapons were not acquired over a long period, but rather at specific moments in life (punktuell erworben).79 It seems as if Siegmund wishes to express that objects were regularly replaced with new fashionable objects in the course of a person’s life. This implies that the elderly were generally buried with their recently acquired objects or with old objects that were altered according to the prevailing fashion standards, although this is not explicitly expressed.80 Such statements can only be substantiated with comparisons to the determined biological age of the deceased. The graves from the lower Rhineland area can, according to Siegmund, be dated in short phases because of this rapid replacement of objects in life. The age at death, therefore, has little distorting influence. The chronological results of the lower Rhineland area, as it can be extracted from Siegmund’s cultural considerations, represent acquisition moments, which, in time, lie close to the burial moments. The distorting influences on chronology through deviant circulation periods of the grave goods do not play a significant role. Siegmund discovered that early medieval antiques (objects that are clearly from an earlier phase) are rarely used as grave goods in the Rhineland, and consequently that the choice of grave goods does not include inherited objects.81 This does not mean that the inheritance of moveable property was not part of early medieval social life; it merely suggests that these objects were rarely selected as grave goods.

It can be questioned, however, to what extent the rapid change in material culture is represented in Siegmund’s research results. Rhineland phases 5 and 6 (both 15 years in length) are relatively short. If one examines the contents of the graves in these phases, most of these graves appear to contain objects that occur in two or more phases. Köln-Müngersdorf grave 97A, for example,

77 Steuer 1998, 135.
78 Siegmund 1998, 222. Phrases that express more or less the same can be found in numerous studies. See Chapter 4 in this thesis for a selection of them.
80 This is not in accordance with the majority of the correlations that were found between grave goods assemblages and the age at death such as in the model of Halsall for Lorraine (north-eastern France). See Chapter 2 for a more detailed discussion of these correlations.
81 This was also concluded by Périn (1980, 180). It remains questionable whether this applies to very old objects in more recent assemblages (which are easy to identify) or less old objects in younger assemblages (which are more difficult to identify as older). This specific subject of more or less prolonged circulation will be elaborated in Chapter 3.
contains a Sax 1 (seax) and a Lan 2.4 (lance).82 The knife and small bronze buckle from this grave are not included in the seriation of Siegmund. Siegmund dates the seax in Rhineland phases 4 to 7, and the lance in Rhineland phase 4. The grave is dated to Rhineland phases 4-5 (530-570).83 On the basis of the information of the contents of the grave alone (as represented in the typo-chronology scheme and described in the typological overview), the grave should be dated in phases 4 to 7 (530-610). Only on the basis of the position of the grave in the seriation with applied chronological boundaries, it is dated to one phase (phase 5). This assignation was probably broadened into two phases on the basis of additional information (see Chapter 4). However, a considerable number of the graves in Siegmund’s list of datable graves are assigned to one phase.84 Does one accept the position of the graves as the correct position in the chronological ordering, or does one question this exactness of the places of graves in a seriation? It can be assumed that the seriation represents a general chronological ordering (the graves on both extremities of the seriation very likely date in chronologically different periods), but that the exact position of the graves in relation to each other, especially of those within the short phases in the middle of the seriation, can be doubted. It was already discussed that this exactness should be questioned because the ordering is based on a selection of the available burial evidence; the position of the graves in relation to each other is based on incomplete data. If one questions this exactness, the lance from Münstersdorf grave 97A may very well be an old element in the assemblage and may be deposited in Rhineland phase 7. In addition, if one only considers the circulation periods of the object-types that appear in the graves of Rhineland phases 5 and 6 (which each consist of 15 years), the change in grave good repertoire may not be as rapid as Siegmund suggests. Too much importance is placed on the positions of the graves in the obtained sequence. The drawing of boundaries and their chronological significance is extremely important to discuss more thoroughly, especially when important conclusions regarding the cultural aspects of early medieval society and burial practices, such as Siegmund proposed, are based on this presumed exactness of the created chronology. The graves and the associated circulation periods of the grave goods require discussion, not just the assignation of the assemblage (grave) to one phase.

Although Steuer has an alternative perspective, he does not dismiss the main chronological assumption that resemblance equals contemporaneity. Rather, he claims that the dating of graves on the basis of their resemblances can be problematic when certain cultural variables are considered. The theoretical problems of the construction of short phases, as illustrated above, are, according to Steuer, not only related to various ages at death and acquisition moments of objects, but also to the different periods in which the objects (that became associated through burial) circulated. This aspect certainly adds more complication to chronological analysis.85 In contrast to Siegmund, Steuer incorporates the possibility of burial with relatively old and inherited objects, which is another reason for him to claim that chronological phases shorter than 50 years represent a false image of historical reality.

Considering the theoretical backgrounds of the acquisition moments of certain objects in life, no answers can be found in Steuer’s work; only hypothetical situations are sketched. His theoretical framework is schematically represented in his possibility scheme by two possibility groups each consisting of three examples.86 Group 1 (Figure 4: situations 1-3) concentrates on the possible burial time span of three graves of persons who lived in different times, but in which a similar object-type was found: the maximum length of the time span for the burials is mainly determined by the acquisition moment at birth, the highest possible age at death, and the longest possible circulation period of the objects. The possible burial time span of the graves on the basis of these examples comprises 100 years. The maximum possible time span of burials that can be associated with group 2 (Figure 4:

82 Fremersdorf 1955, tafel 18, 97A.
85 Steuer 1998, 141. Steuer used a fixed circulation length for all object types in his theoretical estimation of possible burial time spans, although he recognises that this may differ for various object-types.
86 Steuer 1998, 141, Abb. 4
situations 4-6 (three chronologically different object-types that are found in the grave of one person)) depends on the youngest object-type, for which the circulation period was fixed at sixty years. In these situations, it is represented as if the oldest object-type can only be found with the youngest object-type if they are ‘connected’ by the lifetime of the deceased. This is not always the case, for instance, when objects are subject to hereditary transmission for a considerable time. However, in these situations, the burial time span depends on the circulation period of the youngest object-type in the grave. How then, should circulation periods be established?

It is clear that Siegmund’s work includes some degree of circular argumentation, and that his remarks such as the fact that the elderly could be buried with recently acquired objects, and that people felt the need to replace their objects with more fashionable ones on a regular basis, requires further investigation. A discussion of the cultural components of chronology preferably starts from a theoretical starting point, such as proposed by Steuer. The work of Siegmund and Steuer showed that a theoretical exploration of the nature of the connection between grave goods and the deceased, which also implies an exploration of the variety of associated circulation trajectories, is required for the chronological debate. These two cultural components of social life imply a set of questions that form the basis of further reflection in the context of the chronological debate. Examples of relevant questions are:

- Did people in the early medieval period acquire objects as an individual, and can certain ‘general’ acquisition moments be considered?87
- How did they appreciate these objects? As individual property which should be kept?
- What were the contexts of acquisition? Is the acquisition of objects related to the life-cycle of persons?
- Does the acquisition of objects in the same period and at the same age equal the acquisition of a relatively similar set of objects?88
- Were persons buried with the objects they acquired (burial with personal possessions)?
- Were the elderly buried with the objects they acquired at a young age, or was it a general practise that people replaced their objects in the course of their lives?
- Were practises of object transmission (through, for example, inheritance) rare in the Merovingian period, or is only burial with these objects a rare phenomenon?
- What sorts of prolonged circulation other than the prolonged circulation as a consequence of hereditary customs can be considered?
- What sorts of objects other than personal belongings could have been placed in graves, and can these objects have prolonged circulations?
- What is the range of age at death in a cemetery?89

This list is not complete, but merely serves to exemplify that a concept of burial with personal possession has more aspects than a simple image of acquisition, keeping, and deposition. The next chapters in this thesis will explore the relationships between people and objects and the associated variation in the circulation of objects, on the basis of which this list of questions that represent the cultural variables in the chronological debate can be extended. It is clear that a conflict exists between the actual assignment of graves to short chronological phases and the theoretical discussion of the assessment of the time span (‘the possible funeral time span’) in which graves can be dated. This conflict can basically be formulated as the discrepancy between the ‘presented burial time span’ of graves by assigning them to one chronological phase (generally phases from 15 to 50 years), of which

87 Steuer already showed that the acquisition moment of objects is an important cultural variable in the chronological debate (see Figure 4). This subject is hardly ever discussed in early medieval archaeology, despite the general assumption that the objects found in graves are personal possessions, which implies that active acquisition was a component of early medieval life.

88 This is one of the results of Halsall’s research on the correlation between age and grave goods in the cemeteries of Lorraine (1995); see also Chapter 2 in this thesis.

89 In Steuer’s possibility scheme (1977, 1998), the age at death was fixed at 50 years for all the examples. The range of age at death for each cemetery or cluster of cemeteries under study needs to be incorporated in the establishment of the possible funeral time span, in relation to the other cultural variables mentioned and the variability of the circulation periods of the associated objects.
the problems and artificiality of the short phases in particular were questioned in the sections above, and the ‘possible burial time span’ of which the assessment depends on the consequences of considering several cultural variables. The significance of these cultural variables for the Merovingian period appears to be essential for the chronological debate.

1.4 Conclusion: A redefinition of the chronological debate

A number of subjects have been discussed in order to define the contents of a chronological debate in which the practise of chronological analysis and the influence of cultural aspects of early medieval society and burial practises can be integrated. In the end, such a debate can result in chronological schemes of which the outcomes can be considered reliable and on the basis of which further interpretative research can be based. In addition to the problems of chronological methods, discussed on the basis of the method of seriation, some cultural aspects complicate the construction of refined chronologies. It can be stated that a general change of the morphological features of objects that were used as grave goods probably existed over the course of the Merovingian period. However, this change is not to the same degree represented in the burial evidence due to complex social processes starting at their production and perhaps ending at the moment of their deposition in graves. This distortion is averaged by the creation of a typological classification and averaged again by the statistical process of seriation. This averaged character of the chronological results of a seriation is acknowledged and accepted, but is not consequently integrated in the ‘cultural’ conclusions on the basis of the chronological results. It is questionable whether the dating of graves in relatively limited periods of time represents cultural reality or the actual deposition phases. This becomes even more questionable if one considers the absence of numerous objects in the burial evidence and therefore the seriation. The cultural variables that influenced the appearance of the available burial evidence, however, offer interesting possibilities for future research and can redefine the contents of the current chronological debate (Figure 7).

One of the central discussions in a more broadly defined debate involves the question of whether people in the Merovingian period were buried with their personal possessions. Although in the majority of chronological studies this is considered to be a logical assumption, the concept of personal property and the burial of objects with their alleged owners are not thoroughly explored. If furnished burial with personal possessions is regarded as a cultural aspect of early medieval society, theorising on the circulation periods and the acquisitions moments of objects in the lived life of the deceased become related subjects that also require further research. The rejection of burial with personal possession brings the opposite, burial with occasional objects, into scope: objects that the burying community selected from the material culture in circulation at the moment of preparation for burial. In the next chapters, the case is made that mourners had various choices, and that burial objects cannot be captured in these two opposite categories of grave goods.

Not only the nature of the relation between grave goods and the deceased should be understood, but also the associated circulation processes of objects and object-types should find a place in the redefinition of the chronological debate. The assessment of the circulation period of objects requires knowledge about production processes, distribution, acquisition, exchange and transmission. The identification and exploration of the cultural categories of grave goods, such as the category of personal possessions and the identification of cultural categories of objects on the basis of circulation trajectories, will form the discussions in the following chapters. The results of physical anthropological research, the so-called ‘non-selective’ data, make it possible to find meaningful correlations between grave goods and, for example, age.90 In fact, the comparison between these two kinds of data is

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90 Härke discussed this distinction in ‘Intentionale und Functionale daten’ (1993) and in ‘The nature of Burial data’ (1997). The distinction between intentional and functional data, as Härke explains, offers the possibility to detect contrasts and contradictions between these two types of data, which are the best indicators for the variability of choices that were made in the event of death and burial.
promising for future research, and the formulation of relevant research questions that can be answered with the available research results of skeletal remains and as such connect the cultural aspects of Merovingian life and death with chronological results should also be integrated in the chronological debate.

### SHORT or LONG chronological phases?

The assessment of the possible burial time span:

<table>
<thead>
<tr>
<th>Cultural variables</th>
<th>Chronological methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal possessions &lt;--&gt; Occasional objects</td>
<td>- similarity is contemporaneity?</td>
</tr>
<tr>
<td>- acquisition moment</td>
<td>- what is dated?</td>
</tr>
<tr>
<td>- circulation processes</td>
<td>- why are graves similar?</td>
</tr>
<tr>
<td>- age at death</td>
<td>- phases as scholarly construct</td>
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<td></td>
<td>- the meaning of object-types</td>
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<td></td>
<td>- obscured information</td>
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<tr>
<td></td>
<td>- circulation periods</td>
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</tbody>
</table>

**Circulation periods**

(production, distribution/ exchange, transmission, deposition)

- Primary circulation
- Prolonged circulation:
  * heirlooms / objects with a biography
  * antiques
  * gifts

**Figure 7.** The cultural and methodological aspects of the burials and grave goods in the debate on the chronology of the early medieval period.