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Deviant Child Burials in Medieval Central Europe

Superstitions and Parental Grief Responses in the Context of Non-Normative Funerary Rites

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Introduction

Deviant burials, here defined as burials that deviate from a regionally and culturally specific mortuary standard, are a well-known element in the archaeological record of the time between Late Antiquity and the Late Modern Period. Atypical interments were discovered outside of burial sites, in the settlement contexts, smithies, or other remote places, but also on the communal cemeteries and churchyards. In most cases, these burials are associated with fear, and superstitions, or are thought to be the final resting place of social outcasts. Commonly, they are considered as a manifestation of belief in a life after death and the distinction between a *good death* and a *bad death*.

Although deviant burials of adult individuals are widely discussed in archaeological literature (see for example: Aspöck 2009; Betsinger et al. 2020; Franz and Nösler 2016a; Murphy 2008; Reynolds 2009), little attention has been paid specifically to atypical burials of children and adolescents.

By defining the framework of deviant burials and investigating the concept of childhood, the present thesis will deal with a comprehensive presentation, interpretation, and evaluation of deviant burials of subadults to address the question of the value and position of children in the Middle Ages. The exploration of the intersection between *deviancy* and *childhood* might allow insights into the social and cultural perception of children, but also into parental responses to premature death.

Children's daily lives and living conditions are rarely thoroughly mentioned in contemporaneous written records. Traces and remnants of play, learning, and child upbringing are hardly discernible in the archaeological records, making it difficult to identify spaces, habits, and items that belong to the sphere of children. Their graves are thus arguably the most important sources to reconstruct past childhood and to answer the question of the social position of children in the European Middle Ages.

While historical studies have long considered that children in the Middle Ages were not given much value or considered to have an own identity, archaeological finds of elaborate and distinctive burials reveal quite the opposite and, in many cases, indicate a close parent-child relationship. This thesis tries to illustrate the range of deviant child burials in medieval Central Europe and different approaches of interpretation. It is going to demonstrate that not all atypical burials are the result of superstitious belief in dangerous dead but may also be read as an expression of the individual grieving process.

Einführung

Sonderbestattungen, also Bestattungen außerhalb einer zeitlich und regional spezifischen Bestattungsnorm, sind ein viel beschriebenes Phänomen aus archäologischen Kontexten der Zeit ab der Spätantike bis in die späte Neuzeit. Beispiele von abweichenden Bestattungsarten stammen aus frühmittelalterlichen Reihengräberfeldern, Kirchenfriedhöfen und Klöstern, oder aus archäologischen Kontexten abseits der Bestattungsplätze - im Siedlungsbereich, in Schmieden oder gänzlich isoliert.

Zumeist werden diese Gräber mit der Angst vor den Toten und dem Glauben an Wiedergänger assoziiert oder als letzte Ruhestätte einer sozialen Randfigur interpretiert. Sie werden als Ausdruck des Glaubens an ein Leben nach dem Tod betrachtet und gelten als Überreste des heidnischen Glaubens. Man verbindet sie mit einem *schlechten Tod* oder einem nicht gelungenen Übertritt ins sichere Jenseits.

Obwohl atypische Bestattungen in der archäologischen Forschung eine häufig diskutierte Thematik darstellen (Aspöck 2009; Betsinger et al. 2020; Franz and Nösler 2016a; Murphy 2008; Reynolds 2009), gibt es nur wenig wissenschaftliche Arbeiten, die sich gezielt mit Sonderbestattungen von Kindern und Jugendlichen beschäftigt.

Da Begrifflichkeiten rund um die Bestattungspraxis in vielen Fällen unklar dargelegt sind, soll die vorliegende Arbeit eine klare Definition für die Ansprache von Sonderbestattungen bieten. Ebenso wird das Konzept von Kindheit im Mittelalter umrissen. Dies bildet die Basis für eine umfassende Darstellung, Interpretation und Auswertung von atypischen Bestattungen von Kindern und Jugendlichen und soll Einblicke in ihre soziale und kulturelle Wahrnehmung, aber auch in ihre aktive Handlungsfähigkeit und Eltern-Kind-Beziehungen ermöglichen.

Gräber von Kindern sind wahrscheinlich die wichtigste Quelle für die Untersuchung von Kindheit in der Vergangenheit, da ihr tägliches Leben und ihre Lebensbedingungen in den zeitgenössischen schriftlichen Aufzeichnungen nur in geringen Auszügen beschrieben werden. Abseits der Gräber sind Kinder im archäologischen Befund schwer zu finden oder zu identifizieren. Für die meisten Kinderspiele braucht es keine oder kaum Gegenstände, Spielsachen sind häufig aus vergänglichen Materialien und auch das Erlernen von neuen Fähigkeiten hinterlässt zumeist keinen Abdruck im Boden. Die Analyse von Gräbern ist daher unerlässlich und kann zumindest ein Stück weit zur Beantwortung der Frage nach der sozialen Stellung der Kinder im europäischen Mittelalter beitragen.

Research Questions, Objectives, and Aims

The overall aim of the present thesis is to examine the role, social position, and identity of children in medieval societies, represented through the way they were treated after death. The study attempts to offer interpretative approaches and debate follow-up questions, despite the fact that this broad subject might not be answerable conclusively within this scope. In order to address as many issues as possible, this paper is divided into smaller research objectives that are to be explored through more specific questions.

The first and basic research objective is to phrase coherent and consistent definitions of the medieval idea of childhood as well as the concept of deviant burials. This leads to the following issue on defining the normative funerary practice and differentiating between typical and atypical burials. This thesis is going to propose a taxonomy of deviant child burial based on formal traits and subsequently discuss possible interpretations and motives for a special funerary treatment. Pursuing questions concerning the intersection of deviancy and childhood identity will be discussed in the concluding chapter.

This thesis also aims to show the diversity of burial customs and the meaning of certain practices. Furthermore, it is going to emphasize the fact that children in the Middle Ages were not regarded as supporting actors or miniature adults. However, it is not intended to provide a comprehensive list of all atypical burials, nor is it a mere selection of the most bizarre or radical burials. Rather, the catalog compiled in the course of this thesis presents a range of apotropaic interventions to grasp the high variety of burial rites. Thereby, I am demonstrating that atypical burials are not necessarily linked to fear of death or the dead, but that a great bulk of measures taken are based on loving and caring motives.

Mortuary practices are one of the most direct sources for the reconstruction of past communities, behavior, and social order. Therefore, a closer look at child burials, especially burials that deviate from a temporal and spatial norm, might offer insight into the social and cultural perception of children in the Middle Ages.

Materials and Methods

Temporal, Spatial, and Cultural Framework

Atypical burials are found in almost all parts of the world at all times. In Central Europe, we observe this phenomenon in both pagan and Christian settings, from prehistoric and antique contexts up until the Modern Age. Nevertheless, during the time between the end of the Migration Period and well into the 18th century, deviant burials acquire a conspicuous frequency, establishing themselves as part of the mortuary practice. Especially in periods of high mortality, brought on by epidemics, widespread violence, or other catastrophes, there are more burials that show a particular peri- and post-mortem treatment (Franz and Nösler 2016b). Superstitions surrounding death or resurrection are concepts that have been expressed since early human history and are still a part of the conceptual world in many cultures.

Religious and social shifts, as well as territory and state formations between the decline of the Western Roman Empire at the end of the 4th century and the onset of the Reformation and the turn from the Middle Ages to the Modern Era, are some of the most frequently addressed issues of medieval archaeology (Graham-Campbell 2007: 13-16; Carver 2011: 16-17). All the modifications brought forth by these processes fundamentally changed how people behaved, thought, and lived. Written sources outline these transformations, explain their motifs, and list the execution of new laws, dogmas, and social standards. Yet, the archaeological record allows us to capture the actual integration and the gradual process of their establishment. This can highlight phases of transition and times of syncretism and demonstrate how long it takes from the initial impulse to the full appropriation of religious concepts, practices, and rituals. Particularly in the context of burial traditions, where ancient rituals have long coexisted with new regulations and occasionally merged to form distinct practices, we can recognize these complex, protracted processes. Changes, innovations, or variations of the burial tradition within a society can be hints for changes of culture, migration of people, or propagation of new beliefs and ideas.

Because of the crucial social, religious, and political events that occurred in Central Europe between 500 and 1500 AD, the current thesis focuses on that time period. Additionally, this epoch offers a wide range of different sources to investigate. There are several written records and visual representations that describe the religious and profane aspects of communities in addition to (bio-)archaeological data.

The main geographical focus is Central and parts of Eastern Europe. This includes the modern countries of Austria, Germany, Switzerland, the Czech Republic, Hungary, Slovakia, and Poland (Fig. 1). These

countries were mainly chosen because their historical developments in the Middle Ages are inextricably intertwined. The geographical setting was also chosen for linguistic factors, as well as the accessibility of data.



Fig. 1: Geographical framework.

The period of the Early, High, and Late Middle Ages is characterized by cultural and religious upheavals and the formation of states and empires. This thesis might not offer a suitable scope for a comprehensive presentation of the cultural or political history of the Middle Ages, but it needs to address some key points to provide a theoretical foundation for further discussions. Essential for an understanding of this period is the fact that European society was extremely poly-cultural and ethnically diverse (Grabner-Haider et al. 2010: 15). Archaeologists have spent a long time attempting to sort through this jumble of late antique and early medieval ethnicities by connecting artifacts with origins and affiliation to one culture or ethnic group. However, since people of this period were also very mobile, extensive trading was carried out and the Christian mission additionally stimulated cross-border exchange, archaeologists are increasingly coming to the conclusion that this approach was misleading, overly simplistic and that historical societies were operating on a more complex level (for further discussion, see for example: Brather 2004; Eichert 2017; Kokkotidis 2020).

The Migration Period, which was triggered by the invasion of the Huns in 375/376 (Pohl 2000: 246) and the defeat of the Romans by the Visigoths in the Battle of Adrianople in 378 caused instability and complex migratory processes for almost two centuries. There were several episodes of state-formations in Central Europe during these transformations, especially after the culmination of the Migration Period, which is typically characterized by the Lombard invasion of Italy in 568 (Pohl 2014: 232-233). Even if the length and historical significance of these reigns varied in retrospect, they all had an impact on the development of early medieval Europe's identity. This period was characterized by the emergence and collapse of several empires, as well as a unification of religion - from manifold pagan beliefs to Christianity.

The Christian mission of Europe is a process that lasted almost 1000 years. It started with the baptism of the Frankish king Clovis I (466-511) and only reached its conclusion in the 14th/15th century with the Christianization of the Baltic countries. This process influenced almost all aspects of medieval life. A consideration of social structures detached from this religious aspect is thus neither purposeful nor possible for this period (Padberg 2009: 9-11, 47-50).

Even though Christianity had been the authoritative religion in most European regions since the early Middle Ages, many pre-Christian customs and ideas persisted until the High Middle Ages (Stuopecki 2007: 367). Conversions that overturn and change the basis of people's conceptual world cannot happen in one day, so we can assume a transitional phase. One of the reasons for a rather slow progress of the adoption of Christianity and a long continuation of old traditions amid society might have been due to the fact that not all people have voluntarily adopted the Christian faith (Padberg 2009: 9-13; Grabner-Haider et al. 2012: 43). For example, the conversion of the Saxons, Baiuvarii, Avars, and Slavs after they fell under the dominion of the Frankish Empire during the reign of Charlemagne might be assumed to be at least partially involuntary. Charlemagne, who was anointed as king in 754 and subsequently crowned emperor in 800, was a central figure within the Christianization process of various ethnic groups of Central Europe and consequently in a gradual process of religious and social unification. During the transition from the 8th to the 9th century, he managed to expand the Frankish Empire to its greatest extent over most of Europe and also gave the impetus for large-scale missionary work (Padberg 2009: 102-106).

At the end of the 9th century, but particularly in the first half of the 10th century, the Hungarians emerged as a new political force in central Europe. The Hungarian Invasion - *Ungarische Landnahme* - is characterized by repeated warlike conflicts of the nomadic Hungarians, also known as the Magyars, against the East Frankish Empire and the Moravians. The war campaigns came to an end in 955, when the Hungarians were defeated by Otto the Great at the Battle of Lechfeld south of Augsburg, Germany.

After that, the Hungarians settled in the territory of present-day Hungary and expanded their empire. In the year 1000, the Kingdom of Hungary was established. Stephen I. was the first king and in the course of establishing his realm, he converted the Magyars to Christianity (Obenaus 2015a: 225-228). Europe gradually saw the establishment of more and more Christian empires, expanding their constitutional structures (Berend 2009: 12-13).

Profound reforms and structural changes initiated by these events are decisive for historical research to consider the first half of the 11th century as the transition from the Early to the High Middle Ages (Boshof 2010: 26-29). While the spread of Christianity was one of the characteristics of the Early Middle Ages, the High Middle Ages were involved with infrastructural reformation to establish the new uniform belief. In particular, the 11th and 12th centuries were marked by the Investiture Controversy, the question of the distribution of secular and clerical power. It considerably weakened the authority of kings and allowed the Catholic church to strengthen its influence on society. This decades-long debate was finally preceded by the Church schism of 1054, i.e., the separation of the Western and Eastern Churches (Hartmann 2007: 2-5; Grabner-Haider et al. 2012: 30). The late 11th century also marked the beginning of the Crusades, religiously motivated war expeditions to displace the Islamic empire from the Holy Land. The repeated war campaigns and the four Crusader States, that were established in the Levant, lasted until the middle of the 13th century (Preiser-Kapeller 2021: 189-197).

After the ecclesiastical order was able to consolidate itself and churches and associated churchyards were spread across the country, the major characteristic of the Late Middle Ages was the high number of city foundations and further improvements concerning the profane parts of life. It is assumed that more than 300 cities were founded in Europe in the period between 1220 and 1320 and that the population in Europe had doubled from the 11th to the 14th century. The period also experienced climate warming which might have ensured that agriculture became more productive, at least in short terms, and that agricultural structures had to be adapted. From the 14th century onwards, the average annual temperature dropped again, and many parts of Europe were hit by recurring crop failures and famines (Grabner-Haider et al. 2012: 13-14; Preiser-Kapeller 2021: 293-297).

The founding of cities entailed a multitude of advantages and disadvantages. While, on the one hand, permanent markets were established and trade and handicrafts flourished, a concentration of many people (and animals) in one place induced the outbreak of epidemics due to the lack of hygienic infrastructure and a facilitated transmission of infectious diseases. Furthermore, urban structures might have served as a trigger for an increasing hierarchy within society (Hassett 2017: 308-309).

Systematic and logistical division of labor led to a massive growth of productivity, but also to the situation that people became dependent on each other. Farming people living in the countryside were

able to provide for themselves and were only slightly reliant on itinerant traders or craftsmen. At the same time, the inhabitants of urban areas were dependent on a gapless organization of infrastructure and trade (Grabner-Haider et al. 2012: 21-22). In the 13th century, the construction of castles peaked (O'Connor 2011: 243), and the urban upper society erected townhouses. The local nobility constructed representative residential towers that characterize the skyline of the medieval cities in Italy and Germany for a long time (Scholkmann 2011: 390-391).

In the late Middle Ages, the ecclesiastical structure was further expanded by building new churches and large cathedrals, refining or reformulating dogmas, and significantly increasing the density of parishes. Christianity progressively penetrated society, which until then had still partially adhered to some traditions of pagan faith. Gradually, the marginal knowledge of the lay community about Christian doctrines intensified. The belief in heaven, hell, purgatory, and original sin captured people's minds and influenced their everyday behavior (Grabner-Haider et al. 2012: 44).

In the course of the Middle Ages, there were two phases of plague outbreaks, which struck the European population in several waves. First, the Justinianic plague, which, as far as the decoded genome of the pathogen *Yersinia pestis* could be determined and dated, affected Europe and the Mediterranean region in at least 18 waves between 521 and 750 AD. The second phase of the plague, known as the *Black Death*, drastically decimated the European population during endemic outbreaks between 1347 and 1353 (Feldman et al. 2016; Gutschmidt-Schumann et al. 2018: 406-407; Harbeck et al. 2013; Preiser-Kapeller 2021: 310; Vasold 2012: 49-52; Wagner et al. 2014). The plague was seen as a punishment from God and resulted in a strong increase in superstition and in scapegoating of individual groups of the population (Dirlmeier et al. 2009: 19-21).

In general, the period of the Late Middle Ages was an epoch of intensively expressed faith and fear of God. Religion was the center of daily life (Grabner-Haider et al. 2012: 44-45). The time at the transition from the 15th to the 16th century, the beginning of the Renaissance and the rise of Humanism, as well as Luther's Reformation movements, finally represent the end of the Middle Ages (Grabner-Haider et al. 2012: 9-10; Preiser-Kapeller 2021: 303-316).

This section demonstrates that the three-part Middle Ages represent an exceptionally eventful and diverse period in the history of humanity. By stating the characteristic of each phase of the Middle Ages, this brief historical and cultural outline highlights the multifaceted and complex developments and processes that took place in the time from 500 to 1500 AD.

Data Acquisition and Handling

Graves as the most direct source of human past offer a wide range of possibilities for investigation, through which a multitude of data can be collected. These diverse and interdisciplinary possibilities of investigating burials, therefore, provide a database, which has to be carefully selected and further analyzed in response to the respective research question.

The present study investigates the graves of subadult individuals that show deviating features from the surrounding norm of the burial context within the time of the Early to the Late Middle Ages in Central and parts of Eastern Europe. In the course of data acquisition for the present work, finds were only taken into further consideration if

1. the site is located in the geographical area under investigation
2. the find context can be dated clearly to the investigated period
3. the buried individual did not reach adult age - i.e. individuals who can be assigned to the anthropological age groups listed in Tab. 1 (according to Baccino et al. 2013; Grupe et al. 2015; Scheuer et al. 2008; Trautmann and Harbeck 2019)
4. the burial somehow deviated from the immediately surrounding temporal and regional burial practice regarding burial type, location, grave goods, body treatment, etc.

Tab.1: Age categories and corresponding age spans. After Baccino et al., 2013, Grupe et al., 2015, Trautmann and Harbeck, 2019, Scheuer et al. 2008.

age category	age span
fetus	prenatal
neonatus	birth to 6 months
Infans I/I	6 months to 3 years
Infans I/II	4 to 6 years
Infans II	7 to 12 years
Juvenis	13 – 19 years

The first step in data acquisition was to look for burial grounds, churchyards, courtyard burials, settlements, or isolated graves within the described temporal and regional focus. For this purpose, publications, online databases, but also yet unpublished material (with consent of the researchers) were consulted. Only accessible data and data published in German or English language could be processed further, which drastically limited the possibility of generating comprehensive data.

Deviant burials identified during the assessment of all materials were compiled in a database and displayed in a catalogue (Appendix A).

The following data was recorded:

- * number/ ID of the burial
- * place, region, and country of the site
- * type of site
 - burial ground
 - settlement/production area
 - church/churchyard
 - single burial site
- * date of the site and date of the burial if scientific dating was made or typochronological classification allowed more precise dating
- * total number of burials on the site
- * location of the burial
- * gender and/or sex if scientific analyses were made
 - method of sex determination
- * age and age category
 - method and/or morphometric features for age estimation
- * burial mode and prevailing burial mode of the immediate burial context
- * grave construction and dimensions
- * orientation and prevailing orientation of the immediate burial context
- * state of preservation
- * grave disturbance
 - ancient or modern
 - intentionally or unintentionally
- * position of the body
- * description of the position of individual skeletal remains and taphonomy

- * manipulation of the body
- * pathologies, non-metric variations, other anomalies
- * grave goods
 - grave goods with possible apotropaic character
- * if it is a multiple burial: other individuals involved
- * conclusion on why it is considered to be a special burial
- * source and image references

The first step was to collect all burials that show any characteristics of deviancy, which will be defined and described in a later chapter. All investigated places of burial were collected in a table (Appendix B). The next step was an evaluation of the gathered data.

A considerable part of the data from early medieval cemeteries on the territory of present-day Austria, Czech Republic, and Slovakia was gathered from the GIS-based web database THANADOS - The Archaeological and Anthropological Database of Sepultures¹. The database complies with the ontology of the CIDOC Conceptual Reference Model².

¹ Thanados.net (last accessed: 07.11.2022)

² <https://cidoc-crm.org/> (last accessed: 07.11.2022)

The Concept of Childhood

A Brief History of the Archaeology of Childhood

Depictions of life in ancient times displayed in museums or books present a vivid impression of everyday life. However, in the last years, this didactic tool for dissemination of knowledge about past human history also had to face some critique. For ages, they mostly showed an unproportioned age and gender distribution of populations. Men were the main subjects in most of these pictures, women slipped into the background, and children were depicted in insufficient numbers. Based on their demographic distribution, the portrayed communities were doomed to extinction (statistically expressed in: Röder 2002).

However, these images did reflect a state of research within historical and archaeological investigation. For the longest time, the study of children, but also women in the past, has been severely neglected. One of the fundamental and initial works that addressed research on childhood from a historical perspective is *L'enfant et la vie familiale sous l'ancien régime* by the French historian Philippe Ariès. The first edition in the original language was published in 1960, followed by a translation into English in 1962 entitled *Centuries of Childhood: A Social History of Family Life*, the German version *Geschichte der Kindheit* was published in 1975. The equally influential book *The History of Childhood* by Lloyd DeMause (1975) was published just a few years after Ariès initial work.

Archaeology also resonated with these new approaches of historical research. Gender archaeology emerged as a distinct subject within social archaeology starting in the 1970s, but particularly in the 1980s and 1990s, (i.e. Gilchrist 1999; Sørensen 1992; Walde and Willows 1991; Karlisch et al. 1997; Fries 2007; Moraw 2014), which eventually contributed to the conviction that it was also vital to examine and emphasize another marginalized social group, the children (Hausmair 2013: 273).

Crawford et al. (2018: 3) stated “*that until 30 years ago archaeologists had no concept of childhood*” referring to the lack of exploration on past childhood. This has, however, gradually changed as research has reevaluated the sex and age distribution of functional communities and introduced multidisciplinary approaches to life course studies. Within this context, social sciences and historical disciplines are concerned with age as an identity-forming factor and the perception of various age groups (Hausmair 2013: 273), whereas human biology examines the physical resources and energy expenditures that are necessary for the respective processes of the different biologically determined stages of life (Kappeler 2020: 38-39; Frankenhuis and Nettle 2020).

One of the first articles to specifically address the existence and remnants of children in the archaeological record of a site was written by Anne-Sofie Gräslund: *Barn i Birka* (1973) which simply translates to *Children in Birka*. It provided an impetus for further research on the history of children derived from archaeological findings. Another pioneer in the field of researching children's remains in an archaeological context is Grete Lillehammer, now Professor Emeritus of Archaeology at the University of Stavanger, Norway. Even before her seminal work *A child is born* (1989), she published several articles on the everyday life of children in prehistoric Norway (1979; 1982; 1986). During her academic career, Lillehammer wrote many studies on the concept of childhood and sketched a comprehensive picture of the current history of research on this topic (see for example: 2002; 2010; 2012; 2015; 2018). Kathryn Kamp, teaching at Grinnell College in Iowa, was also one of the scholars that initially addressed the study of children. Kamp asked the very foundational question *Where have all the children gone?* (2001), referring to the lack of study and representation of the social group of subadult individuals. The geographic focus of her research is on southern North America, Central America, and parts of the Middle East, but her theoretical work on the visualization of children and adolescents or expressions of parenting in the archaeological record are relevant to all regions (see for example: Kamp 2015).

Numerous monographs, papers, conference proceedings, and edited volumes have been written on this topic since the early 2000s. These works cover a wide range of research methodologies and issues because of the contributors' various areas of interest and educational backgrounds. In addition to the aforementioned publications by K. Kamp, extensive works from Jane Eva Baxter such as the monography *The Archaeology of Childhood* (2005) and the edited volume *Children in Action: Perspectives on the Archaeology of Childhood* (2006) are primarily dedicated to the identification of children and childhood in the archaeological records, as well as the social-cultural position and perception of children (and women). Since 2009, the annual journal *Children in the Past*, edited by Eileen Murphy, Professor of Archaeology at Queen's University of Belfast, features various academics who have concentrated their research on childhood. Murphy also contributed to this field with books and articles, for example, the edited volume *Children, Death and Burial Archaeological Discourses* (Murphy and Le Roy 2017). Further, she published comprehensive volumes on burial archaeology like *Deviant Burials in the Archaeological Record* (2008) or *The Odd, the Unusual, and the Strange. Bioarchaeological Explorations of Atypical Burials* (Betsinger et al. 2020) which featured papers that addressed the intersection of deviancy and age within the burial rite. The *Society for the Study of Childhood in the Past* also periodically publishes anthologies on specific topics as part of the *Childhood in the Past Monograph Series* (e.g.: Brockliss 2010; Hadley 2014; Sánchez Romero et al. 2015; Rebay-Salisbury and Pany-Kucera 2020a).

One of the standard publications for the field of bioarchaeology, osteology, and palaeopathology of children is Mary E. Lewis' comprehensive book *The Bioarchaeology of Children* (2007). It deals with investigations of skeletal remains and their informative value for the reconstruction of the past. As recently as 2018, Lewis published the handbook *Paleopathology of Children: Identification of Pathological Conditions in the Human Skeletal Remains of Non-Adults*. She presents standard as well as newly established scientific and osteological methodologies for dealing with human remains of sub-adult individuals.

Siân Halcrow dedicated her work and blog (childhoodbioarchaeology.org) to bioarchaeology and paleopathology of children. Her paper *The Bioarchaeological Investigation of Childhood and Social Age* together with Nancy Tayles (2008) and her contribution to the newly published volume *The Mother-Infant Nexus in Anthropology: Small Beginnings, Significant Outcomes* (Gowland and Halcrow 2020) are just two examples. Sally Crawford, Senior Research Fellow at the School of Archaeology at the University of Oxford also contributed with a considerable number of publications to the establishment of this field of research. Some of her articles and monographs address the social perception of children, as for example: *Childhood in Anglo-Saxon England* (1999), *Archaeology of the Medieval Family* (2014), *Children, Childhood and Society* (Crawford and Shepherd 2007), and *The Oxford Handbook of the Archaeology of Childhood* (Crawford et al. 2018).

A theoretical view of childhood is described in the monograph of Julie Wileman, *Hide and Seek: The Archaeology of Childhood* (2005) and David F. Lancy's *The Anthropology of Childhood: Cherubs, Chattel, Changelings* (2008), as well as the book section *Babies aren't Persons: A Survey on delayed Personhood* (2014). By comparing and evaluating a variety of materials, including archaeological discoveries, artistic and literary legacies, along with ethnographic studies, both make an effort to improve the visibility of children and adolescents. They also include approaches taken from behavioral psychology. Robin Derricourt follows a similar approach in his book *Unearthing Childhood. Young Lives in Prehistory* (2018). In his book, there is also a focus on sketching a comprehensive picture of childhood based on archaeological records and paleontological finds of hominin predecessors in comparison with cross-cultural ethnographic observations, as well as inputs from primatology, and behavioral psychology.

Since humans do not reproduce by cell division, the study of children might include the investigation of parenthood and parent-child-relationships. There is ongoing research at the intersection of gender archaeology, social archaeology, and archaeology of childhood to scrutinize interactions and emotional bonding between parents and children based on evidence from archaeological contexts (see for example: Beausang 2005; Cannon and Cook 2015). A major field of research is the investigation of motherhood and its social perception, together with an examination of infant rearing and social

reactions to a child's death. One of the researchers investigating motherhood in prehistoric societies of Europe is Katharina Rebay-Salisbury. Her papers on child upbringing (Rebay-Salisbury and Pany-Kucera 2020a), infant feeding (Dunne et al. 2019; Rebay-Salisbury 2017b), the social value and perception of mothers, and anthropological traces of pregnancy (Pany-Kucera et al. 2021; Rebay-Salisbury 2015; 2017a; 2019; Rebay-Salisbury et al. 2018) are major contributions to this field of research.

Due to innovations in the field of stable isotope analysis, it is possible to carry out investigations of weaning age and nutrition of children and mothers. The method is frequently applied and continuously developed in a number of case studies with various temporal and spatial foci (Beaumont et al. 2015; Burt 2013; Fulminante 2015; Haydock et al. 2013; Ryan et al. 2020; Stantis et al. 2020).

This section reviewed research on children, childhood, and adolescence from the perspectives of (bio-)archaeology and history. Only a few significant and comprehensive books or articles that are related to this thesis have been discussed here, even though there are countless papers and books dealing with specific research questions or the remnants of children in the archaeological record of sites or at certain times. As the networks of scholars studying children in the past becomes more established, a synthesis of their work provides a wider perspective on the subject.

Childhood in the Middle Ages: Social Perception and Value

The ability to analyze past perceptions and concepts of childhood is tied to the fact that we have an understanding of it today. Our modern Western conception of childhood, which developed in the 20th and 21st centuries, presupposes a distinction between children, adolescents, and adults (Butschi and Hedderich 2021: 24). There is now a basic definition of childhood as the *“period following infancy when a nonadult is weaned from nursing but still depends on older individuals for feeding and protection”* (Verostick 2020: 17, following the definition of Bogin 1997 and Fulminante 2015). Nevertheless, it is still up to the respective community to split an individual's life course into different categories and to fill these with specific features, characteristics, and duties.

Childhood in today's Central European context represents a phase of impartiality and development – a phase with only a minimum of legal liability but the greatest protection. Child labor is prohibited, and the focus is on learning and education. The social perception of subadults, however, exhibits a considerable degree of variation when examined historically or globally and the concept of childhood and adolescence is in a constant state of flux. Childhood cannot be investigated in isolation from its environment and must always be considered in the context of the social, cultural, and economic

structure of a temporal or spatial entity (Butschi and Hedderich 2021: 19-24). Whether a society recognizes childhood as an independent social and biological phase can, conversely, also provide hints about underlying social processes: *“The construction of infancy can rather be a significant proxy for how a culture defines crucial ontological ideas, such as social norms and morals, gender and even humanity”* (Eriksen 2017: 338-339).

On a biological level, interactions between children and parents, as well as activities that assure newborn survival, are partly based on behavioral and evolutionary determined patterns. Hence, some of these conducts might not be culturally *learned*, but rather considered to be *natural*. This premise serves as the cornerstone of the attachment theory, which was put forth by the British psychiatrist and psychotherapist John Bowlby (1951; 1969; 1973; 1980) within the framework of behavioral biology and developmental psychology. Bowlby suggests that a caring bond between children and caregivers is formed due to the bipartite system of expressing affection and responding with care. The attachment level of the child, as well as the care level of the caregiver, are stimulated through the behavior of the counterpart and in a constant cycle of reaction and counterreaction. Most of these actions and reactions are based on a release of the hormone oxytocin, aptly named the cuddle hormone (Lohaus and Vierhaus 2019: 120-122; Uvnäs-Moberg et al. 2005: 60; Levine et al. 2007: 1162). Although the parent-child attachment theory is a well-established viewpoint in developmental psychology and cognitive biology, it cannot be utilized as proof of parents' unconditional love for their children or vice versa. Attachment disorders, that have been described in manifold expressions in medical and psychological research, often refute the comforting view of omnipresent parental love (Minke 2011: 35).

Historical studies have long considered that, in medieval society, children either had a lower social value or were somehow invisible. According to the French historian Philippe Ariès, this rejecting attitude was generally attributed to the high infant mortality rate until the late Modern Times. He claimed that parents in the Middle Ages lacked compassion for their children as a result of the low survival rate of their progeny, which he described as psychological self-protection (Ariès 1975: 92-112; critically discussed in: Brather 2014: 18; Butschi and Hedderich 2021: 23; Lohrke 2004: 31; Trattnig 2013: 28; Ulrich-Bochsler 1997: 9). E. Shorter (1975; cited after: Cannon and Cook 2015: 401) also concluded that during times of high infant mortality, grief and emotional attachment towards children was rejected. He argued that intense sadness and grieving would have caused parents considerable psychological harm to the point where it could prevent them from engaging in daily life and even disrupt societal order.

The assumption that there is a general association between high mortality rates and emotional detachment is, for instance, refuted by studies on death in elite Victorian Families by P. Jalland (1996) and on grief in English working-class families in the late 19th and early 20th centuries by J. Strange (2005). They both came to the conclusion that deep-felt grief after the loss of a child was not a question of high or low mortality rates, nor of social or financial standing, but was widely experienced (cited after: Cannon and Cook 2015: 401).

Additionally, Ariès claimed that childhood, which lasts longer than the stage in which a child cannot survive without any external help, is a modern concept and argues that a stronger emotional tie between parents and children and a sentimentalization of childhood only evolved from the 16th and 17th century onward. He contends that throughout the Middle Ages, a child was regarded as an adult as soon as it was weaned and physically able to walk or to handle minor chores. The child was nourished equally to adults and was required to work without going through a transitional period of adaptation. In this mindset, the period of late childhood or adolescence did not exist. As part of his argumentation, he claims that the timing of the *invention* of childhood can be pinpointed through iconographic observations. Up to the 16th and 17th centuries, children were depicted like miniature adults, both in terms of their attire and their physical morphology. In the Late Modern Period, artists eventually started to portray children with childlike facial features, as well as age-specific fashion and wardrobe. Ariès draws the conclusion that the development of a concept of childhood was accompanied by a clear and visible differentiation between children and adults based on these artistic aspects. He claims that, prior to this change in perception, children and adults operated in the same environment of life. Children were simply regarded as small, *unfinished* adults (1975: 92-112; Konrad and Schultheis 2008: 12-13).

David Archard, a British professor of philosophy, was highly critical of Philippe Ariès' work. The main criticism directed at Ariès' hypothesis was that he failed to distinguish between conception - how childhood is defined and delineated - and the concept of the idea of childhood as a life stage itself. According to Archard, it was a fundamental inaccuracy to "*observe differing conceptions and conclude from them a general absence of a concept*" (Archard 1993; as cited in: Winkler 2017: 27-28).

The US-American psychohistorian Lloyd DeMause, however, postulated a hypothesis that was very close to Ariès' assertions. He also considers that there might have been a gradual change of mindset from a rather distant and apathetic relationship with children in Antiquity and the Middle Ages to a loving and nurturing attitude at the transition to the Modern Age (DeMause 1975; as cited in: Konrad and Schultheis 2008: 16). Both approached the study of children from their intrinsic socialization, which hindered them to recognize that medieval society just had a distinct view of childhood and that

this crucial stage of development was not completely neglected (Winkler 2017: 27; also see for example: Lancy 2008: who contradicts Ariès with his extensive account of the diversity of cultural conceptions of childhood).

The stereotype of distant parents and the neglected medieval child persists in the general perception despite the fact that many archaeologists, historians, and sociologists today dispute Ariès and DeMause's theories. Archaeological contexts, but also records in contemporary written sources mostly reveal quite the opposite. Contemporary textual records, such as saint's vitae, legal texts, canon law, and medical manuals provide a glimpse at childhood in ancient and medieval societies and help to put archaeological findings into context.

Several written sources describe and define a division of childhood into different stages. These were already recorded in medical texts of Antiquity and later rewritten and recited in medieval sources. This division of the subadult life phases is about the same as we conceive them today.

The first stage is *infantia*. It is also considered as the period of speechlessness and lasts until the seventh year of life. The first episode of *infantia* is described separately in some texts. This subphase may last until the seventh month of infancy or until the second year of life. Depending on the author, it is outlined as the time until all teeth have erupted.

The period of *pueritia* lasts for the time from the 7th to the 14th year of life. The end of this phase is marked by the onset of puberty. The term *pueritia* comes from *pures* (pure) and is explained by the inability to procreate (Lohrke 2004: 17). Among others, these phases of subadult life are described by the writer and scholar Isidore of Seville (c. 560 – 636 AD), who also designates *pueritia* as a phase where children gain the ability to retain memories. Additional written sources state that entrance into the monastery was also possible at this age, and that schooling or vocational training for medieval children started at seven (Trattnig 2013: 30).

The last phase of subadult age is *adolescentia*, from the age of 14 to 20 - the age of experiencing the peak of reproduction (Lohrke 2004: 17). In this phase, the growing individual was granted more abilities and possibilities, but also more duties. Depending on the temporal or spatial context and sex, the adolescent became capable of marriage, but also of penal responsibility (Winkler 2017: 30). The underlying division of the subadult phase of life into *infantia*, *pueritia*, and *adolescentia* provides the framework for a further understanding of the concept of childhood in the Middle Ages.

These sources demonstrate that Ariès' theories regarding the absence of late childhood or adolescence did not quite match medieval reality. If these notions, their characteristics, and the traditions connected to them were not recognized by society, the distinction between childhood and

adolescence would not have been described in written records. These stages are usually divided based on certain occasions as mandated by society, and the transitions are typically accompanied by specific rites. Transitions are often based on biological development and physical characteristics, yet they can occur at different times and be experienced in various ways since they are ingrained in the social environment of a community. In very broad terms, the caesurae for the principal division of phases of the human life cycle are birth, reaching sexual maturity, reproduction phase, a post-reproductive or menopausal phase and death (Frankenhuis and Nettle 2020: 496).

In some cultures, the eruption of the first tooth, for example, represents a common milestone for acceptance into the community or the right to be buried in the communal burial ground. This can be found mentioned in texts of Pliny (Kramis and Trancik 2015: 15), and also in Norse records from Iron and Viking Age Scandinavia (Eriksen 2017: 340). In Roman Times, newborn and infants were buried outside of the communal graveyards at night. These deaths were referred to as *mors acerba* (unripe death) or *mors immature* (untimely death). Because children in the Roman Empire were not yet considered members of society before the eruption of the first tooth, their burial was not considered a social occasion requiring the presence of the community or an adequate burial place and rite (Tsaliki 2008: 4). Milestones in individual biographies such as physical development or social maturation can be linked to the most elaborated, but also some of the most conservative rites of passage (Lohrke 2004: 23). It is vital to distinguish between the biological, calendrical, physiological, and social ages in this context because their perceptions and related expectations can differ greatly (Brather 2015: 66; Hausmair 2013: 275; Rebay-Salisbury and Pany-Kucera 2020b: 2).

Leges, capitularies, and other legal texts record an actual state of affairs in a particular area at a particular time. However, the extent to which this legitimacy is geographically or temporally transferable cannot be verified in detail. We must therefore assume that they only depict a blurred picture of their scope of authority and validity (Schumann 2017). Nevertheless, they provide us with key data and background for the interpretation of archaeological findings of Late Antiquity and the Middle Ages and indications for the value, role, and agency of children and juveniles.

The age of maturity is particularly important information in these legal texts. It aids in our understanding of the timing of the transition from a child to a fully grown adult who is actively engaging in medieval society. In the early medieval Leges, there are rarely any precise characteristics or descriptions of the periods of youth. They do, however, establish a distinction between immaturity and maturity. Legal capacity in Old English law, for example, is stated at the age of ten, in the *Lex Salica* of the early 6th century, at 12 years of age, and in the *Lex Ribuaria* as late as 15. In these texts, there are no indications of gender-specific differences regarding the time of maturity and the associated

ability to marry. *Lex Salica*, however, mentions that girls were able to give birth by the age of 12. The regulations of the Lombard king Luitprand (712–744) specify the same age as the marriageable age of a girl, and several medieval texts describe an average menarche age of 13–14 years (Lohrke 2004: 25–28).

These ages and caesurae are relevant information for the study of childhood and adolescence. Legal texts also give indications of the value of people expressed through monetary fines or other sanctions for physical harm or even murder. Age, sex, and status of the harmed individual were taken into account when determining penalties. The amount of fine may have been a reflection of that person's worth as a worker as well as of their ability to procreate. It can further be observed that especially Carolingian capitularies attribute great attention to the protection of children (Garver 2018: 209–210). In the *Lex Visigothorum VIII*, the early medieval legal text of the Visigoths, fines are initially graded according to age. A differentiation based on sex is made by the time when the individuals have reached the age of 15. The *Lex Salica* initially specifies a particularly high *wergeld* for boys under the age of 12, which eventually becomes significantly higher for girls above this age, when they are become able to give birth and marry. Later Frankish legal texts also name a fine for the murder of women of childbearing age that is up to three times as high as for men of the same age group. According to the *Lex Alemannorum*, female members of society are subject to double the financial penalties even at an early age (Brather 2017a: 215–216, 225; Eriksen 2017: 339; Lohrke 2004: 19, 25–29).

These *wergelder* indicate that societies attributed a certain value to children. For one, this could be interpreted with their future role for the continuation of society and its culture and tradition. Their value in providing care for the elderly, particularly for parents and possibly grandparents, may be another factor within this context. Additionally, it must be considered that, particularly in rural and agricultural areas, the society was dependent on as many laborers as possible to maintain a constant supply and subsistence (Konrad and Schultheis 2008: 15). The fact that most Leges provide a full account of the punishment for child abuse and infanticide can indicate that it occurred quite regularly, but also that the well-being of children was present in the communal consciousness and that they were regarded as precious and worthy of protection (Kölbl 2004: 33–35; Schwarz 1992).

Especially in times of crisis or poverty, infanticide or child abandonment was a widespread method of controlling births and household size. However, there may have been a number of additional underlying reasons that led to the neglect of a child. It may be due to economic, spiritual, or even ethical considerations, or may have been utilized as an alternative for abortion that is less physically (but probably not emotionally) harmful for the mother (Eriksen 2017: 339–341). In modern forensic psychology, there is a distinction between neonaticide and infanticide due to altruism, narcissism, and

dissociation and it can be assumed that these underlying motives can also be transferred to the past (Mundt 2009). Furthermore, we can distinguish between active infanticide and passive infanticide due to lower parental investment and neglect (Ulrich-Bochsler 1997: 94).

As early as 374 AD, the Christianized Roman emperor Valentinian III declared that all cases of infanticide and abandonment had to be punished by law. Yet, early medieval sources, such as *vitae* or *leges* present a different set of facts and stories. As stated in the *Lex Frisionum*, infanticide before the intake of food, perpetrated by the mother remained unpunished until the 9th century (Trattnig 2013: 49-50). Also, for the 11th and 12th century there are legal texts that mention that the murder of the newborn child was permitted under certain conditions. At the same time, intentional contraception became forbidden (Uitz 2019: 46). The fact that neonaticide, infanticide, and arguable filicide were consistently experienced throughout the Middle Ages is not suggesting that this was part of the daily order or representative of a general rejection of children.

Occurrences of infanticide and child abandonment were, however, documented in the Middle Ages as well as in Antiquity and other cultures of earlier and later centuries (Grubbs 2011: 21). A commonly addressed matter within this context is selective infanticide of girls. An early written testimony of sex-based infanticide was recorded in the *Vita of Saint Liudger*, written c. 846. Along with chronicling Liudger's life and deeds, the text provides information regarding the birth of his mother. It is stated that her still pagan grandmother was disappointed with her daughter-in-law because she had only given birth to girls and no son as the family's progenitor. She therefore ordered armed servants to kidnap and murder the infant daughter before she was breastfed for the first time. In accordance with contemporary law, a kid could only be killed before it had received its first feeding. The severs intended to drown the baby, but a neighbor who had arrived in time was able to save it. She quickly gave her some honey, after which the child was no longer allowed to be killed.

This written text provides an essential historical source for sex-based infanticide as well as the important notion that there is only a very narrow time window for legally tolerated infanticide. It is a significant indication that there were indeed moral considerations concerning infanticide and that children were not thoughtlessly murdered for economic and pragmatic reasons (Beilke-Vogt 2008a: 23; Lohrke 2004: 35; Trattnig 2013: 49). In my opinion, the mere existence of this window of time during which neonaticide is somewhat legal could also be a reflection that people were trying to find a way to deal with peri- and postpartum depression and stress, impulsive behavior, and motherly attachment disorders.

Infanticide of girls is further mentioned in the *vita* of St. Otto of Bamberg, who missioned the pagan Pomeranians in the first half of the 12th century. The text describes that girls were more often killed

or abandoned than boys (Trattnig 2013: 49). During the High and Late Middle Ages, it is estimated that girls died at a higher rate than boys, not only through active infanticide, but also through deliberate neglect, which, in most cases, resulted in death. The intentional refusal of care and feeding or a general lower parental investment had fewer, if any, legal consequences because it was difficult to prove. Yet, the rejection of nursing and nutrition could have been the most widespread form of infanticide. Patterns of this behavior can be indicated by the different lengths of breastfeeding between boys and girls recorded in written sources (Lohrke 2004: 37; Trattnig 2013: 51; Uitz 2019: 95) or derived from analysis of nitrogen isotope ratio in bone collagen or dentine samples (Fulminante 2015: 29). In comparison with early medieval Leges that state a higher *wergeld* for girls and young women, this High Middle Age source might indicate that there was a change in perception and that the disparities between female to male individuals were intensified at the transition from the Early to High Middle Ages. This also becomes tangible by comparing Early to High and Late Middle Age funerary topography. While on early medieval burial grounds there are no assigned areas based on sex, we find that in later Christian burials inside the church women were usually rather buried in the north (the *bad* side) and men in the south (Meier and Graham-Campbell 2007: 432-433; Ulrich-Bochsler 1997: 29-32).

But it was not always only sex that was decisive for lethal neglect, killing, or abandonment. We can assume that children who were unwanted in other ways such as illegitimate or disabled children, or children with chronic diseases were neglected as well, and even forms of eugenic must be taken into consideration within this scope (Lohrke 2004: 37; Trattnig 2013: 51; Uitz 2019: 95). It was common practice to expose the children of underprivileged families—not because the children were unwanted, but rather in the expectation that they would grow up in a better environment. It was anticipated that abandoning them would increase their chances of survival. Both, the *expositio*, the deliberate abandonment, and the murdering of unwanted children were described as pagan habit in Christian texts. Yet, child neglect was also observed in Christian settings, which is also expressed in the increasing foundation of orphanages in the Late Middle Ages (Eriksen 2017: 342; Lohrke 2004: 31; Winkler 2017: 29).

In most communities where infanticide or intentional neglect is common, actions, physical development, or rites of passage are required for a child to be welcomed into society (Eriksen 2017: 341). This can be understood as a form of psychological self-protection in which caregivers refuse to allow emotional attachment until the initiation into the social domain is complete. Rites like this are arguably present in every community, regardless of their level of complexity, and constitute significant thresholds for individual life courses (van Gennep 2005: 15).

In our modern Western socialization system, we assume that the protection of our children is paramount, and we take all reasonable steps to assure this. While considering lethal child neglect to be scarce in recent times, the actual incidence rate of police-reported cases of neonaticide in Austria was as high as 3.1 per 100.000 births during the period from 2002-2009 (Tanaka et al. 2017: 252). This should demonstrate that the worth and perception of infants do not always correlate with the infanticide rate.

However, written records do not just document unpleasant elements like infanticide, abandonment, or neglect. A significant number of parenting manuals were written in the 15th century (Winkler 2017: 29) and there are prior medical manuals for baby care that already advised nursing by the mother or a wet nurse as the best and safest nourishment for children. Goat's or cow's milk, cereal porridge, or bread soaked in honey water were mentioned as substitute foods. These texts also advocated regular bathing, ideally three times per day, and regularly replacing wet diapers. It was further recommended to put stuffed caps on infants' heads to cushion falls and prevent injuries. These manuals also advised to train the cognitive abilities of children and to do simple exercises to check their physical development. It was also noted that it is essential to pick up a crying child and occasionally tickle it to make it laugh (Trattnig 2013: 39).

There are some written sources on rearing and care for children after the age of two, but these are significantly fewer in number and less detailed. Probably because the dependency of children decreased at this age, while their independence increased steadily. The Augustinian monk Aegidius Romanus described the emotional and educational treatment of children in the early 14th century in an affectionate and playful way. He recommended that parents should tell stories with educational messages, inform their children about major historical events, and sing songs to them. He also states that parents should try to avoid making children sad because children are not yet able to cope with emotions as adults do. On another notion, he also believed that children were not able to use their brains until the age of seven, thus a strict, Christian upbringing and obedience to parents and other adults should only start at that age (Trattnig 2013: 43).

Beginning with the 12th century, more efforts were made to provide academic education for the children of a higher social strata, and the overall "*institutionalization of child welfare*" (Winkler 2017: 29) during that period indicates that there was a change of perception of the children's position within society.

At first glance, there is little difference between these and 21st century parenting guides in Western culture. The fact that wet nurses and doctors dispersed all over Europe made an effort to develop manuals on how to care for infants and that parents allegedly followed their recommendations may

be considered a contrast to the idea of a widespread negligence and disconnected attitude toward children throughout the Middle Ages.

A point that further illustrates that parental affection for children cannot be denied for the time of the Middle Ages, can be seen in the context of baptism and the articulation of the doctrine of the limbus. In the 12th century, ecclesiastical law also recognized childhood as a separate phase of life. As a result, the doctrine of the *limbus puerorum* was developed. According to this, children who died before they were baptized do not end up in hell but are believed to spend eternity in the somewhat cooler antechambers of it. This shows that there was an urgent call for the salvation of little souls from eternal damnation coming from their parents (Hausmair 2020: 155). As the limbus teachings were formulated, they were also accompanied by the fundamental discussion of the original sin of children. While newborns and infants were assumed to only carry inherited sin within them and had not yet acquired sin on their own, questions of conscious behavior, imputability and consequences of action concerning older children were raised. These discussions indicated that children were considered to be capable of independent actions and moral decision-making (Winkler 2017: 32; Trattnig 2013: 31).

In the High and Late Middle Ages, children were usually baptized about a week after birth. On the one hand, to prevent the child from eternal existence in the limbus in case of a sudden death, on the other hand, it was generally believed that baptized children had a higher chance of survival because they were protected by God. According to folk belief, unbaptized children may also be kidnapped by demonic characters (Trattnig 2013: 37). These notions are relics of the pre-Christian belief in changelings, which can already be found among the Celts, but especially in the Germanic and Slavic cultures of the Early Middle Ages. Like other pagan customs, the belief in changelings lived on in Christian oral tradition, the fairies or other supernatural beings who originally took away the children were just turned into demons or Satan's helpers.

If a child was particularly weak, vulnerable to illness, or if it cried a lot, it was considered to be a changeling. There were several methods to force the devilish spirits to bring back the real child. However, many of these apotropaic acts, for example dousing the child with boiling water, were very dangerous and several well-intended rites ended fatally for the child (Kuuliala 2011: 80-82; Trattnig 2013: 51-52; Gardela and Duma 2013: 326). These behaviors demonstrate how much socialization, culture and spiritual ideas affect the perception about what is best for a child. It also shows vividly how deeply syncretism was anchored in society.

We can draw the conclusion that a dismissive attitude of parents toward their children cannot be regarded as an all-pervasive reality after considering these concisely described characteristics of childhood and child upbringing in the Central European Middle Ages. At the same time, however, it

can be stated that there was indeed a change in the perception of childhood at the beginning of the Modern Era in parts of Central Europe. Driven by the Reformation and the humanistic tendencies of the Enlightenment, education, and training played a new and central role in the early stages of life. For example, Maria Theresia, Empress of Austria-Hungary, established a mandatory and well-developed educational system (Pohl and Vocelka 1992: 303-305). With this fundamental shift, modern traits of childhood emerged and developed into the perception of childhood that we now consider normal in Western industrialized countries (Konrad and Schultheis 2008: 15-18).

In conclusion, there is no all-encompassing answer to the question of the position, role, and value of children in the period from the early to the late Middle Ages. The framework chosen for this work represents a time and a geographical space that is characterized by constant change and a profound syncretism. Consequently, it is hardly possible to present a uniform conception of childhood in the Middle Ages. This chapter aims to highlight specific elements that should give readers a better understanding of the varying concepts in this specific stage of early life. Whether a child is born into a higher or lower social class, grows up in a rural area or in one of the High Middle Ages' newly established towns, whether the child is a male or a girl, and whether the child is healthy or has a physical or mental impairment can all make a significant difference. Children from higher social classes were given lavish burials and are mentioned in written sources, while children from lower social classes remain mostly invisible (Winkler 2017: 29). To a certain extent, the archaeology of childhood is also an archaeology of elites - a phenomenon that largely dominates historical research.

Bioarchaeological Methods of Analyzing Subadult Skeletal Remains

Age and Sex Estimation of Subadult Individuals

Bioarchaeological analysis of skeletal remains typically generates osteobiographies for each individual assessed and the population under study based on data gathered from morphometric or biochemical analysis. Usually, the first step of osteological examination of human remains is determining an approximate age at death. It is followed by an estimation of morphological sex. A detailed recording of pathologies, traumas, as well as anomalies and non-metric skeletal traits, can provide information about the health status and the genetic affiliation of the individual on the small scale. On a population level, this can help to reconstruct general living conditions, population-specific variation of morphology or height but also social stratification and uneven access to food and supplies expressed through skeletal stress markers. Calculating the body using various formulas is possible if long bone preservation is sufficient. These are the main stakes of palaeodemographic research based on bioarchaeological approaches (Buikstra and Ubelaker 1994; Chamberlain 2006: 8-9; Grupe et al. 2015: 254).

The morphological features of the skull and pelvis, as well as metric analysis and the general robustness of the bones, are used to estimate the sex of skeletal remains. These traits show pronounced sexual dimorphism. They are evaluated individually and are usually expressed on a scale of -2 (female) to +2 (male). In adult individuals, sex can be determined with a certainty of about 96% (Grupe et al. 2015: 254-255). However, because skeletal sexual dimorphism is only fully developed after puberty, these methods must be critically assessed when investigating infant and juvenile individuals. Nevertheless, there were several approaches for determining characteristics of sex assessment based on metrics on non-adult skeletal remains. One of the methods for sexing a subadult was a comparative analysis of teeth size, as deciduous teeth of boys are in general slightly larger than those of girls. These evaluations are usually based on crown dimensions of molars or canines. In humans, as well in primates, the canines might show the largest difference in size, which can be up to 4% (Lewis 2007: 47-48). De Vito and Saunders (1990), who amongst others, contributed to this field of research, proposed an accuracy of their discriminant function analysis of deciduous teeth ranging between 64 and 90 %.

Hunt and Gleiser (1955) claimed that it is possible to identify the sex of subadult individuals by correlating dental and skeletal age. The premise of their hypothesis was that female children mature faster in terms of skeletal development than male, while dental development and tooth eruption patterns are the same. So, in conclusion, if there is a disagreement between dental and long bone age, the individual is considered to be female (Lewis 2007: 48-49). However, a lack of correlation between

these might rather be an indicator for poor health conditions or deficiencies in early childhood than the sex of an individual (Lewis 2007: 38-43, 45).

The morphological sex of an individual is determined by the tenth week of pregnancy due to the release or withholding of testosterone. Weaver (1980; cited after: Reinman 2015: 14) thus concluded that a sex-based expression of skeletal characteristics forms until the fifteenth week of gestation. Despite this early determination of morphological sex, it is the prevailing opinion in modern research that differences in skeletal characteristics only fully develop in the course of puberty caused by further hormonal changes in the body and that a reliable estimation of sex is only feasible from this point on (Lewis 2007: 47-48; Reinman 2015: 1-2).

A major contribution to studies dealing with the possibility of sex assessment of children and adolescents was made by the German anthropologist Holger Schutkowski. Based on the *coffin plate* sample of Spitalfields in London, he formulated a series of morphological and metric features that should determine the biological sex of subadults (1990; 1993). Schutkowski focused on some of the same skeletal features used in adult sexing, the morphology of the mandible and the pelvis.

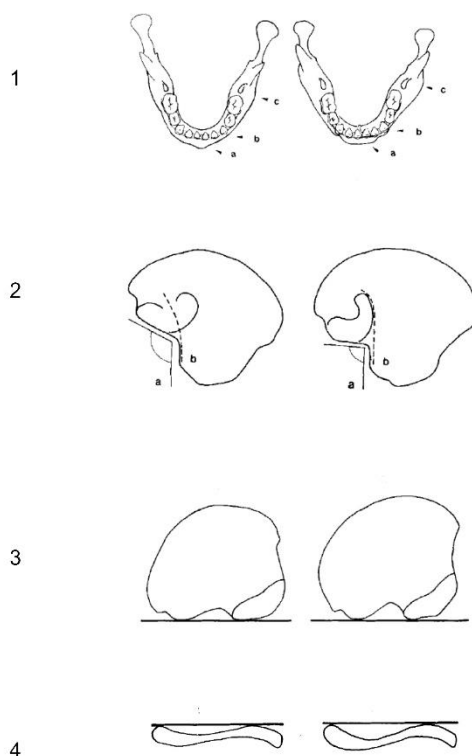


Fig. 2: Features on the mandible and pelvis used to sex a subadult individual (Schutkowski 1993). The depictions on the left show the female specifications of the features, the ones on the right are male.

According to his study on fetal and neonatal individuals, Schutkowski recorded the mental protrusion and general shape of the mentum (Fig. 2.1.a), the morphology of the mandible arch at the section of the anterior dentition (Fig. 2.1.b) as well as the angle of the gonion (Fig. 2.1.c). Concerning the os ilium, he proposed that the angle of the incisura ischiadica major, which is a significant feature for sex estimation in adult skeletons, is already wider in subadult females than subadult males (Fig. 2.2. a). Also, if you would draw a line from the incisura ischiadica major towards the facies auricularis it would be much more bent in females (Fig. 2.2.b). He also considered the depth of the incisura ischiadica major (Fig. 2.3) and the curvature of the crista iliaca (Schutkowski 1993; cited after: Reinman 2015: 17-26; Lewis 2007: 50-54). In addition to these non-metric traits, he also designed a calculation of discriminant functions for sex determination based on length and width measurements of the ilium and the femur (Schutkowski 1990: 5-6).

A. Reinman (2015: 27-28, 33) revisited Schutkowski's non-metric traits and concluded that only two of these methods - mandibular protrusion and mandibular arcade – provide an accuracy of over 75%, while the other six did not. Morphological or metric sex analysis of subadult individuals is considered uncertain and most physical anthropologists working in the field refrain from determining or indicating the biological sex of children and adolescents without biomolecular analysis (Grupe et al. 2015: 256; Hadley and Hemer 2014: 6-7; Lewis 2007: 58-59). The lack of reliable macroscopic methods of sex determination, which are admittedly the least expensive and least extensive in terms of infrastructure, hinders to answer a large number of further questions, such as whether girls and boys are treated differently or whether the sex of an individual and gender as expressed in the grave corresponds. These questions cannot be answered conclusively without molecular analyses to determine the chromosomal sex. In conclusion, the applicability and reliability of sex estimation on the skeletons of subadult individuals based on different morphological observations is a controversial topic in current research.

As early as the 1990s, palaeoanthropological research began to use DNA analysis for sex determination. Since then, aDNA analysis, with different research aims and questions, has gained momentum in recent decades. Depending on the state of preservation, aDNA can be sequenced from even the smallest bone or tooth samples or from soil, which can provide information about the chromosomal sex and phenotype of an individual as well as the genetic relationship between individuals and migration. Nonetheless, testing is still a tedious, invasive, and costly process and is highly dependent on the degradation of DNA (Bösl 2017: 275; Kaestle and Horsburgh 2002: 96-103).

A less expensive and less destructive method for sexing children and adolescents that is also less restricted by degradation processes through soil deposition is the investigation of sex-based

amelogenin, the protein that forms human tooth enamel. Using chromatography mass spectrometry, it is possible to identify the sex of human remains via differences in the chromosomes X and Y in its amino acids. As tooth enamel is the hardest material in the human skeleton it is usually preserved and less susceptible to weathering or disintegration processes (Gowland et al. 2021; Rebay-Salisbury et al. 2020; Stewart et al. 2017; Rebay-Salisbury et al. 2022).

In the discipline of funerary archaeology, certain grave goods or dress items, such as weapons or jewelry, are thought to be typical for one gender (Härke 2003b). This categorization was initially based on graves of adult individuals, for which it was easier to identify both sex and gender. The supposed result of a gender division of objects was then transferred to the graves of children and even substituted sex estimation on adult burials if bone preservation was insufficient or osteological examinations have not been conducted. It was repeatedly noticed that this led to wrong assumptions on gender roles and positions in the past, but also occasionally biased the anthropological sex estimation (see for example Hedenstierna-Jonson et al. 2017: the well-known warrior grave of Birka, which was recently announced to be female based on genetic sex assessment; further see: Sayer et al. 2019). An objective evaluation of the individual's biological sex can presumably only be achieved by a clear differentiation between archaeological gender and anthropological sex estimation.

Age at death of subadult individuals is usually estimated through tooth development and long bone measurements. While growth and maturation are strongly influenced by environmental factors such as nutritional basis or health status, dental development is less affected by these, and more determined by genetics. Hence, tooth root and crown development and eruption timelines are considered to be the more reliable method for aging subadult individuals. A discrepancy between dental and long bone age can indicate physical stress during childhood such as malnutrition or disease (Lewis 2007: 38-43, 45).

Ubelacker (1989) established and modified a chart for dental eruption phases and morphological development which is frequently used in osteoarchaeological recordings of human remains. It depicts developmental phases from the mineralization of deciduous crowns at five months in utero until the eruption of the third molar in the early twenties and thus provides suitable assistance for determining a precise age. This chart has been further modified and refined by Al Qahtani et al. (2010) and is commonly known as *The London Atlas of Human Tooth Development and Eruption* (Fig. 3).

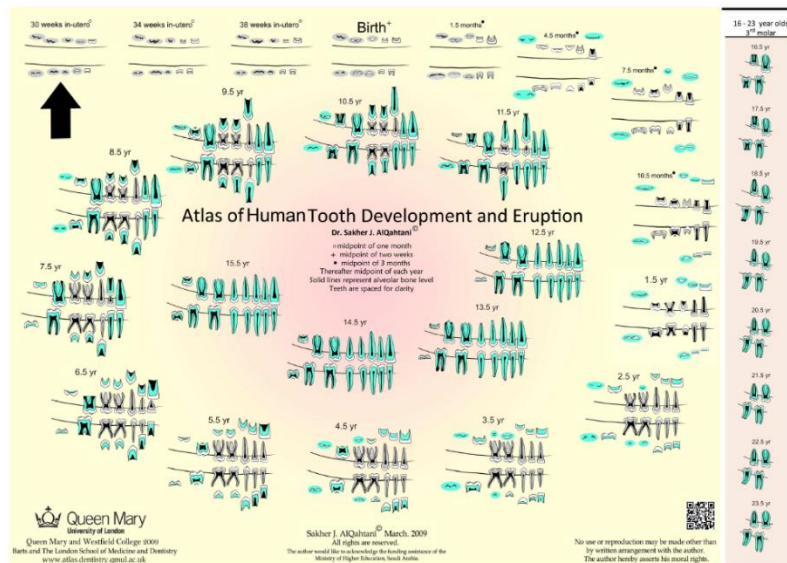


Fig. 3: The London Atlas of Human Tooth Development and Eruption (Al Qahtani et al. 2010)

Age estimation on long bones is for one based on measurements of diaphyseal lengths. Manuals with tables showing the average dimensions of the individual skeletal elements, such as those published by Scheuer et al. (2008), are helpful for the osteological evaluation of subadult skeletons. The records cover fetal development, based on examinations of pre-term infants and miscarriages, and supplemented by radiographs and ultrasound scans, and all further developmental stages up to the age at which full-size growth is reached.

Long bone growth is further linked to epiphyseal union (Fig. 4). As the primary ossification center in the diaphysis expands, it fuses with the secondary ossification centers, the epiphyses. The earliest union of primary and secondary ossification centers occurs on the distal as well as on the medial epiphyses of the humerus around the age of 10 , whereas some unions only fuse during the twenties like the sacral vertebrae and the medial end of the sternum (Passalacqua 2018).

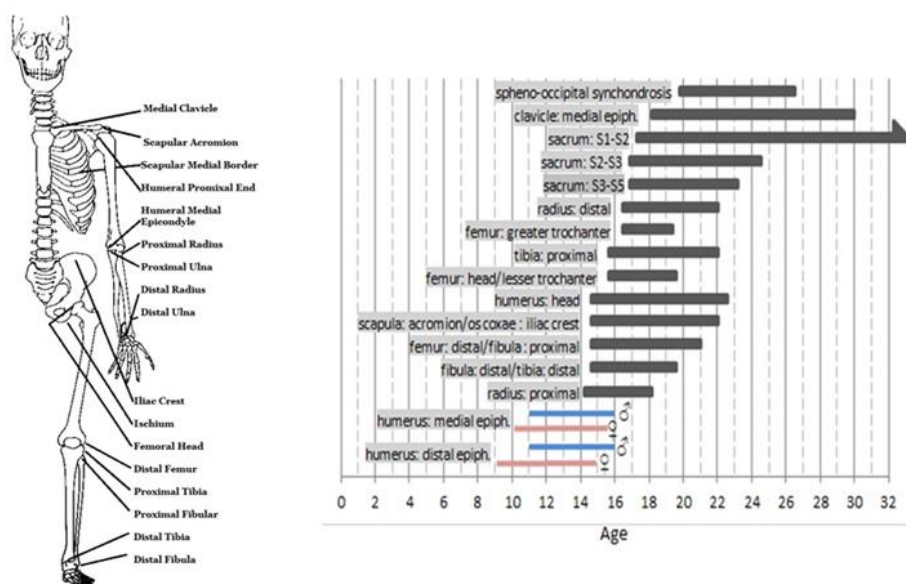


Fig. 4: Chart of epiphyseal union (Buikstra and Ubelaker 1994).

Due to the fact that girls can reach biological maturity up to two years earlier than boys, the majority of charts that illustrate epiphyseal closure stages include age ranges for both sexes. This circumstance, however, leads to the fact that the approach of age assessment based on skeletal growth also has limitations (Hadley and Hemer 2014: 6). An exact determination of age-at-death using this method, therefore, presupposes that the sexual dimorphism on the juvenile skeleton has already developed to such an extent that a sex assessment can be carried out in advance. This situation might in some cases lead to a circular argument. Age estimation based on long bone development should thus always be combined with an assessment of tooth development, as this constitutes the more reliable methods.

Recent studies have shown that it is also possible to determine the pubertal stage by identifying phases of skeletal maturation. Indicators for the pubertal growth spurt are the degree of mineralization of the canine, the morphology of cervical vertebrae, development of the os hamatum, fusion of the distal humerus epiphysis, the proximal ulna and distal radius epiphysis, the fusion of the metacarpals and hand phalanges as well as the ossification and fusion of the iliac crest (Lewis et al. 2016: 49-50). By assessing these factors, DeWitte and Lewis (2020) were able to estimate an average age of menarche, which can allow conclusions about the general living and health conditions of a society.

Lastly, it is important to mention that the age determined based on anthropological criteria reflects the biological age of an individual. This biological age is strongly influenced by factors such as external environmental effects, population- or sex-specific developmental velocities, health status and nutrition, childhood workload but also on individual differences in maturation. Therefore, it does not necessarily correspond to the chronological age of an individual. Due to the rapid succession of morphological developmental processes in childhood, the time frame of the age at death can be narrowed down more closely in subadult individuals than in adults, resulting in a clearer correlation between biological and chronological age (Ulrich-Bochsler 1997: 16). Neither the biological nor the calendric age alone provide information about the social perception and organization of age groups in society.

Hide and Seek: Infant Deficit on Early Medieval Burial Grounds

When estimating the demographic distributions of early to late medieval societies, the general assumption is that the infant mortality rate was slightly over 50%. This estimation is based on the statistical work of L. Franz and W. Winkler (1936), who published a study on the distribution of age at death in Bronze Age societies and formulated the hypothesis that the mortality rate of neonates and infants in prehistoric times might correspond to the recorded rate of Lower Austria before 1829. This percentage is negotiated for the Middle Ages as well, though sometimes critically discussed (Atzbach 2009: 13; Kölbl 2004: 10; Cemper-Kiesslich and Kanz 2016). In addition, mortality charts from developing countries are occasionally used to supplement this number. The proportion of subadult individuals (0-20 years) on a burial site should therefore be 45-60% of the total number of buried individuals, and the percentage of under-5-year-olds should be no less than 20-30% if the rate expressed by Franz and Winkler is deemed to be appropriate (Alt 2002: 223; Dollhopf 2002: 297; Gangl et al. 2015: 153; Lohrke 2004: 20; Lewis 2007: 22; Ulrich-Bochsler 1997). On many early mediaeval burial grounds, the average percentage of children (age groups fetus, neonate, infans I, and infans II) documented is below this threshold (Atzbach 2009: 14-15; Gangl et al. 2015: 115; Kölbl 2004: 12, 17).

This infant deficit is not a universal characteristic that can be found on all early medieval burial sites, however, it is a phenomenon that can be observed in some regional settings, such as southwestern Germany and must be approached from different perspectives. While some causes for a lower number of children than anticipated are most likely linked to ideas of the afterlife or other socio-cultural conceptions, others are due to erosion, preservation conditions, or the circumstances during the excavation. The accounts for a child deficit will therefore be divided into two categories in the following: pre-depositional factors (Fig. 5) and post-depositional factors (Fig. 6).

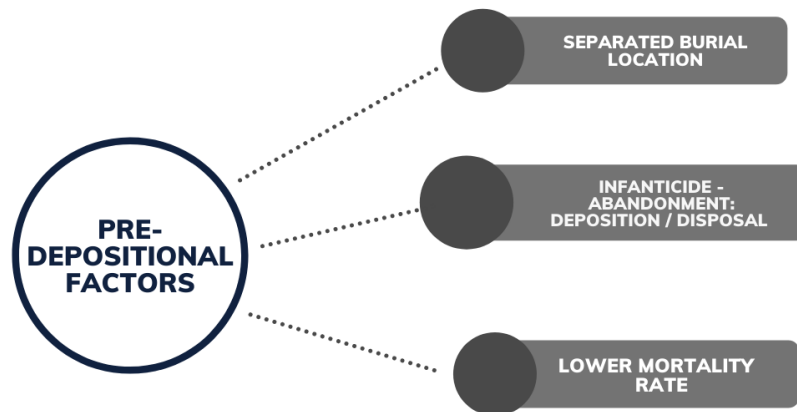


Fig. 5: Pre-depositional factors for a lack of skeletal remains of fetuses, neonates, and infants on early medieval burial grounds.

One pre-depositional factor to consider in the context of the postulated infant deficit on early medieval burial grounds might be an age-dependent burial custom. In many societies, children were treated differently after death and thus buried outside the general burial ground. It is, for instance, noticeable after the Christianization when unbaptized children were not granted a place in the churchyard, in consecrated ground. But even in pre-Christian times, it has to be assumed that only a selection of the children was buried in the communal burial ground. The factors that were decisive for the choice of who is going to be buried with the rest of the community and the burial place of the other children cannot be determined. Specific burial customs for stillborn children or infants can be found from ethnographic records or within the Roman burial rite (Ulrich-Bochsler 1997: 93, 103; Gangl et al. 2015: 153; Kölbl 2004: 12; Lohrke 2004: 37). The assumed deficit or complete lack of young children on some burial grounds raises once more the question of whether membership of the society and thus a rightful spot in the communal burial ground is linked to a certain age, a physical or cognitive stage of development, or to a certain sequence of entry rites. Even if a deficit cannot be explained conclusively with just this factor - neither on an intra-site level nor on an inter-site level - it can nevertheless be argued that a selective burial rite might be the most probable reason as it is documented across temporal and spatial contexts (Beilke-Vogt 2004: 273-274). To date, we know no separated early medieval burial ground where only children have been buried (Atzbach 2009: 15).

In the High and Late Middle Ages, as well as in the Early Modern Period, however, we can grasp some exclusive burial locations in and around churches. Some of these churches, where only children were buried, were not designated burial sites which indicates that the interment was actually forbidden and

probably even performed without the clerical consent (Hausmair 2018; Hausmair 2017; Hausmair 2020; Lindenhofer 2012; Ulrich-Bochsler 1997; Wimmer 2016). These will be discussed and interpreted in more detail in a later chapter.

Infanticide and child abandonment could also explain why there are fewer infants than expected found on burial sites. It seems probable that children who have been killed were either secretly deposited or disposed or were buried in the domestic context rather than in a cemetery (Lohrke 2004: 38; Ulrich-Bochsler 1997: 103). This could, however, also be related to a selective burial rite as murder victims are generally buried outside the communal burial ground (Biermann 2009: 3; Grabner-Haider et al. 2012: 55-56). In the case of exposure, it can also be assumed that the child was abandoned far away from the society in which the parents lived and was thus already excluded during its lifetime (Eriksen 2017: 349; Lohrke 2004: 38; Ulrich-Bochsler 1997: 103).

It also seems critical to reevaluate the projected infant mortality rate in addition to considering infanticide, abandonment, and selective burial practices as potential causes of the low percentage of buried subadults. B. Lohrke (2004: 39) and S. Kölbl (2004: 31-46) both discuss the possibility that mortality rates may have been significantly lower than those calculated by Franz and Winkler for pre-industrial times and which are usually applied to the Early and High Middle Ages. After computer-based simulations of palaeodemographic distributions and a thorough review of contemporary sources, both conclude that there is no statistical indication or historical evidence for a child mortality rate of 45 - 50% for the entire Middle Ages. Rather, they assume cyclical high and low phases of mortality, which may have been comparatively low in the Early Middle Ages.

The general female fertility rate in the Middle Ages is another issue that must be addressed within the context of this discussion. A low number of infant and child burials could in fact be the outcome of a low pregnancy rate. As stable living and health conditions, as well as an adequate and sufficient nutritional base are the prerequisite of female fertility, it seems plausible that deficient conditions reduced the number of pregnancies. Poor environmental circumstances could have been responsible for a late age of menarche or menstrual disorder and thus prevent fertilization (Bealek 2017: 33; DeWitte and Lewis 2020: 2; Jasch-Boley et al. 2021: 312).

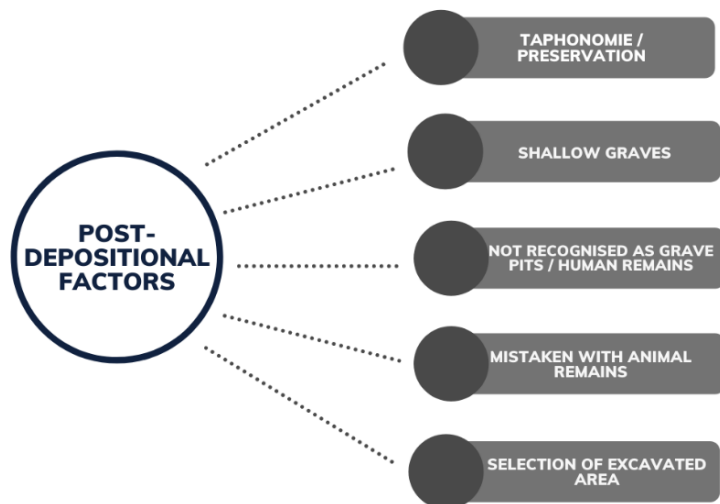


Fig. 6: Post-depositional factors for a lack of skeletal remains of fetuses, neonates, and infants on early medieval burial grounds.

Post-depositional factors encompass any aspects that reduce the skeletal database due to the impact of soil conditions, taphonomic processes, and inadequacies in the archaeological excavation procedure. Especially preservation status and taphonomy are usually highly discussed because there is a general opinion that skeletal remains of very young children decompose particularly quickly in the soil. Often, only the smallest remains, such as tooth enamel, or even nothing at all, is left of the body. Furthermore, infant bones are very small and therefore often not seen or recognized or sometimes even mistaken for animal remains. Therefore, preservation, imprecise work, often under time pressure, and a lack of anatomical expertise on the site are stated as the most common reasons for the absence of fetuses and neonates (Alt 2002: 457; Gangl et al. 2015: 153; Lohrke 2004: 38).

Kölbl (2004: 17) counters on the point of faster decomposition of infant bones and argues - based on a paper by Guy et al. (1997) on infant taphonomy - that the degree and speed of decomposition depends on the degree of mineralization of the bones. They describe an inversive course of bone mineralization. According to this, the skeleton of newborns is more saturated with minerals than that of children about two years old. Only at the age of about four years, the concentration becomes higher again before mineralization is completed around the age of 13. There is a notable correlation between the concentration of minerals in the bone and the speed of decay. M. Lewis (2007: 24-26) also states that the level of mineralization is not linear and at its lowest around the first birthday and increasing again afterwards.

Decay is, however, also influenced by other aspects such as bone density and porosity and extrinsic factors such as soil chemistry and type, the presence of a burial container or clothing, temperature, soil humidity and bioturbation. All of these are also influential for the decomposition processes of adult

bodies, but as subadult skeletal remains have a less dense bone structure and only a thin layer of cortical bone, they tend to be more susceptible to extrinsic factors. We can therefore conclude that the skeletons of children, especially newborns and infants, are more prone to decay due to their bone structure. However, it is not to such an extent that their bones decay completely, while those of adults are well preserved. When analyzing infant burials, it is therefore important to consider the general preservation of organic matter at the site (Lewis 2007: 24-26).

Another factor may be the initially shallower graves for children, which are more susceptible to being disturbed by agricultural or modern landscape alterations and could be completely erased (Atzbach 2009: 15). Nevertheless, it is challenging to find proof for things that no longer exist, making this argument difficult to support. It is conceivable, however, that small burial pits, adapted to the small size of infants or children and in which no skeletal remains have survived, get mistaken for postholes or other pits with no clearly discernable function.

While poor preservation and circumstances at the excavation reduce the number of originally buried individuals, storage conditions afterwards can be also responsible for a gap in the data set. All these described reasons, or rather a combination of pre-and post-depositional factors, are responsible for the comparatively low number of infants uncovered on some early medieval burial grounds. Lewis (2007: 20) makes the supposition that many researchers disregarded children for further study because they considered that the low number of child burials would not yield statistically meaningful data.

The internal structure of the burial place as well as its parts that we chose to excavate further influences the sample size of subadult burials. A separated location of children does not necessarily have to be completely away from the burial site, but child burials may also have been clustered on the site (Kölbl 2004: 13-14). Even today, in many larger cemeteries, for example at the Vienna Central Cemetery, we find a separated area for subadult burials, mostly for stillborn or children that died in early infancy.

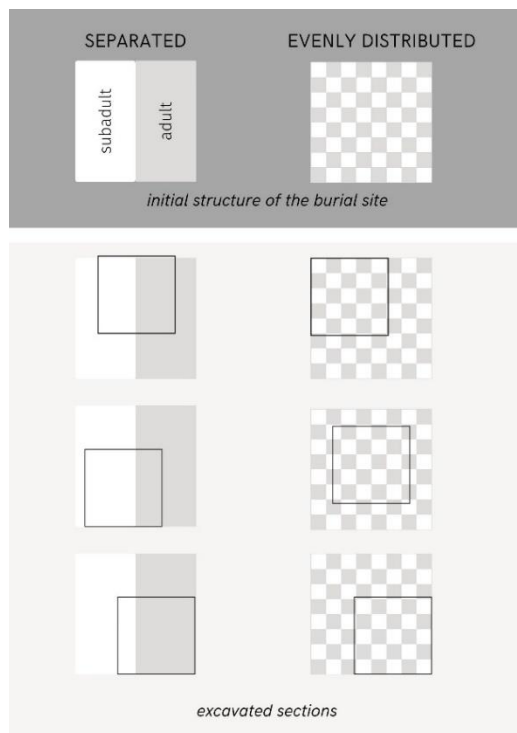


Fig. 7: The internal structure of a burial ground based on age distribution and the selected excavation section influence the sample size of subadult burials. Modified after Kölbl 2004: 13.

As shown in Fig. 7, the initial age distribution during the occupancy of the cemetery, together with the choice of the location of the excavation trench, can be decisive for the number of subadult individuals that are recovered and further investigated. When it comes to demographic distribution and the interpretations that are drawn from it, it is thus important to check whether the site was completely or only partially excavated (Kölbl 2004: 13-14).

A lower number of infants in some early medieval cemeteries obviously reduces the investigable database. However, it might also be important information on the treatment of children after death and a significant indication of the status of the child during this period. If we assume that there was indeed an age-specific burial rite for stillborn or prematurely deceased children, it was carried out way from the communal burial place, and possibly even completely detached from society.

Although the infant deficit on early mediaeval gravesites is widely cited within research, it is debatable if this is actually a widespread phenomenon or if there are rather underlying methodological issue resulting in this demographic gap. Small numbers of newborn and infants have been observed at some, but not all, of the large Merovingian row burial ground (Kölbl 2004: 9) and Anglo-Saxon sites (Lewis 2007: 20-23), however, it is rarely stated if a reduced sample size may be due to ritual reasons, or whether it was caused by preservation constraints or circumstances of excavation. Among the sites that were reviewed during this examination, there were only very few instances displaying a shortage

of infants, and most of these were sites that have been unearthed in the course of rescue excavation and were thus probably not excavated completely. Only stillborn children are in fact frequently underrepresented, but are nevertheless found in many sites, at least in small numbers. Several personal conversations with colleagues who investigate early medieval burial sites in southern Germany (for example Iffelsdorf) and Austria (for example on Hemmaberg, as well as Kremsdorf or Oberleiserberg among others) or burial data from Czech Republic (such as Stará Kouřim or Břeclav Pohansko) also contributed to my opinion that the supposed child deficit is not a phenomenon that is tangible in all central or eastern European regions throughout the entire Middle Ages, but rather a regional and/or temporal specificity of age-dependent funerary behavior.

Death, Dying, and Burial in the Middle Ages

Conceptions and Norms

Graves are a crucial and intricate source for the study of previous societies because they can be examined through multi-proxy approaches and provide a wide range of information about the behavior and culture of individuals and communities.

Burial practices are witnesses of religious and spiritual ideas and grave goods are records of the material culture that can represent social hierarchies, affiliations, and identity. Human remains can provide details about the buried person, including age, sex, disease, or trauma, on an individual level, as well as population specific traits and living conditions (Nilsson Stutz and Tarlow 2013: 3-5). Though graves can provide us with a wealth of information, past civilizations' concepts of death and dying are nonetheless difficult to understand and decipher, even for periods with contemporary written records and oral tradition.

Despite all attempts, death remains challenging to define. On a very basic level, there is a distinction between biological death, i.e., the death of the physical organism, and social death. Biological or clinical death has indisputable indications and characteristics, such as a complete lack of activity of the central nervous system, cardiac arrest, death stains, rigor mortis, and finally putrefaction (Hochmeister et al. 2007: 19-22). The definition and timeline of the social death, however, is a matter of the respective society. It is embedded in the funerary practice and the conception of social identity. The timing of biological and social death does not necessarily have to correlate because the transformation from a living to a dead individual is not inevitably accompanied by the deletion of the social person. Therefore, death and the handling of the corpse must always be considered in the context of the surrounding socio-cultural framework (Hausmair 2015: 34-35). The requirement to deal with death is the single element that is universal (Schmitz-Esser 2016: 3; Scott et al. 2020: 1).

Death is a profound event in any society because it disturbs the internal structure of the community and it is almost always accompanied by rites and practices, that have been designed to cope with the loss (Hausmair 2015: 44). *“Death is both an event and a process”* (Gray 2021: 106) and its processing constitutes a central role in life as everyone is confronted with it. In the Middle Ages death was omnipresent because of a relatively high mortality rate. As in almost all periods of human history, women were at particularly high-risk during pregnancy, childbirth, and the postpartum period. Poor hygienic conditions, contaminated water, infectious diseases, and malnutrition led to a high infant mortality rate, especially after birth or after weaning (Cemper-Kiesslich and Kanz 2016: 305-307). Periods of famine and crop failures due to climate oscillations and epidemics also caused a higher

mortality rate especially in the Late Middle Ages (Isenmann 2012: 66-67; Preiser-Kapeller 2021: 319-324; Vasold 2012: 62-63). Medieval society was therefore strongly influenced by its approach towards death (Booth and Tingle 2021: 8).

Due to the omnipresence of death, societies came up with coping mechanisms to deal with the loss of beloved people. One of the most important coping strategies are expressions of an afterlife and afterworld. The imagined afterlife has therapeutic meaning in the context of a person's passing and its perception is highly dependent on the temporal, spatial, and cultural framework and not equally intense throughout time and space (Hausmair 2015: 44; Heller 2017: 25-27; Rebay-Salisbury 2012: 15-16).

The period between dying and being buried, which was considered to be part of the *extended life course*, was crucial to the identity of the deceased in the Middle Ages. The concept of an *extended life course* refers to the idea that an individual's identity begins to form before birth and endures beyond death (Gilchrist 2012: 19-20). According to medieval belief, a person still held post-mortem agency. People remained liable to prosecution, possess rights and duties and continued to be an active legal entity (Nießen 2012: 9-10).

Rituals and behaviors that supported the passage from the world of the living to the world of the dead were characteristic of this stage of biological death, and eventually social death. The German-French ethnologist Arnold van Gennep examined, analyzed, and interpreted various sorts of transition rites in his primal book *Les Rites de Passage*, which was published in 1909. Rites of passage, according to van Gennep's observations, are required whenever an individual moves from one social realm to another and they can be expressed and carried out in a wide variety of ways, based on the community and its level of socialization. Additionally, the spiritual und cultural ideology of each society determines if rites of passage are even necessary for a certain occasion. Birth rituals, for example, represent a child's introduction to the community, whereas death ceremonies signify a person's exit from the living collective. Further biographical milestones in life, like entering adulthood, getting married, and becoming a parent, etc. also involve rites of passage in most societies.

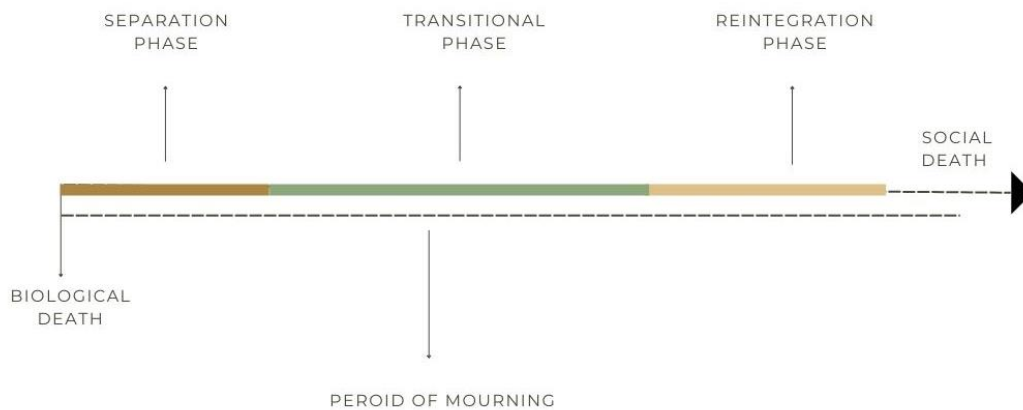


Fig. 8: Mortuary timeline and rites of passage (after Van Gennep 1909)

All these rites undergo three stages: A phase of separation from the current state, a transitional phase, and finally the reintegration into a new sphere (Fig. 8). These stages have different lengths and different relevance depending on the individual procedure (van Gennep 2005: 21-29).

The primary goal of the initial stage of funeral customs is to disconnect and separate the deceased from the living community and the social roles they had. This is followed by a liminal phase of transition. Contemporaneously, the bereaved experience a period of mourning. All societies described by van Gennep had inherent restrictions and guidelines for the expression of mourn, such as dress codes or behavioral taboos (van Gennep 2005: 142-149).

The funeral itself is incorporated in the transitional stage and involves its own rituals and procedures. The actions carried out within this scope are among the most crucial in assisting the shift from being alive to being dead and the establishment of a new existence in the afterworld. At the same time, rites are performed to safeguard the remaining community from the deceased individual and to modify their personal ties with the departed (van Gennep 2005: 142-149; Kremser 2009: 58).

After a given amount of time, that is typically determined by cultural or religious conventions of society, the deceased's transition is completed, and this is usually also the time when the period of mourning ends. It is followed by the final phase of reintegration into the world of the dead (van Gennep 2005: 145). The sequences of these phases and the individual actions are subject to strict rules. Inadequately performed or scheduled rites, or the absence of essential components, may have

negative effects on the successful transition to the afterlife (Franz and Nösler 2016a: 47-48; Krög 2015: 23-24; Schmitz-Esser 2016: 54).

An appropriate burial, as well as the grave monument, is usually designed by the grieving relatives based on social conventions, culture-specific norms, beliefs, environmental conditions, and material resources. It is multidimensional and the components used for the funeral are drawn from a large spectrum. Influential factors are the timing, place, and manner of death, as well as the social identity of the deceased, the interests of the bereaved as well as the deceased's will. As each grave is individualized, it reflects one specific segment of the communal mortuary practice (Hausmair 2015: 44). Regulations and anticipations surrounding the treatment of death and imaginations of an afterlife define the burial mode and the funerary standards (Rebay-Salisbury 2012: 15; Hausmair 2015: 40). The dead body is the central point of the burial – the *“raison d’être for the tomb”* (Duday 2009: 6). All actions and objects within the funerary process enclose the once living person. Some of them embody representations of the living identity, some have apotropaic functions and some of them refer to the identity of the dead (Toplak 2017a: 127, 134).

Like a time capsule, the grave preserves the last phase of a complex, multi-layered and multi-dimensional burial process. Yet, some acts that were carried out during the time between death and the interment might leave no traces in the ground or occurred elsewhere than the final place of burial. Immaterial elements of the mortuary practice like chanting, gestures, scents, or fumes are not tangible or findable, and ephemeral objects might also vanish completely. Furthermore, we must regard that not all funerary rites of all cultures involve burying the corpse or cremated remains. Some forms of handling a dead body might leave no trace at all – *“there is more to death beyond physical evidence”* (Scott et al. 2020: 1). The archaeological record is thus limited and can only reconstruct singular aspects, and not the entire funerary practice of a society with all its components and forms (Schmitz-Esser 2016: 5; Daim 2003: 43).

From an archaeological point of view, the grave as an entity is composed of various material objects and taphonomic observations. The merit of a burial can be estimated based on the qualitative and quantitative value of the grave goods and dress components and the effort invested in the construction of the grave monument. Social index calculations can be used to reconstruct the social structure and the internal order of a community (Hodson 1990; Rebay-Salisbury 2006: 201-204). This approach is useful in prehistoric or early medieval contexts because of the richness in grave goods. Late medieval burials rarely include grave goods and social rank is rather expressed through the location on the churchyard, or within the church (Schmitz-Esser 2016: 70-73; Ulrich-Bochsler 1997: 29-34).

In this scope, we have to consider, that burials do not necessarily have to reflect realities or the actual *social persona* (Saxe 1970), but could have been used to portray ideas that are driven by specific spiritual belief or stage social conceptions. Burials might rather be considered as a distortion mirror of the past life, than an accurate representation of an actual identity (Brather 2009a: 281; Toplak 2017a: 128). If we presume that the funerary rite is subject to follow idealized depictions, we can see that a customized post-mortem treatment does present different types of social identity and an intrinsic hierarchy. It is challenging to provide a definitive answer to the question of whether the structure and composition of the dead society as represented by graves are similar to those of the living society. However, it provides us with insight into the imagined and created social structure of the burying community and offers conclusions regarding ideas about afterlife perceptions (Brather 2012: 568-570; Rebay-Salisbury 2006: 199-200).

The next section is going to provide a brief overview of various funerary customs and practices throughout the Middle Ages, describe various types of burial sites, and discuss important developments in post-mortem treatment throughout periods of profound religious and social transformation.

To recognize funerals that deviate from a community's mortuary customs, it is necessary to define some standard features first. For the longest time, historians and archaeologists have characterized medieval funerals as being uniform, exhibiting only a limited spectrum of variety that was defined and controlled by doctrines and canon law. Especially from the High Middle Ages onwards, the funerary practice is easier to identify normative mortuary behavior and standards compared to earlier periods of human history. However, compared to what is generally believed, the diversity of medieval burial practices is much higher, although there are certain characteristics that define medieval graves (Gilchrist 2022: 121; Vargha 2017: 272).

One of these general traits of medieval Christian burials is the prevailing mode of inhumation burial. Even though Augustine of Hippo, one of the early Christian Latin Church Fathers of the 4th and 5th century, stated that the incineration of a corpse has no negative effect on the resurrection on the Day of Judgment, it was still rejected for a long time. Cremation slowly became more prevalent within Christian funeral practices only during the 19th century. Despite the fact that there were no liturgical prohibitions, the *Capitulatio de partibus Saxoniae*, written in the late 8th century, declared that cremation was an undesirable post-mortem treatment and was therefore condemned. Given that this legislative text was decreed by Charlemagne, it can be assumed that the association of burning the

dead with pagan faith was an instrument of his missionary process (Schmitz-Esser 2016: 47-54; Kalhous 2019: 112-114).

The adoption of inhumation burials and the rejection of cremations after Christianization was a first step toward a unification of mortuary practices (Schmitz-Esser 2020: ¶ 2). Another common characteristic of medieval burials is that they are typically orientated with the deceased's head in the west, facing east. This commonly explained with the intention to bury the dead facing the rising sun. Also, the arrival of Jesus on the Day of Judgment is expected to come from the east (Kenzler 2011: 21; Schmitz-Esser 2016: 58-63). Yet, the tradition of a west-east-orientation is not exclusively reserved for medieval Christian burials. In prehistoric periods, for example at LBK burial grounds (Neugebauer-Maresch and Lenneis 2015), and in Avar (Daim 2003) and Magyar burial traditions (Kemenczei 2010) even before Christianization, burials are also orientated west-east. Jewish communities also still bury the dead facing the rising sun (Tilly 2007: 170).

Except for the burial mode of inhumations and the orientation of graves, the treatment and handling of death varied throughout the Middle Ages and written sources are not always abundant or elaborated to help us decipher the surrounding rites.

Official texts, such as *leges* or *codices*, are among the most important written sources for the early Middle Ages, as they provide information about the legal structures of ordinary life, but also about concerns of ecclesiastical law. Most *leges* describe fragments burial customs and rites and provide a supportive framework for the interpretation of archaeological finds and features (Brather 2017b: 354-355).

The *Liber Historiae Francorum*, written in the 8th century reports on burial procedures of the Frankish elites. Criminal aspects such as illegitimate grave manipulation are, for example, mentioned in the *Pactus Legis Alamannorum* (Hausmair 2015: 52). Another important contemporary source on the treatment of death at the transition from the early to the high Middle Ages are the *Chronicles of Thietmar of Merseburg*. He recorded various aspects and indications that are important for the interpretation of funerary customs of this period. As one central point of his narrative, bishop Thietmar of Merseburg describes the importance of *memoria* after death. Furthermore, he addresses the possibility that the dead could rise from the grave and return to be amongst the living. He also stresses the close relationship between the here and the hereafter and illustrates the embedding of supposedly pagan customs in the Christian burial rite (Goetz 2015; Krög 2015: 5-7).

A key source for mortuary liturgy for the time of the 10th and 11th century is the *Sacramentary of the bishop Warmundus of Ivrea*. In a sequence of ten illustrations, Warmundus depicts the *Ordo in Agenda Mortuorum* (Fig. 9), i.e. the liturgical acts and processes surrounding the death of a person

belonging to the Christian faith (Mackie 2010: 219, 237-238). As the burial rites were regulated by church, another important source for the High Middle Ages was the *Decretum Gratiani*. The text was written in 1140 by Gratian and comprehensively described the funerary practice. The *Decretum Gratiani* is particularly interesting in the context of the present thesis since it specifies the circumstances or identifying characteristics that result in a denial of a Christian funeral and exclusion from the common burial ground (Vargha 2017: 274; Zapp 1999).

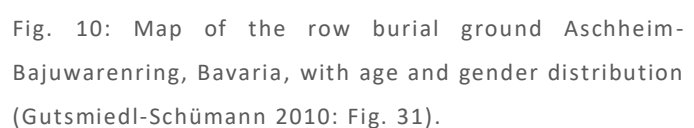


Fig. 9: Ordo in Agenda Mortuorum – Death and burial of a Christian, depicted in the *Sacramentary of Warmundus of Ivrea*, c.1000 (Meier and Graham-Campbell 2007: 433)

These are just a few examples for important historical texts that provide an insight into the handling of death and the basic burial practice during the Early and High Middle Ages . Nevertheless, there are significant gaps within the written records of that period, which makes archaeological sources crucial for the study of mortuary practices (Halsall 2008: 105-107).

The primary source of information regarding the social structure of communities, particularly for the Early Middle Ages in Central and Eastern Europe, is data recovered from archaeological investigations. Especially the Merovingian time is characterized by an abundance of grave goods which allows diverse statements on differences in social status, as well as fine chronological dating. Prevailing burial places

These communal burial grounds were mostly used for a few centuries and can encompass up to 1500-2000 burials. Aside from the arrangement of the graves, another characteristic of these burial grounds is, that there are hardly any superimpositions of graves and even multiple burials are not very frequent. The low number of overlapping graves can probably be an indicator for the primordial existence of grave markers (Graenert 2020: 40-41; Schreg 2004: 32-34; Haberstroh 2020: ¶ 4). A large number of row burial grounds as for example Schretzheim (Koch 1977), Pleidelsheim (Koch 2001), Aschheim-Bajuwarenring (Fig. 10) (Gutsmiedl-Schumann 2010) or Altenerding (Losert and Pleterski 2003) have been investigated in detail and published in extensive monographs. The row burial grounds commence at the end of the 5th century and were used until the end of the 7th century, some until the early 8th century (Haberstroh 2020; Schreg 2004: 32).



In addition to these usually large burial sites, there were also smaller cemeteries, a site type that became more frequent by the end of the 7th century. The emergence of these smaller burial sites, which were probably primarily used by people of higher social status, is also accompanied by an increase in grave goods bearing Christian symbols (Haberstroh 2020; Schreg 2004: 31-32). Also, multiple burials and superimposing graves were more frequent than within row burial grounds. According to G. Graenert (2020: 42-43), superimposing burials or graves placed very close to each other were intended to show personal relationships between buried individuals. A desire for spatial proximity between interconnected persons might have been prioritized over the integrity of the older grave.

This point is, however, debatable if there is no scientific evidence of kinship. Even if interpersonal relationships such as marriage, adopted children, or other social connections that are not genetically manifested cannot be confirmed, superimpositions do not necessarily have to be intentional. It is possible that the higher frequency of superimposing graves on smaller separate burial grounds in caused by a lack of (persisting) grave markers. Maybe this rather elite sites were occupied less regularly, and grave markers had already decayed.

Another similar type of burial ground, which is however only found in the regions of the Frankish Empire during the late Merovingian period, are sites that are usually referred to as *Hofgrablegen* in German. Smaller groups of people were buried on or near their farmstead, or within a settlement complex. This phenomenon disappears again with the emergence of churchyards in Carolingian times (Schoenenberg 2021: 93-95; Schreg 2004: 32; Steuer 2004: 194-199; Unselt 2021: 251). *Hofgrablegen* or clustered burials within the settlement area are for example found in Unterhachingen (Haas-Gebhard 2013), Aholming-Ölgartenweg, Buchhofen-West, Niederpörling-Leitensiedlung (all in Bavaria, Germany, see: Lobinger 2014).

At early medieval central places, such as Gars/Thunau in Austria (Nowotny et al. 2018), Lauchheim in southern Germany (Stelzner et al. 2020), or Mikulčice (Hladík 2020) and Pohansko in southern Czech Republic (Macháček and Wihoda 2019), several types of burial sites were found next to each other. At Lauchheim, for example, there are large row burial grounds, smaller separated burial grounds, *Hofgrablegen* (Fig. 11) and burials associated with a church adjacent to a multi-phase settlement (Stelzner et al. 2020). Such central places are exceptional cases for the investigation of past human history.

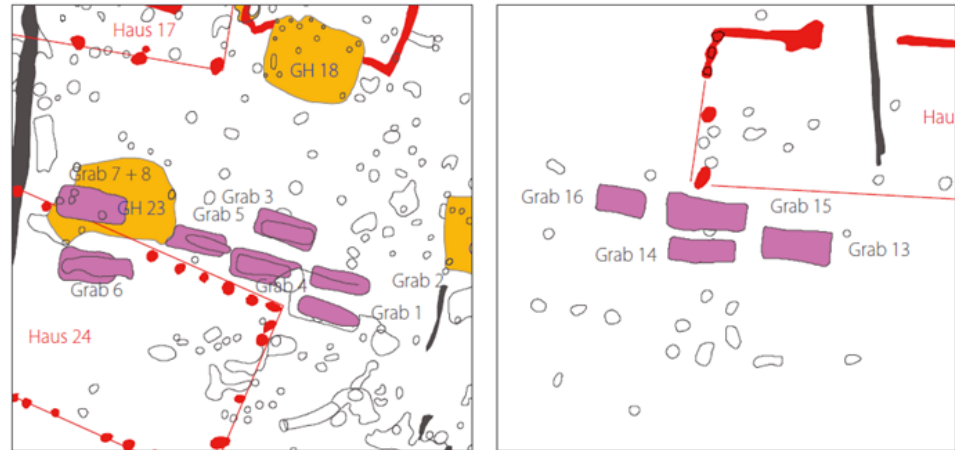


Fig. 11: Burial cluster 1 (left) and burial cluster 2 (right) in the middle of the settlement area of Lauchheim Mittelhofen. The graves are dated to the second half of the 7th century, when the settlement was in active use (Schoenenberg 2021: 94).

Contemporaneous cremation burial grounds were found in parts of eastern Central Europe. They usually date from the late 6th to the 7th century and are associated with the Slavic population that migrated from the east during that time. The origin of the Slavs is still under debate (Brather 2008a: 52). These incinerations are rarely accompanied with chronologically sensitive grave goods, which is why a precise dating is often challenging. The cremated human remains were usually kept in cloth sachets or in urns and deposited either in shallow pits, but also in or on top of small burial mounds (Fig. 12). Most of these Early Slavic cremation burial grounds were found in modern-day Czech Republic, as well as in north-eastern Germany and Poland. Furthermore in Enns-Lorch, Upper Austria, in Regensburg-Großprüfening, Bavaria (Brather 2008a: 256-260; Losert 2011: 481-484) and in Slovenia (Eichert 2012b: 497; based on: Pleterski 2008: 39).

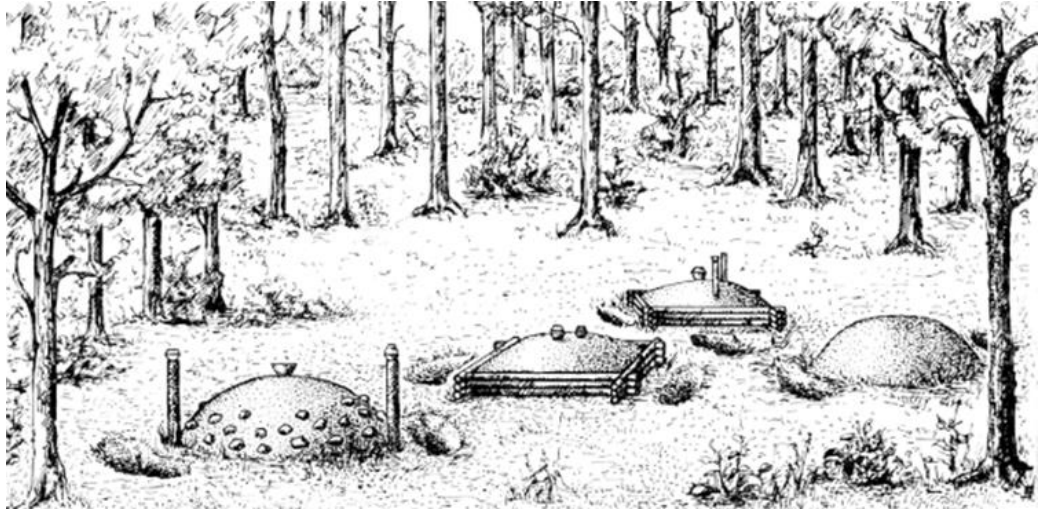


Fig. 12: A reconstruction of the Slavic burial mounds of Gahro, northern Germany, with the urns deposited on top of the mounds (Brather 2008a: 258, Fig. 70; after: Herrmann 1985).

The Christianization of the Slavic *gentes* led to an abandonment of cremation and the adoption of inhumation burials, with bi-ritual burial sites such as Grabelsdorf, Carinthia (Eichert 2012a: 204) or Alt-Käbelich, Germany (Schmidt 1985) representing a transitional phase (Brather 2008a: 256-260).

The first churches and parishes in southern and western Slavic areas such as the Duchy of Carantania, on the territory of present-day Carinthia, for example, were already founded in the late 8th century. During the same time, people in Slavic settlements around the Baltic Sea held on to pre-Christian traditions, cremated their dead and buried them in urns. In this region, the custom of cremation burial was continued until the beginning of the 11th century. It was not until the Late Middle Ages when the Christian belief was fully established in the north-eastern Slavic territory, and inhumation became the prevalent burial mode (Biermann 2000: 92-95; Eichert 2010b: 227; Schmitz-Esser 2016: 48). One of the most important written sources for the history of the missionary process of the Slavic principality of Carantania and the Baiuvarii is the *Conversio Bagoariorum et Carantanorum*, written around 870 (Eichert 2012a: 166; Eichert 2012b: 491)

Although Christianity became established in most of Southern, Western, and Central Europe in the Early Middle Ages, contemporary written sources indicate that aspects of the old pagan faith were still relevant for a long time for most parts of this region. This is testified by decrees and ordinances enacted during the *Concilium Germanicum*, convened in 742/743 by the Frankish Duke Carloman. Oblations at gravesites, temples, places dedicated to the old gods or holy wells, human sacrifices, but also amulets

with magic features and magic spells were denounced. Further indications for the continuation of pre-Christian beliefs can be found in the *Slawensendrecht für die Main- und Regnitzwenden* or also referred to as *Das Würzburger Sondersendrecht für christianisierte Slawen und sonstige Nichtfranken*³. This legal document, which deals with Slavs (or Wends) and other minorities with different cultures, languages, and traditions residing on Frankish territories, was written between 910 and 918 during the rule of King Conrad I. It further outlines punishments for engaging in religious acts that conflict with Christian doctrine. This text mentions the pagan customs by their original vernacular, which might have been intended to increase the enforcement power of this text. It describes the prohibition of *trebo*, which is the sacrifice to heathen gods. Furthermore, there is a ban on burying the dead in burial mounds (*hougir*), instead of the mandatory burial in the consecrated ground of the churchyard. Sacrificial feasts at the graves or on the burial sites were also forbidden (Losert 2020: 185-187; Kahl 2008: 61-63; Schmitz-Esser 2016: 48-49). The *Capitulatio de partibus Saxoniae* which was penned in the late 8th century, as well as the *Slawensendrecht* both included that burials adjacent to prehistoric or generally older mounds (*ad hougir*) are also forbidden (Brather 2009a: 263; Losert 2020: 186)

Early medieval burial mounds can be found all over Central Europe, especially in Moravia (Turek 1958) and Slovakia (Milová et al. 2011). Burial mound sites in Austria, that have been recently excavated or published are for example Wimm, Lower Austria (Breibert 2005), Grabelsdorf (Eichert 2010a: 209-213), or Thunau am Kamp (Breibert and Wilschke-Schrotta 2010). Examples from Germany were excavated in Pfreimd (Hoffmann 2016), Iffelsdorf (Losert 2020), Wollin (Biermann 2004) and Gahro (Wetzel 1979).

In Bernhardsthal at the Austrian-Czech border, early medieval communities not only buried their dead *sub hougir* (under a mound) but also *ad hougir* (at/near a mound), as their burial mounds are located adjacent to Hallstatt period tumuli (Macháček et al. 2019; Losert 2020). Particularly in Slavic societies, burials in or near prehistoric mounds or megalith tombs can be found quite regularly before Christianization (Brather 2009a: 263). N. Posselt (2017: 143) states that one of the underlying motives might have been a “conscious manifestation of antagonism to the Christian burial rite”. But also, legitimization of cultural identity through the affiliation with preceding societies that populated the same region could be a possible interpretation (Posselt 2017: 142-143). Furthermore, in the Alamannian region in today’s Baden-Württemberg, southwestern Germany, burial mounds from the 6th and 7th century were found next to large early Iron Age burial mounds. It seems that here, too,

³ “The Special Law for Wends living along the rivers Main and Regnitz” or “The Würzburg Special Law for Slavs and Other Minorities” (author’s translation)

the proximity to prehistoric landmarks was deliberately sought in order to relate to ancient traditions (Schreg 2004: 35).

The above mentioned written legacies give us an important indication that Christianity and pagan traditions coexisted in the Frankish Empire almost 500 years after Clovis' baptism in 498 (Padberg 2009: 49), though the state administration felt the need to ban these last remnants of pre-Christian traditions. Further legal texts of the 8th century also address the fact that the dead should enter the graves without any grave goods (Hartmann 2003: 131,142; cited after: Brather 2009b: 100). Despite this, the archeological record of early medieval burial demonstrates quite the opposite. The persistence of including items, especially those bearing Christian symbols, is a striking example of how syncretism was strongly manifested in early medieval society (Goetz 2011: 38-40; cited after: Hausmair 2015: 314).

The Christianization of Europe did not only change burial modes, but also the perception of the dead and death. P. Ariès, who has made contributions to a historical analysis of death in medieval and modern Western societies, contends that throughout Late Antiquity and the Early Middle Ages, people were more fearful of the dead than of dying. As a result, they separated the realms of the living and the realms of the dead by burying the dead outside of the settlement area. The fear of the dead reduced with the establishment of Christianity and the indoctrinated safety net of the heavenly (or underworldly) afterlife that came with it, and cemeteries moved into the center of the world of the living (Ariès 1981; cited after: Hausmair 2015: 38). This is evident by the abolition of the row burial ground outside the residential area and the establishment of churchyards as the designated burial sites around the newly founded churches. The new place of burial entailed another change: social hierarchies were now indicated through the place of the burial rather than elaborate grave goods. Desirable spots inside of churches were limited and were only assigned to a small segment of society, members of the clerical and secular elite. S. Ulrich-Bochsler (1997: 29-34), who investigated sex and age distribution of medieval and early Modern mortuary spaces in Switzerland, found that throughout this period there is a noticeable surplus of men in prestigious spots. Accordingly, this demonstrates the subordinate status of women and children in high and late medieval society and within religious structures. Furthermore, outsiders, strangers, and unbaptized were supposed to be buried outside the communal cemetery (Dunst 2012: 50) – *“despite the Christian ideal of equality and humility, a graveyard can be understood as a career space”* (Meier and Graham-Campbell 2007: 432).

On burial grounds outside of the residential area, there was hardly any overlap of graves as they offered almost unlimited space. Due to spatial restrictions of churchyards in the center of the town or around the church, grave superimpositions (as seen on Fig. 13), or the removal of older tombs occurred

more frequently from the late 11th and 12th century onwards. On most churchyard and cemeteries the burying community established ossuaries to provide a dignified place for the human remains that have been cleared away (Cemper-Kiesslich and Kanz 2016: 308-309; Dunst 2012: 49). Contrary to Jewish and Islam burial traditions, for example, where burials are protected from any disturbance, (medieval) Christian doctrines do not require an eternal burial place or the integrity of the dead body for resurrection and translocation to the heavenly kingdom (Schmitz-Esser 2016: 32-33; Gilchrist 2022: 122). As these ossuaries were erected on consecrated ground, the afterlife and the well-being of the soul was not disturbed if the skeletal remains were exhumed, relocated, and interspersed with the remains of other individuals (Dunst 2012: 49-50).



Fig. 13: Overlapping graves and continuous reuse of grave pits on the medieval churchyard of St. Johannes in Nabburg, Bavaria. The individuals were buried in the course of the 15th century (Hensch 2014: 430).

Secondary burials, reopened graves and multiphase burial practices can be frequently observed throughout the entire Middle Ages (Klevnäs et al. 2021; Aspöck 2005; Aspöck et al. 2020a). Even before the establishment of the first ossuaries in the High Middle Ages, evidence of reburial of human remains are also found on early medieval burial grounds. In Thunau *Obere Holzweise* (Lower Austria), for example, the remains of an adult male were reburied after the complete disintegration of the anatomical tendon and deposited in a rectangular wooden box, as indicated by an iron lock on top of it. Noteworthy is the fact that grave goods (two iron knives) were also included and the stacked long

bones were found in a typical west-east orientation (Nowotny 2018: 45). A similar feature was uncovered in the somewhat younger burial ground at Oberleiserberg (Lower Austria). In Grave 41, the remains of three individuals (a mature male, an adult female, and an infant I) were also found in a secondary burial position. The bones were deposited in the center of a rectangular, west-east-oriented pit. Following the longitudinal direction of the pit, the bones were heaped on top of one another here as well (Richards in preparation)

The reuse of burial pits and the collection of the skeletal remains of the primary burial was depicted in a medieval painting from 1430, produced in Amiens, France (Fig. 14). It shows a funeral scene with the naked corpse lying on a bier: A priest and the grieving community are standing next to the deceased. In front of the bier, we can see the grave being excavated by an undertaker. He removes long bones and a skull from a previous burial in a far advanced stage of decomposition with the soft tissue already completely disintegrated (Illy 1992: 475-476).

In the High and Late Middle Ages people were usually buried in a simple coffin or in a shroud. The shroud was sometimes ornamented with a cross on the chest (Gray 2021: 112-113). During that time people were buried with a particular position of their arms, which were either crossed on top of the chest (Fig. 13) or the hands were folded over the pelvic area (Fig. 14). This arm position is usually interpreted as a gesture of praying or humility and even infants were buried with this gesture. Arms stretched out next to the body can also be observed in later medieval burials (Alterauge et al. 2020: 10; Hensch 2014: 427), though it cannot be always identified whether this was the initial burial position, because taphonomic processes like bloating and swelling of the corpse, may also move the arms next to the body (Duday 2009: 9).

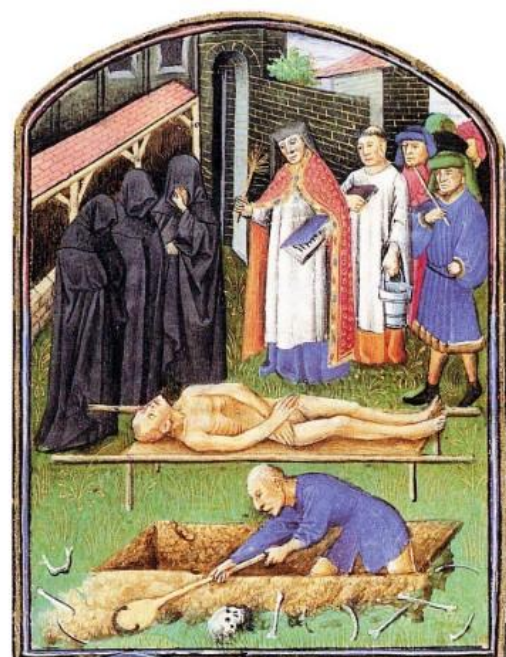


Fig. 14: Depiction of a medieval funeral. Painted in Amiens, France, around 1430 (Illy 1992: 476).

Even though the inclusion of grave goods has significantly decreased after the Early Middle Ages, high and late medieval, as well as Modern Period burials frequently contain dress components such as clasps or hooks, but also objects of spiritual relevance. These are mostly rosaries, small statuettes, or pilgrim badges. Persons of high rank were buried with their insignia, holders of high ecclesiastical offices additionally with elaborately designed bibles (Kenzler 2011: 21-22).

Strong spiritual beliefs and a constant awareness of one's own mortality were major characteristics of medieval life (Grabner-Haider et al. 2012: 44; Bates 2021: 74). In the 12th century, theological debates concerning Christian eschatology led to a hierarchical division of the afterlife into different spheres. Purgatory, *limbus patrum*, and *limbus puerorum* were introduced and expanded the initial dichotomous distinction between heaven and hell. This arrangement was the basic topography of the medieval afterlife until the Reformation at the beginning of the 16th century. Unlike eternal damnation in hell, purgatory was supposed to be a temporary waiting room for Christian souls to wait for resurrection on the Day of Judgment. The punishments and penance that had to be endured in purgatory had a purifying effect (Hausmair 2017: 217; Le Goff 1990: 220-221; Dunst 2012: 12) and the duration of the stay could be reduced by prayers and the purchase of an indulgence, a fact that was highly criticized with the Reformation (Köpf 2004: 147).

Purgatory and limbo were placed at the margins of hell. The *limbus patrum* was a place inhabited by the souls of Old Testament prophets that came before Christ, while the *limbus puerorum* kept the souls of unbaptized children (Hausmair 2017: 217; Hausmair 2018: 273-276; Tingle 2021: 39-41; Encyclopedia Britannica).

From the 13th century onwards, medical and scientific advances (Grabner-Haider et al. 2012: 99-102) as well as a theological and cultural focus on expressing mortality, led to an increase in written and pictorial sources that address the dead and decaying body (Schmitz-Esser 2016: 30). Especially in art, the portrayal of death became a popular motif in the aftermath of the Plague in the 14th century. The Dance of Death (Fig. 15) – *danse macabre* – and the lyrical narrative of *ars moriendi*, the art of dying were popular themes within visual art and literature (Bates 2021: 83-84).



Fig. 15: *The Dance of Death* by Michael Wolgemut, from the *Nuremberg Chronicle* of Hartmann Schedel from 1453. Noteworthy is the depiction of different stages of decomposition.

During the Late Middle Ages, preparing for death was “*the most important business of earthly existence*” (Houlbrooke 1988: 57). The care for a safe journey and wellbeing in the afterlife was an underlying motive for many things that were done during the lifetime. Centrally to this mindset was the concept of *memento mori*, the perpetual reminder of mortality and the transience of life (Bates 2021: 74). In his investigation of death in High and Late Middle Age Western societies, Ariès (1981) considers it as a time of *tamed death*. Death was ubiquitous, accepted and calmly awaited, because eternal life in heaven or hell was more pivotal. This period was preceded by a time of *feared death* marked by a spatial demarcation between the living and the dead in prehistoric times until the Christianization in the Early and High Middle Ages. The most recent periods are addressed as time of *forbidden death*, because since the late Modern Era death and the dead have been increasingly marginalized. Society is dissociated from death, dying and encounters with dead bodies. The process of dying is more isolated, death is sterile and the funerary system was professionalized (Bates 2021: 72-76; Hausmair 2015: 38).

The continuous interaction of different social groups, cultures, and diverse beliefs, as well as the changes in rulers and power, caused the Central European Middle Ages to be subject to constant transformation. Among many other aspects, this is evident in the steadily changing burial customs and afterlife beliefs. The Middle Ages, particularly their early period, constitute a complex period with

numerous processes and multi-part structures that can only be addressed briefly within the context of this thesis.

Because of this high diversity and constant change, funerary norms can only be defined and characterized in relative terms during this long period of time and the large geographic area. A funerary standard can be defined for individual contexts, either for a single burial place or for the burial practice within a predetermined time frame or region. The standards get vaguer as the frame gets bigger. Nevertheless, within the investigations of burial practices, we need to establish categories of burials to determine, describe and compare them. While the categories we use to classify burials do not necessarily have to correspond to historical realities, they do help us to outline a *norm* (or a range of *normal*) as the first step to identify deviations.

Defining Deviancy

Despite the fact that the term *deviancy* is commonly used, its exact definition in the context of mortuary studies is ambiguous, which is why it seems crucial to give a brief overview of the research history and different approaches to its interpretation.

The label *deviant burial* was introduced to funerary archaeology in the 1960ies and 1970ies (Kyll 1964; Schwidetzky 1965; Ucko 1969; Saxe 1970; Pauli 1975) and has become established since. However, one of the first authors to describe atypical burials was the German archaeologist G. Wilke (1933). Wilke recognized the intentionality behind deviating post-mortal treatments while examining burials in prone position, i.e., burials where the body was found lying on the stomach. He outlined the frequency and distribution of prone burials and attempted to interpret underlying motives and motivations. N. Kyll (1964) also described and elaborated on the habit of face-down burials as one of the most noticeable types of deviant burials.

The first author to use the term *Sonderbestattung*, the German term for deviant burial, was the German anthropologist I. Schwidetzky (1965). She noticed that most excavated skeletal series could not represent a living population because of an unproportioned age and sex distribution. By comparing these findings with burial rites from ethnographic records, she concluded that this might have resulted from a different treatment after death, e.g., different burial places or divergent burial modes. These differences led to a statistically significant absence of distinct cohorts of people, with children being the most frequently absent group. According to Schwidetzky's definition from a palaeodemographical

point of view, *Sonderbestattungen* are all those burials that cannot be excavated and investigated, because there are not found on the communal burial ground (cited after: Aspöck 2009: 14).

The definition of deviant burials as described by I. Pauli, who studied testimonies of Celtic folk belief based on the burial site of Dürrnberg bei Hallein, Austria, translated the idea of *Sonderbestattung* from absent to present findings. He refers to Schwidetzky's definition but broadens the term significantly:

„Als zusammenfassender Begriff bietet sich jener der „Sonderbestattung“ an, den wir von I. Schwidetzky übernehmen, aber so allgemein definieren, daß er nicht nur Phänomene umfaßt, die unter paläodemographischen Gesichtspunkten zur Nichtauffindbarkeit von Gräbern bestimmter Personengruppen führen können, sondern auf alle Gräber angewendet werden kann, die sich im Bestattungsritus von der jeweiligen Norm unterscheiden.“⁴ (1975: 174)

By defining deviant burials as burials that contrast the surrounding norm, Pauli transfers the concept to a physically tenable phenomenon. This delineation has become the lowest common denominator as most researchers agree that deviant burials are *"graves that deviate from the usual standard of the time and region"* (Biermann 2009: 3), *"graves that deviate from the normal or average"* (Brather 2009b: 103) or *"that they are burials different from the normative burial ritual of the respective period, region and/ or cemetery. These differences may occur in body position or treatment, location or construction of the grave or types of grave goods"* (Aspöck 2008: 17). Most attempts at definition, however, lack a definition of *normal*, *standard*, or *average* which is why the concept of deviation within the funerary rite remains somewhat vague.

Besides the palaeodemographical definition of Schwidetzky as something statistically absent and as a descriptive label for special burials, the term *deviant burial* was also used in the context of statistical evaluations within the background of processual archaeology. Without any spiritual implications or interpretations it simply referred to burials that showed differences regarding measurable and quantifiable traits (Scott et al. 2020: 5).

Though all its challenges, the investigation of deviating and atypical burial rites has been a frequently addressed field of research within archaeology because it holds a certain fascination. Variations and interpretations of special burials and mortuary treatments have been described in exhaustive monographs, articles, and volumes (Aspöck 2008; Aspöck 2009; Aspöck 2013; Balter 2005; Betsinger et al. 2020; Biermann 2009; Chapman 2013; Franz and Nösler 2016a; Kurasiński et al. 2018; Müller-

⁴ "The term *Sonderbestattung*, as suggested by I. Schwidetzky, might be appropriate to use if adapted. If we broaden its definition beyond phenomena that lead to the untraceability of graves of certain groups of people from a palaeodemographic point of view, we can apply the term to all graves which differ from the respective norm in the burial rite." (author's translation)

Scheeßel 2013; Murphy 2008; O'Shea 1984; Shay 1985; Stülzebach 1998; Thomas 2015; Wilson 2021; Wahl 1994). Case studies with a regional and/or temporal focus (Alterauge et al. 2020; Brather 2009b; Brundke 2013a; Dzik 2012; Gardela 2015; Gardela 2017; Genesis 2018; Gregoricka et al. 2014; Hensch 2014; Hosek 2020; Jungklaus 2009; Jungklaus and Müller 2016; Koperkiewicz 2015; Reynolds 2009; Müller 2020; Riisøy 2015; Štefan 2009; Taylor 2014; Toplak 2015; Toplak 2017b; Vargha 2017), investigating specific groups of people or individuals (Alterauge et al. 2017; Beilke-Vogt 2008a; Beilke-Voigt 2015; Crawford 2008; Daim and Lauermann 2006; Eriksen 2017; Ganslmeier 1988; Hadley 2010; Hausmair 2018; Jungklaus et al. 2018; Novotny et al. 2006; Nuzzolese and Borrini 2010; Nowotny 2020; Wojenka et al. 2021), or describing particular features and acts (Biermann and Jungklaus 2013; Gilchrist 2019; Holloway 2008; Jungklaus and Biermann 2021; Klevnäs et al. 2021; Kurasiński et al. 2018; Losert 1991; Moilanen 2018) provide a broad insight into the topic of atypical burials. Numerous publications of burial sites contain a short chapter on deviant burials on the site, usually collecting all features that do not fit in any other category of burials or that are somehow outstanding. The definition of what is special or normative differs widely among publications, and the factors that determined classification are rarely discussed in detail.

E. Aspöck, who made substantial contributions to the definition and analysis of deviant burials, observed important distinctions between the semantics of German and anglophone research. While the principal associations with deviant burials are about the same, the titling of the phenomenon nevertheless differs essentially. The German-language term *Sonderbestattung* with the prefix *sonder*, which translates to *special*, does not imply further implications per se and is thus somewhat neutral. On the opposite, the English *deviant* is already burdened with negative connotations and became associated with fear, bizarre rites, and a bad way of dealing with the dead (Aspöck 2009: 2, 14; Scott et al. 2020: 6).

Even though atypical burials have been discussed by a great number of authors, there is nonetheless a lack of clarity on the exact definition of abnormality within the burial practice (Aspöck 2013: 26). A recurring challenge within funerary archaeology is that specific burial characteristics and traits often lack clear classifications and concise designations and that scholars use different names for the same occurrence or vice versa. Their understandings can be highly variable and dependent on personal knowledge, opinion, and theoretical background. The use of vague, interpretative, or ambiguous definitions of terms further challenges large-scale investigations or inter-site comparisons of burial phenomena (for a further discussion on clear terms regarding funerary practices see: Knüsel 2014).

To diminish the vagueness of the term deviant burial, the archaeologist R. Meyer-Orlac set out a list of criteria to specify deviant traits of Bronze Age burials in her article *Zur Problematik von*

*'Sonderbestattungen' in der Archäologie*⁵ (1997). I. Nießen (2012) followed Meyer-Orlac's approach, modified the checklist, and applied it to Merovingian burials in her study on the distribution of deviating burials in early medieval southwestern Germany and E. Aspöck also describes similar traits in her PhD-Thesis (Aspöck 2009).

Burials that display one or more of the following traits of post-mortem treatment have been considered as deviant burials in the scope of the present thesis. Evaluations were made in regard to the surrounding burial practice (adapted after: Meyer-Orlac 1997; Aspöck 2009; Nießen 2012; Gardela 2017):

1. special topographical location of the grave, e.g. outside the communal burial place or in a peripheral location of it
2. a striking type of grave design, e.g. particularly deep, conspicuously constructed, or marked
3. a divergent burial mode, e.g. a cremation burial in the context of a predominant inhumation burial custom
4. a variant position of the body, e.g. an unusual orientation, prone position, or flexed burial
5. intentional incompleteness of the skeleton, as well as peri- or post-mortem manipulations and mutilation of the corpse (decapitation, amputation of limbs, etc.)
6. inclusion of special grave goods or a special position of grave goods within the grave or in relation to the body; objects with apotropaic character, objects that were used in the course of the funeral ceremony or its preparation, artifacts that are not age or gender appropriate or gender-specific, as well as graves particularly poor or particularly richly equipped
7. restrictions of potential movement of the dead, e.g. securing the deceased within the grave, by covering the grave with rocks, nailing the body onto the coffin or tying up the body

These criteria represent decisive traits to identify atypical burials. However, all these traits must be evaluated and weighted differently and individually in context with the surrounding burial rites. Despite this list of characteristics, deviant burials are not always clearly identifiable and occasionally it remains debatable where to draw the line between variance and deviation from the norm.

The major issue when it comes to identifying deviant burials is that preliminary interpretations are often already incorporated into the description of the findings, because archaeologists usually

⁵ "On the problem of 'deviant burials' in archaeology" (author's translation).

associate atypical burials with certain ideas and concepts. For one, deviant burials are perceived to be exceptional and thus represent a minority in the burial context under examination. Moreover, special burials are usually connected with a specific status during life or unusual circumstances of death of the buried individual or with distinct individuals or specific groups of people, such as persons who engage with magic, criminals or outlaws, or certain professions such as blacksmiths or executioners. Disabled, sick, or foreign people, as well as children, unmarried women, women who died in childbed, victims of violence and suicides are similarly related to extraordinary burial practices (Gardeła 2017: 20-21; Weiss-Krejci 2013: 284–286). Essentially, most deviant burial practices are considered to represent the exclusion or marginalization of an individual or a social group and often linked with negative connotations (Toplak 2017a: 140). In this mindset, a normative burial refers to a good or regular life or a timely and positive death, whereas a non-normative burial is perceived as a breach of rules or taboos within the strict burial custom to compensate a negative course of life or a *bad death* (Aspöck 2013: 26-27). Considering this, some examples of deviant burials are also considered to be the result of secular judicial action and are thus not always driven by superstition or the fear of revenants (Gardeła and Kajkowski 2013: 784).

While it must be acknowledged that there are numerous burials where deviations embody a negative life path or a social marginalization, it is not a universal explanation for all atypical burials. Some irregular burials, especially of prehistoric periods, are interpreted to be burials of shamans or other prominent characters (Reymann 2015: 151-155), for example, the Mesolithic burial of a female shaman of Bad Dürrenberg, Germany (Porr and Alt 2006).

Another point that must be critically reviewed is the presumption of a dichotomous mortuary rite. A general perception within archaeology is that burials are either classified to be inside a frame of *norm* or outside of it. The distinction as *normative* vs. *deviant* is to a large degree influenced by recent Western socialization and the researcher's intrinsic approach towards a pious treatment of the dead. However, what may seem impious or even brutal to us, may have been a normative or even desirable behavior in past societies (Aspöck 2009: 2). This binary categorization of funerary rites, however, cannot be sustained with archaeological, historical, and ethnographic observations. A closer examination and description of burial types and individual traits usually demonstrates that societies have more than two ways of dealing with death, hence showing a greater variability of funerary norms (Aspöck 2013: 31; Scott et al. 2020: 6-7). Behind the notion of a diverse and variable mortuary custom is the idea that a burial is usually adapted to the deceased individual. Factors that determine the type and mode of burial are age at death, sex and/or gender, social status, and the circumstances of death (Hausmair 2015: 44; Veit 2013: 12). On occasions, biographical details required special measures to support the transition into the afterlife or if the community feared a resurrection of the deceased

(Aspöck 2013: 27; Franz and Nösler 2016b: 20-24). A crucial component of the medieval spiritual conception was furthermore to ensure not just passage into the afterlife, but also the protection of surviving community from any alleged harm caused by the deceased (Kremser 2009: 63). I. Nießen (2012: 6) consequently notes, that every type of medieval burial is somewhat special because it was less about what is normal and more about what is right for the particular individual to pass the liminal stage after death and convert into the afterlife. Although medieval burials were embedded in a set of funerary conventions due to religious frameworks (Gray 2021: 106) and also regulated because of hygienic reasons (Schmitz-Esser 2016: 97-99), they nevertheless show great variability. Similarly, E. Aspöck (2013: 35-36) advises to avoid the phrase deviant burial (or *Sonderbestattung*) because it is associated with a binary funerary rite and serves more as an auxiliary term for rituals that might not be fully understood. She rather recommends using designations that describe the respective mortuary treatment under investigation. Some burial customs may be reserved for particular people and circumstances of death, and their execution and design can vary greatly from surrounding burials.

Another point of view for dealing with exceptional burials was presented by U. Veit (2013: 20-21). He is equally critical of the binary separation of normative and non-normative and delineates four categories of special treatment of the dead:

1. burials without or with hardly any normative rites
2. over-ritualized burials, e.g. prestigious graves
3. graves without a body, e.g. cenotaphs
4. bodies without a grave, e.g. depositions and corpses that have been preserved outside of a funerary context

This classification is almost free of prejudiced interpretation, even if it is not completely free of bias because it implements the opposites of over- and under-ritualized which implies an evaluation of burial rites from an extrinsic perspective.

Veit (2013: 20) also critically addresses the inflationary use of the term *deviant burial* and condemns the emphasis on special burials from periods of human history where little is known about burial regulations and norms in the first place. Also, he argues that deviant burials should not be treated as a primary category, such as inhumation or cremation, or as a counterpoint to normal burials.

In conclusion, it can be stressed that although the classification of deviant, irregular, atypical, or abnormal burials are frequently used in archaeological research, their exact definition is nonetheless unclear. While it was suggested to avoid using the terms deviant burials or *Sonderbestattung* (Aspöck

2013: 35-36) altogether, they will still be used in the present paper because they are common *termini technici*.

In the present thesis, the examination of burials is not based on a dichotomous consideration of the medieval funerary rite but reviewed against the background of a variable and multipartite mortuary practice. Furthermore, it needs to be emphasized that burial customs can only be considered on a small-scale since they are bound to the temporal, regional and cultural environment.

Results

Typology of Deviant Child Burials

In the prior chapter, I established criteria for identifying and evaluating deviant characteristics within mortuary practice. Taking these into account, this thesis proposes a taxonomy of deviant burials based on formal traits: burials in unusual places, burials that show unusual body treatment or body positioning, unusual burial mode and burials including unusual objects and multi-phase burials. This typological classification intends to provide a clear structure and terminology for the consideration of atypical burials of subadult individuals to enable a cross-regional and diachronic comparison of burial customs.

Each type of deviant burial is outlined based on individual examples of burials or case studies to describe and elaborate the given type or illustrate their variability. Many atypical burials are, however, characterized by the fact that they display more than one special or diverging trait. Sometimes, there are multiple deviating elements that apply to one burial, such as an interment in prone position that is orientated differently than the respective norm, e.g., east-west instead of west-east. These combinations might impede a clear classification of special burials according to the formal criteria mentioned above. Yet, they reflect that the suggested classification only functions as a framework to roughly classify deviant burials to make them describable, comparable, and eventually interpretable – they cannot do justice to the actual variety of all aspects that are included in the mortuary behavior of a community.



Fig. 16: Reconstruction of Grave 110 from Stary Zamek, Poland. Illustration by Mirosław Kuzma. This example shows several deviating traits and special treatment like prone body position, as well as stakes and rock placement (Gardeta 2017: 104)

In the attached catalog (Appendix A), burials with multiple deviating features were annotated with "combination of deviant factors". In the following chapters, these burials are categorized according to their most distinctive feature.

Burials in Unusual Places

Burials in unusual locations, i.e., all places that were not designated and/or intentionally established for burials or ritual depositions of human remains, are some of the most evident deviant burials. At the same time, off-site burials can remain completely concealed, because usually there is no indication of their location or even their existence. Human remains outside of burial contexts and sacred places are mostly accidental finds. Yet, once found, graves in unusual places tend to receive a lot of attention, because they are often associated with negative intentions such as burials of social outsiders or a quick, maybe even a clandestine disposal of a corpse (Veit 2013: 20).

However, depositions of dead bodies aside from a funerary context may have various backgrounds and are caused by different events. Their interpretations are thus determined by the location of the burial, the type of site, and by the identity of the buried individuals. Infant burials, for instance, along church or cemetery walls may not reflect a marginalized position but rather express particular beliefs about the afterlife, post-mortem care, and how parents cope with bereavement (Hausmair 2020). Findings of human remains at sacred places (Aldhouse-Green 2002) have to be explained with different motives than skeletons at execution sites (Genesis 2018). There are several things to take into account when it comes to human bones that have been discovered in settlement settings. In these cases, it must be assessed if it is a ritualized burial or whether taphonomical observations point to a careless disposal of the body. As with all archaeological findings, context is key.

U. Veit (2013: 19-21) tried to delineate four approaches to interpret and explain the findings of human remains outside of communal burial sites (Fig. 17). He defines nonintentional embedding of a corpse in soil or other spatial contexts as the first category. If someone passes away somewhere without anyone recognizing it, sedimentation processes may cause the body to become buried in the ground. Likewise, a corpse may be fully covered and vanish from sight after catastrophic events like volcanic eruptions, fires, earthquakes, etc. Although these bodies were interred, there was no special ceremony or intention to do so.

Burials of the second category are characterized by the intention of interment but the absence of ritual. This includes the covert disposal of a corpse with the intent of burying it but not getting noticed. Typically, there are no ritual actions performed in these cases.

The other two categories are defined through intentional as well as ritualized actions and behavior. Veit differentiates between burials in unusual locations as expressions of propaganda or as an expression of social deviations. The denial of a normative burial off-site the communal burial place ordered by an instance of authority is considered as an expression of propaganda. Because the grave is hidden from the bereaved community, it represents a forced and accelerated social death. Burials outside the communal burial ground, yet close by and known to the community, are regarded as an expression of social deviation. Specific life or death circumstances required a modified burial rite to assure passage to the afterlife. Even though this can entail being physically excluded from a communal cemetery, caring intentions can be identified, and the act is not linked to an immediate social death.

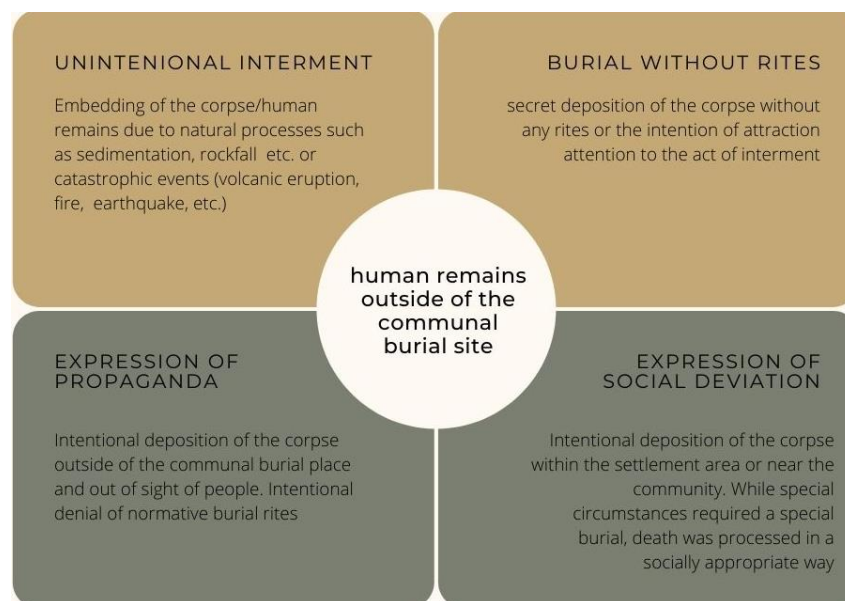


Fig. 17: Explanatory approaches and motives of human remains outside of the communal burial site
(based on: Veit 2013: 19-21).

This condensed explanation of circumstances that may have led to burials in odd locations is merely a point of reference and does not account for all discoveries of human remains outside of an area specifically designated for interments. Nevertheless, they can provide a conceptual framework and facilitate further classification of burials.

A frequently discovered type of burials in unusual locations are burials that were found within settlements. Burials in residential or workshop areas can be observed in all sedentary epochs of human history. In Central Europe, for example, they were found in LBK villages (Pechtl and Hofmann 2013), in the early Bronze Age (Langová and Danielisová 2013), and on Iron Age sites (Müller-Scheeßel et al. 2013; Trebsche 2013). In Roman times, stillbirths or infants that died during or shortly after birth were almost regularly buried outside of communal burial sites, for example underneath a hearth or in front of the house (Gardeła and Duma 2013: 326; Kramis and Trancik 2015: 5-6). In the second half of the 7th century, in Frankish and Alemannic regions, burials in the context of settlements constitute a regular burial place. These are referred to as *Hofgrablegen* and have already been discussed briefly (Steuer 2004; Lobinger 2014).

Outside this narrow temporal and geographical framework where *Hofgrablegen* have been used as a burial site for certain groups of people, burials in medieval settlements represent a particularity, but not a complete exception. Since the residential area was not typically designated for interments, they are considered atypical burials, whereas in the case of *Hofgrablegen*, this place was intended for the burial of the family who owned the respective farmstead (Steuer 2004: 196).

Similar to the Roman era, the majority of human remains discovered in medieval settlement contexts are those of children, particularly newborns. Binford (1971: 22; cited after: Cannon and Cook 2015: 402) saw newborn and child burials inside or close to houses as a reflection of their limited social connections. Funeral rites associated with their passing were regarded as a concern of the immediate family, including their graves being placed in the spatial context of the home rather than in public burial spaces.

The village of Kána (c. 1150 - 1300) in Budapest XI, Hungary, holds one example of burials found within the setting of a settlement that lacks distinctly discernible ritual conduct. Kána is the most thoroughly excavated Arpadian village in the Carpathian Basin. Several burials and depositions of human remains were found within the settlement area, amongst them a complete skeleton of a 10–11-year-old child in a large round pit. The body was found in a somewhat supine position, but with twisted limbs. There is no indication that this was an intentional and ritualized burial. M. Vargha expressed the assumption that the dead body of the child might have been thrown into the pit or that it was buried accidentally. An iron pike was found underneath the arm of the child. Maybe he or she was playing (or working) in the pit when it collapsed and buried it within (Vargha 2017: 277).

Austrian researchers recently discovered and published an outstanding example of several burials within a settlement environment in Podersdorf am See. Five individuals were found interred into the floor of a residential building, although there is a contemporaneous burial site in the immediate vicinity

of the settlement area. (Fig. 18). Observations of the stratigraphic relations and backfilling processes suggest that the building was no longer in use at the time of interment. All graves, however, were probably established at the same time. The buried individuals are four adults and one subadult. Two of them, including the child, were buried in a flexed position, another one with slightly bent legs and slightly turned to the right side. The other individuals were buried in an extended supine position. An examination of mitochondrial DNA (mtDNA) revealed that there was a close genetic relationship between the child (flexed burial 2) and the man buried immediately next to it (grave 42). It is possible that all of these individuals shared a social connection or some trait that united them, which could have been the reason for their collective burial at this odd location (Tobias et al. 2020: 218-221).

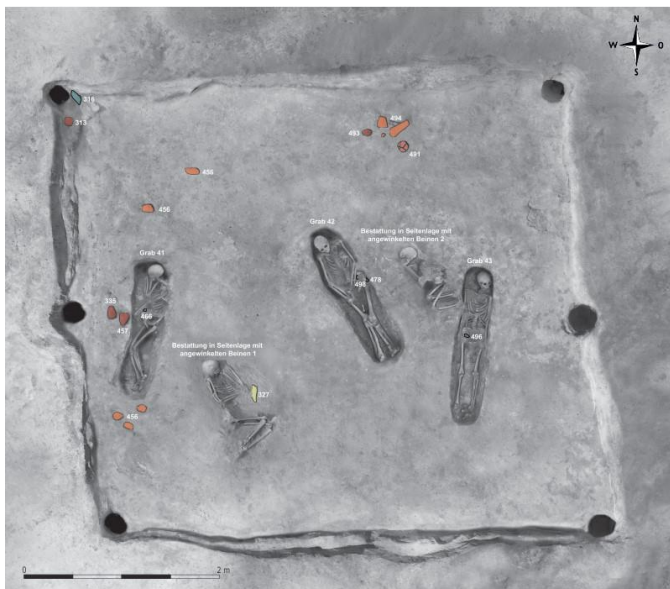


Fig. 18: Burials in a pit house in Podersdorf am See, Burgenland (Tobias et al. 2020: 219).

Similar finds were also made in the early medieval settlement agglomeration of Gars/Thunau in Lower Austria. While there are adjacent contemporary burial sites, depositions and interments of human skeletal remains were found in the residential space as well. Among these were burials of five subadult individuals, four of them in extended supine position, one in an extremely tight flexed position (Obenaus 2015b: and further personal communication with M. Obenaus).

Another example of settlement burials was found in the Late Avar settlement of Eperjes, Com. Csongrád-Csanád, in southern Hungary. In total, five individuals were buried here in the residential context. One 8-9-year-old child was buried in the corner of a pit house, while a second child of 13 years of age was found buried in an oval pit deepened into a ditch. Both were buried in a flexed position.

The older child had their eyes covered with their hands. The younger child was not placed in a deepened pit but simply laid down on the floor of the house which suggests that the house was no longer in use at the time of burial (Bálint 1991: 32-33).

Another example for remarkable burials in unusual places was discovered within the early medieval smithing workshop of Kümmersbruck, Lkr. Amberg-Sulzbach, in northeastern Bavaria. Three individuals, two adult males and one infant, were unearthed during excavations in 2015. They were buried in spacious pits surrounded by stone placements. The younger male individual whose age-at-death was estimated 30-50 years was buried about 50cm south of the child, a 2–3-year-old boy according to the osteological report (Fig. 19). The age-at-death of the older male, buried in a grave pit with a strikingly massive stone arrangement, was estimated to be 50-70 years. Pathological changes and habitual stress markers on the skeletal remains of the adult individuals indicate that they were performing hard work during their lifetime. Specific musculoskeletal markers on the upper extremities, arthritic alterations on hands and elbows, as well as squatting facets correspond to activity patterns as required for smithing (Hensch 2018: 81-84).



Fig. 19: Burial of a 30–50-year-old man (left) and a 2–3-year-old child (right) within the smithing area of Kümmersbruck Lkr. Amberg-Sulzbach, Bavaria (Hensch 2018: 82).

A. Koperkiewicz (2015: 497) addressed a different sort of interment distinct from the communal burial context. He describes the phenomenon that in the Middle Ages ancient burial grounds were reused to inter people who died a troublesome death, such as those who committed suicide, victims of accidents or violence, but also stillborn children. This was observed for several sites in Poland. This approach

could be discussed for Grave 36 - 1981 from Lužice in southern Moravia. Based on the typochronological classification of the related grave goods, the burial was interred significantly later, in the 9th or possibly even in the early 10th century, compared to the other graves at this site, which date to the 6th century. The grave of this approximately 15-year-old female juvenile was positioned in the center of the burial site (Klanica and Klanicová 2011: 245).

In many cases, discoveries of human remains, particularly those of newborns or infants, inside buildings or generally in the settlement area are referred to as foundation deposits. This interpretation, however, presents some difficulties because the concept of foundation deposition lacks a formal definition, criteria, or distinguishing characteristics, similar to many other phenomena connected to mystical and spiritual ideas (Beilke-Voigt 2007: 27-29). T. Capelle (1985: 499) defines that the central point of foundation deposits or sacrifices is "that, the intention of sacrifice in connection with a building is actually recognized as such".

In current research, child burials in the context of settlements are rather thought to be an age-specific burial manner and interpretations as sacrifice deposits are increasingly being critically challenged. The designation as foundation deposition might only be applied to findings that are unequivocally and directly connected to a building and in certain circumstances if there is evidence of a ritually motivated act of killing involved (Beilke-Vogt 2008b: 67, 71).

One example that I. Beilke-Voigt (2007: 160-161, 398), who made seminal contribution to the investigation of building sacrifices, considers to be a valid case of foundation deposition comes from the terp settlement Tofting near Tönning in Schleswig-Holstein, Germany, dating to the 2nd century AD.

Skeletal remains of a 4–6-month-old infant were discovered underneath the threshold of a byre-dwelling which marked the border between the housing area and the barn area. The child was laid down in an 80cm long trough with a suspension device. The excavators described this wooden construction to be a cradle (Fig. 20). The child was placed in a flexed position with the cervical vertebrae separated from the head. In an early publication of the site (Schlabow 1955: 97; cited after: Beilke-Voigt 2007: 160-161, 397), the dislocation of the vertebrae was seen as an evidence for a violent death through decapitation, yet later palaeopathological examinations were not able to confirm this (Rind 1998: 168; cited after: Beilke-Vogt 2004: 161, 397; Eriksen 2017: 345-346).

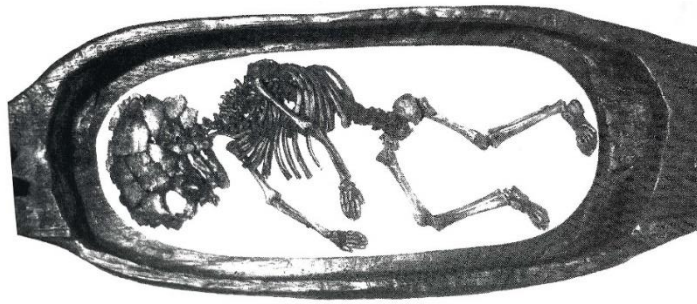


Fig. 20: Burial of a 4-6-months-old infant in a cradle-like trough found underneath a threshold of a byre-dwelling in Tofting near Tönning, Schleswig-Holstein, northern Germany (Beilke-Voigt 2007: 160).

Similar early medieval finds from the same geographic region could indicate that the practice of interring children in residential areas is not a phenomenon limited in time, but rather a long-lasting part of the burial custom within this area.

The settlement Elisenhof is located less than two kilometers away from Tofting and was inhabited during the 8th and 9th century. Seven burials of neonates and infants, as well as further dislocated bones of other individuals were excavated inside and outside of residential houses. All of them were about the same age, the youngest a fetus-neonate (9th-10th lunar month), the oldest 6 months after birth. Five of them showed pathological changes like endocranial and ectocranial hematomas, which presumably are results of birth trauma. No violent causes of death were found (Beilke-Voigt 2007: 398-399).

The skeletal remains of a 3-month-old infant, found underneath a hearth at the early medieval settlement site of Hessens in Wilhelmshaven in Lower Saxony might reveal signs of deliberate killing, or peri-mortem manipulation of the corpse. Textile residues showed that the child was wrapped in a brown woolen cloth and additionally tied with a woolen cord. Further remnants of cord were observed wrapped around the cervical vertebrae in six loops. The cervical vertebrae were found in a twisted position in relation to the lower vertebrae. In a first report by Schlabow (1953: 42f. ; cited after: Beilke-Voigt 2007: 399), who seems to be keen of identifying violence in the archaeological record, these observations were seen as an indicator that the child had been strangled. A later palaeopathological examination by Teegen and Schultz (1999: 265f.; cited after: Beilke-Voigt 2007) could once again not confirm this assumption. Further trauma on the ribs was seen as evidence that the child had been

additionally stabbed in the chest with a dagger-like object. However, it was noted that all observed fractures occurred post-mortal (Siegmüller 2010: 92; Eriksen 2017: 345).

Even without this severe and violent, probably peri-mortals manipulation of the body, the location and the treatment of the burial makes it an exceptional finding even within the context of early medieval settlement burials in the Middle Ages of northern Germany.

The question of whether the child was deposited with the intention of serving as a foundation deposition can neither be answered in this case nor in most cases. Beilke-Vogt (2008b: 70-72) emphasizes that the majority of infant and child burials in settlements should thus not be addressed as ritual depositions. Rather, they might represent an age-dependent burial custom or the parental desire to bury the child under the protection of their own house. She refers to written sources like Pliny in the 1st century AD, as well as Fabius Fulgentius, around 500, both of whom describe a particular funerary treatment of infants. The latter specifies a period of 40 days of life during which the child may not be cremated but should be buried under the canopy of the house. Assuming that this custom was still followed in subsequent centuries, many alleged findings of ritual founding depositions must be interpreted differently as a witness that age was the determining factor of burial location.

Another striking example of the discovery of human remains outside a burial context was found in the medieval urban center of the Polish city of Wrocław. During excavations in 2011, archaeologists found a cooking pot containing the complete skeleton of a neonate. The pot was interred among the charred remnants of a house that had burned to the ground prior the interment of the pot. Whether the infant was buried here deliberately and with an affectionate motive, or whether the intention was to make the small body disappear, possibly following neonaticide, cannot be clarified at this point (Gardeła and Duma 2013: 325).

Prima facie, this burial has a similar appearance as placenta pots, *Nachgeburtsstöpf*e in German. Placenta pots are the result of a folk custom in Protestant regions of post-medieval Germany and involve the burial of the placenta in a container. Usually, they are deposited in the basements, along the wall, underneath the basement windows, or in the corners. Unfortunately, evidence of these postpartum ritual is still extremely limited, and there is a complete lack of findings for the Early and High Middle Ages. Yet, it can be assumed that these findings do not represent a particularity but should be considered as a common habit within the birth procedure. However, due to poor preservation conditions and a lack of knowledge about these placenta burials, they still represent a rare find. Other manners of dealing with the afterbirth, such as burning, air-drying, or throwing it into water, inherently leave no or few traces in the ground and additionally cause a depletion of potential findings. Systematic measurements of estradiol content of the backfilling of supposedly empty pits in basements or around

the housing area could possibly detect afterbirth deposits without containers (Ade and Schmid 2011: 233-235; Dalacker 2017: 257-261). These findings can also be associated with foundation deposits or building offerings, as they were also thought to have protective powers and apotropaic character (Dalacker 2017: 259).

A large number of infant burials outside the regular burial site are also known from the early to high medieval fortified settlement of Starigrad-Oldenburg in northern Germany (Gabriel and Kempke 2011). These display different characteristics and illustrate a wide range of settlement burials that can be ascribed to different motives. Based on the categorization of Veit, some interments unearthed in Starigrad-Oldenburg lack indications of any funerary rites. Yet, there are also burials that were intentionally placed within or around houses and can thus not be seen as a mere disposal.

The settlement agglomeration was inhabited in the period between 630 and 1300 by Slavic communities and Christianization processes can be traced back to the middle of the 10th century through the construction of churches and the presence of objects with Christian symbols in the graves.

Burials of children and juvenile individuals were found throughout all phases of occupation on the cemeteries belonging to the churches as well as within the church. On the designated burial sites, infants were almost always buried in wooden coffins, strictly facing east, and almost all were equipped with at least one object as a grave good. This contrasts considerably with the burials of 15 individuals (in 12 graves) that were found in the settlement area. The interred individuals are exclusively preterm births, neonates, and infants under one year of age. Five graves are located within residential buildings, most of them close to the western wall. Six graves, including a double burial of two infants of the same age based on their skeletal development, probably twins, and a multiple burial of three individuals of slightly different ages were deposited outside the houses along the respective western wall (Fig. 21, right). The other individuals were rather careless interred.

There was no consistent orientation or body position observed for these burials. No grave was buried more than 10 cm beneath the surface. Grave S 12/3 (Fig. 21, left), which was found within an eave drain between two houses, may not even have been buried at all. It was most likely not interred in a pit, but rather simply laid down on top of the ground level. Organic remains on the burial further indicate that the child was covered with a brushwood mat, which was a quite common floor cover during this time (Gabriel and Kempke 2011: 28-30).

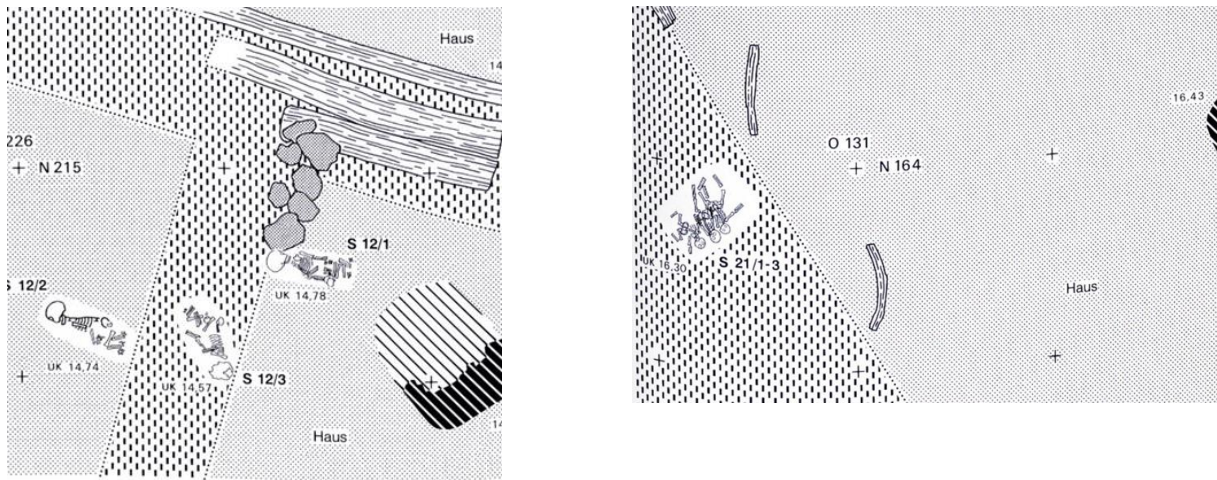


Fig. 21: Burials of fetuses, neonates, and infants within the settlement area of Starigard-Oldenburg, northern Germany. The burials date to the time of the 9th and 10th century (Gabriel and Kempke 2011: left: 252, Taf. 155; right: 253: Taf. 156).

Another peculiarity was found together with the supposed twin burial; a small clay figurine (Fig. 22) was buried next to a small stove, beneath a layer of charred debris, which suggested that the house was destroyed in a fire event. Gabriel and Kempke (2011: 30-31) believe that this figurine is a representation of a swaddled baby. The object, 11cm long and 4cm wide, is hand-formed and not rich in details. The figure cannot be placed sitting or standing because it has slightly splayed legs. Its flattened back suggests that the figure was intended to be placed in a reclining position. The authors of the case study believe that this is a ritual object with apotropaic properties, possibly in connection with the birth of twins, rather than being a toy made for children.

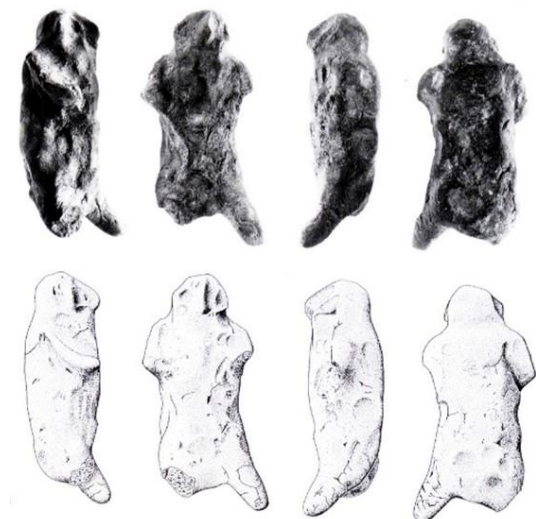


Fig. 22: Figurine of a swaddled baby (c. 950-1000), probably as apotropaic object. Found inside a house in Starigrad-Oldenburg. Inside the same house were burials of two neonates and one fetus, with the first probably being twins (Gabriel and Kempke 2011: 256, Taf.159).

In addition to the 15 intact burials, additional dislocated bones of fetuses, neonates, and infants were discovered throughout the residential area, resulting in a minimum of 40 newborns placed outside the burial sites. 36 individuals of the same age groups were discovered on the settlement's burial sites, though these sites have not been fully excavated (Gabriel and Kempke 2011: 9, 28).

Palaeopathological examination of the skeletal remains revealed that six of the 15 individuals (40%) found in and around the houses showed endocranial hematomas. These are likely connected to birth trauma, just like it was stated for the findings from Elisenhof (Teegen and Schultz 1998: 94-95).

Most of the settlement burials in Starigrad-Oldenburg date to the period from 800 until c. 1000, so they were buried before, but also during the Christianization processes. Gabriel and Kempke (2011: 9-10) assume that until the conversion it was quite common for the members of this Slavic society to bury children who had died at birth or at an early age around the houses. This was associated with a pre-Christian mortuary custom similar to the cases of Tofting and Elisenhof. Also in Haithabu, the majority of newborn and infant burials were found in the settlement context instead of the burial ground (Lohrke 2004: 56). However, even after the Christianization and the establishment of churches and related burial grounds, some children were still buried in the settlement context. It seems arguable that the baptismal status of these infants might also have been crucial for the decision of the burial place. Burial in consecrated earth was accessible to all members of Christian society who had joined through the sacrament of baptism. Until well into the 11th century, however, it was customary in most regions to hold baptisms only at Easter and Pentecost. The younger burials of infants that were found in the settlement context could suggest that they died at an unfortunate time, long before or shortly after the usual baptism dates. Yet, it seems also possible that these burials constitute an adherence to pagan traditions - the protected area of the house as the designated place for the burial of prematurely deceased children – and have nothing to do with baptism (Gabriel and Kempke 2011: 31-32). It could be another example of theological syncretism during the early days of Christianity, or even an indication that not everyone in this community converted to the new faith as soon as it was introduced. It seems crucial to evaluate the linearity of Christianization.

Baptism as a determinant for the place of burial, however, takes a central argument in the interpretation of the so-called eaves-drip burials, i.e., burials along the walls of churches or cemeteries. Even though eaves-drip burials are located on the communal Christian burial ground, they will still be considered in the present categorization because they are clustered at a peripheral or segregated location.

Burials of fetuses, neonates, and infants along the church walls are commonly known from Switzerland, Germany, Austria (Hausmair 2018; Hausmair 2020; Lindenhofer 2012; Ulrich-Bochsler 1990; Ulrich-

Bochsler 1997) and Britain, where this funerary practice is already observed on Anglo-Saxon burial sites (Craig-Atkins 2014). In Central Europe, these burials of infants and neonates emerge from the 11th century onwards and increasingly appear in the late Middle Ages and in the subsequent Modern Period (Ulrich-Bochsler 1997: 84; Hausmair 2018: 277). Records from the church of Münchendorf, near Mödling, Lower Austria, show that infants buried along the church wall can be traced well into the 19th century (Lindenhofer 2012: 42), in parts of the Swiss canton Aargau it was practiced until the 20th century (Hausmair 2020: 152).

Within archaeological and historical research, the term *eaves-drip burial* is usually used not only to describe their specific location but is also connected to a particular idea of handling the death of unbaptized children. The common interpretation of these burials is that they are placed along the walls in order to receive a post-mortem baptism through rainwater that drips from the eaves. This idea originates from folkloric texts of the Late Modern Period and was applied to the entire Middle Ages without any corresponding contemporaneous sources or indications that this notion existed (Hausmair 2018: 278; Hausmair 2020: 151; Ulrich-Bochsler 1990: 312; Lindenhofer 2012: 39-40; Ulrich-Bochsler 1997: 124-125). In this paper, the term eaves-drip burial will be used as a *terminus technicus* to describe the location of burials without implying any interpretations.

The Church of St. Georg on Mount Göttweig, Lower Austria, constitutes a very special example regarding the phenomenon of eaves-drip burials. Burials of 38 infants and one adult male were found there during excavations from 2005 to 2010. The abandoned church of St. Georg and its associated burials are located on top of the hill's southern summit and are in line of site with the still existing Benedictine abbey on the northern platform. The burials date to the period of the 13th to 16th century. Further excavations were carried out at the medieval parish churchyard in the village at the foot of Mount Göttweig, today's Klein Wien. Interestingly, there were hardly any burials of infants found there, which might suggest that there is a connection between the burial community of medieval Klein-Wien and the infant burials on top of the hill.

The children were almost exclusively buried in the usual west-east orientation in an extended supine position. While there was no evidence of wooden coffins, the constrained body positions and dress needles indicate that the bodies may have been buried wrapped in shrouds or cloths. Prior to the excavations, the church of St. George was only known through written records and was exclusively used by the abbey's clergy. It had no burial privileges (Hausmair 2018: 278-284; Hausmair 2020: 160). Similar sites without burial privileges with a large number of neonate and infant burials adjacent to the church walls are the church of Gossam, Lower Austria and St. Jacob's Church of Wien-Heiligenstadt. The church of Gossam was built in the early 12th century and was used as a place of pilgrimage until

the 15th century and it seems likely that the approx. 30 infant burials have been interred throughout these centuries. The skeletal remains of more than 400 individuals found in Wien-Heiligenstadt date to the time from the 13th to 18th century (Lindenhofer 2012: 43-67).

The last example in this chapter on child burials in unusual places is also the latest one regarding the time of burial. The most striking feature of this burial of a 10–12-year-old girl is that she was buried within a cave, the Tunel-Wielki-Cave in southern Poland. DNA analyses were able to determine the chromosomal sex of the child and revealed a Fennoscandian or Baltic origin due to genetic affinity. Using C14 dating, the burial could be dated between 1641-1688, which correlates with the Swedish invasion of Poland by King Charles Gustav in 1655-1657. The authors of the study, therefore, assume that the girl was somehow associated with the Swedish troops. In addition to the extremely unusual place of burial for the Middle Ages and the post-medieval period, there was another peculiarity about this burial: the girl was buried with the head of a finch in her mouth. Another bird's head was found right next to the girl's face, which suggests that it was also originally placed in her mouth and dislocated by post-mortem processes (Fig. 23). Osteological analysis showed that the girl suffered from arrested growth during the last years of her life (Wojenka et al. 2021).

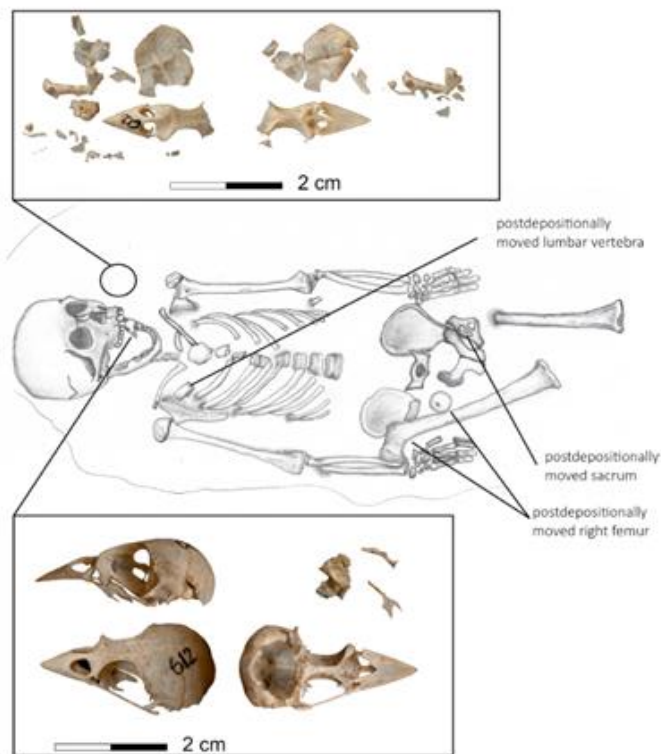


Fig. 23: *The Girl with Finches*. A 17th century burial found in the Tunel-Wielki-Cave in southern Poland (Wojenka et al. 2021: 295, Fig. 6).

Unusual Body Treatment or Position

This category comprises all types of post-mortem treatment that directly affects the dead body and its placement and positioning in the tomb. This includes burials in divergent body position, such as prone or flexed, burials that are oriented differently from the norm, as well as all types of interments where the body has been secured in the grave or possible movement has been restricted, i.e. by stoning or shackling. Additionally, this category refers to burials involving peri- or post-mortem body manipulation and mutilation, such as a deliberate removal of body parts e.g., decapitation.

59.7% of the interments listed in the catalog were classified as burials with unusual body treatment or position, not including those that display a combination of deviant features. This represents the largest group of deviant burial types presented in this thesis.

Body Position

Detailed information on the body placement is an essential part of the documentation of historic burials. This involves describing the general body position, the posture of arms, hands, and legs, as well as the position of the skull. A precise illustration of the location of individual skeletal elements in relation to each other is crucial for the reconstruction of the original state of burial, taphonomic processes and post-funeral interactions with the dead body (Duday 2009).

On another note, the posture of the body in the grave can also give insight into the mortuary customs and beliefs of society because *“the physical arrangement of the cadaver is a readable narrative of the encounter with the dead human body by the living”* (Mui 2018: 26). The way a body is placed during funeral is an integral part of the mortuary rite and represents the way the corpse is perceived and acknowledged by mourners and other bystanders. There are numerous variations of how the body can be positioned in the grave. It can be placed lying in supine, prone, or flexed position and arms and legs can be extended, bent, folded, or somehow twisted. The body can also be arranged seated or even in an upright standing position. Spiritual and social defaults determine the adequate or reverent display of an individual in the funerary context (Mui 2018: 25-26, 118).

Throughout the entirety of the Middle Ages, as well as in earlier eras and in modern Western countries, the typical and prevalent positioning of the dead body has been an extended supine position with stretched legs. The arms are either placed next to the body or folded upon the upper body (Alterauge et al. 2020: 2, 10; Hensch 2014: 427). Other body positions, such as a prone or flexed position are usually interpreted as a display of social deviancy.

Especially prone burials are generally associated with an undignified manner of burial. Most commonly they are addressed as an expression of a marginalized or stigmatized social status of the individual or as a postmortem punishments for failures in life or difficult obstacles surrounding the death (Alterauge et al. 2020: 3; Toplak 2017b: 44-45). Assuming this, the habit of prone burials could provide an inside into medieval judicial actions concerning social outcasts, foreigners, criminals or people who engage with witchcraft or sorcery, especially if they are found outside of designated burial sites in remote areas (Alterauge et al. 2020: 3; Mui 2018: 131; Toplak 2017b: 44-45). Prone burials are also found in the context of execution sites (Genesis 2014: 75-76).

N. Kyll (1964) described face-down burials as an apotropaic funerary practice to prevent the evil deceased's soul from exiting the grave and harming the bereaved. In times of epidemics, it was believed that prone burials would trap the disease in the body of the deceased to avert transmission to the living population. If subadult individuals, who were often considered to be *dangerous dead*, were buried lying on their stomach, it was interpreted as an act against their *evil eye* (Toplak 2017b: 44-45).

Prone burials are also commonly found on communal burial sites which suggests that the individuals who were buried face down were not necessarily completely excluded from society (Alterauge et al. 2020: 3). In these cases, being buried in a prone position rather reflected a modified and adjusted funerary procedure to cope with obstacles in life or around death (Štefan 2009: 141). A burial in the communal burial ground represented that the deceased individual was a part of the living as well as the dead community (Schmitz-Esser 2016: 475). This consideration does not only apply to this kind of deviancy within post-mortem treatments, that were uncovered on communal cemeteries, but to all burials that exhibit divergent traits. In the Middle Ages, total social exclusion usually meant exclusion from the designated place of interment (Hosek 2020: 219; Schmitz-Esser 2016: 475).

Negative associations and interpretations of prone burials are usually discussed for early and eventually late and post medieval finds. High medieval prone burials are occasionally explained with a contrary motive; to be an expression of *humilitas*, the Christian virtue of humility and devotion to God. This is primarily based on a written record from the 12th century. In *Liber de rebus in administratione sua gestis*, written in 1137, Abbot Suger of St. Denis reports about reconstruction works on the convey church of Saint-Denis. The church was used as the sepulcher of the Frankish and Carolingian kings from the 6th century onwards. Pepin the Short, the father of Charlemagne, was buried in St. Denis in 728 and according to Abbot Suger, he was placed face down and his tomb was interred in front of the entrance to the church. The location of burial and the posture were interpreted as a manifestation of Pepin's humility and Christian values and to expiate the sins of his father, Charles Martell. Whether he

was really buried in prone position can no longer be determined, because the grave was disturbed several times. Nevertheless, this written source is significant for the interpretation of high medieval prone burials because it indicates that the clergy and probably also the lay community would have understood prone burials as an expression of Christian humility (Alterauge et al. 2020: 21-22; Schmitz-Esser 2016: 603-605; Toplak 2017b: 48-49).

In their study on the reinterpretation of prone burials, Alterauge et al. (2020: 22) came to the conclusion that this might be applicable for high to late medieval burials that were found buried in close vicinity to the altar lying face down. Yet, these are almost exclusively adult male individuals that might have belonged to the clergy or a high social stratum. However, the interpretation of prone burials as an expression of a positive deviancy cannot be regarded as an approach for all burials of this kind, especially for those of children or burials that were found outside of a Christian funerary context.

Supine positioning of the corpse during the funeral allows a full and symmetrical view of the deceased for the mourners and enhances the spectrum of interaction between the involved parties. This frontal and full-face view is inhibited when the body is placed in a flexed position and turned to one side. This alters the perception of the deceased and the possibilities to view and engage with the dead individual are thus different, maybe even restricted, and also dependent on the viewer's standpoint. Like burials in prone position, a sideways position is sometimes interpreted as warding off the evil eye to banish dangerous dead in the grave. Occasionally, drawn limbs are seen as a sign of shackling or binding to prevent movement (Brather 2007: 114). Yet, a flexed position of the body within the funerary rite is also often addressed as an imitation of sleep and peaceful resting. Particularly, burials of multiple individuals placed in flexed position, maybe even turned towards each other, may have had the intention to resemble co-sleeping as an expression of a close relationship (Mui 2018: 260-261).

A group of burials at Oechlitz, Saxony-Anhalt, similarly create the appearance of a family sleeping side by side. In the central Grave 13, an early adult man was buried in prone position together with a 1-year-old infant (Fig. 24). The child was placed in a flexed position, protected underneath the right arm of the man. The two individuals were facing each other. Another infant (Grave 32, infans I) was placed immediately next to them, orientated west-east, and remains of a neonate were found 40cm south of the male individual. A female individual (Grave 17) in flexed position was buried c. 1m west of the male's head.

Fig. 24. Grave 13 from Oechlitz, Saxony-Anhalt, Germany. An early adult male individual, placed in a prone position, slightly turned to the right side with his arm lying above a 1-year-old infant in flexed position turned to the left (Müller 2020: 292).



A flexed or curled up burial posture of children is further frequently interpreted as the parents wish to place their child in its regular and favored sleeping position (Mui 2018: 287; Gilchrist 2022: 129). In a study by J.-E. Gyulay (1989: 84-85), which dealt with coping strategies of parents after sudden infant death, it was frequently claimed that placing the child in a position similar to sleeping, provided some emotional assistance during the funerary. Since it has already been established that there is frequent evidence of medieval parental grief found within the archaeological record, this could also be a possible explanation for deviating body positions of child burials this period.

Another idea about child burials in a tight flexed position was addressed by L. Gardela and P. Duma, who consider that this position could *“indicate an attempt to return the child symbolically to the ‘womb’ of the earth where it would lie in a foetal position”* (Gardela and Duma 2013: 321).

Besides apotropaic motivations and afterlife concerns, there are also trivial explanations that must be taken into account when investigating burials in a divergent body posture, especially in the case of flexed positions. Occasionally, it seems difficult to discern a clear intention behind a deviating positioning of the corpse. Taphonomic processes, such as the collapse of the coffin following the deterioration of the anatomical tendon assembly, may be responsible for dislocations of bones. Similarly, small animals, roots, or other forms of bioturbation can also alter the original skeletal position and create the impression that like the body was intentionally placed in a way that contrasts the surrounding burial norm (Duday 2009: 28; Biermann 2009: 5). In the case of flexed positions, concerning adult and subadult individuals, it has to be considered that the individual might have died in this position and was buried before rigor mortis disbanded (Mui 2018: 268).

Furthermore, physical conditions, such as disabilities or congenital malformation may also cause a different body posture which in such cases does not represent an intention for a different treatment within the burial practice. Intravital loss and thus an absence of singular body parts might be misinterpreted as a mutilation of the corpse or a secondary removal of limbs. Divergent burial body postures of children also must be studied differently than those of adult individuals. For example, infants and small children were more often buried in a flexed position or in a supine position with bent legs, which is sometimes described as *frog position* (THANADOS - Vocabulary). These body positions are often addressed as deviating traits, but they may rather be an outcome of physical constraints concerning spinal development which often cause infants to flex or abduct their legs (Fig. 25). Therefore, the different burial postures of infants may be more of an unintended result when the body was placed in the tomb (Mui 2018: 287; Richards in preparation).



Fig. 25: Burials of two neonates (0-3 months) from Oberleiserberg, Lower Austria. The left individual (burial 31) was placed in a slightly flexed position, the right (burial 32) with tucked legs in *frog position* (<https://thanados.net/static/images/jpgs/39739.jpg>, from: Richards in preparation).

In total, the catalog includes 23 burials of subadult individuals in prone position and 61 in flexed position. One burial, Grave 114 from Krungl, Styria (Breibert 2015: 216), was described to be placed “in deviant position” . Yet, the exact body position is not further elaborated.

At several sites, all or a significant portion of children or adolescents of a particular age group were interred in an unconventional manner. At the early medieval burial ground of Kanín II-Libice, Czech Republic, for example, all individuals who died at an age between 9.5 to 15.5 years have been buried in a flexed body position which might indicate that death during late childhood requested a specific mortuary treatment within this particular burying community (Hosek 2020: 210-211, 217). A total of nine burials in flexed positions are known from the sites at Usedom, Am Hain and Usedom, Priesterstraße, Germany (Biermann and Freder 2009). At Orosháza - Béke Tsz – Homokbánya and Orosháza-Bónum Téglagyár, Hungary, three subadult individuals were buried in prone, and one in flexed position (Juhász 1995).

The placement of the body is a key element of the burial ritual and determines the grave's appearance and the possibility to interact with the deceased individual during the funerary procession. The way the deceased is portrayed in the tomb and for posterity is thus influenced by cultural and spiritual concepts. Deviations from the presumed adequate attitude and presentation probably have symbolic significance. S. Mui (2018: 280) further examined the relationship between body language and social identity and discovered that there is a generally greater variation in the positions of women and infants in Anglo-Saxon burials. She explained this by arguing that funerals for women, children, and people of lesser social standing may have been more intimate, smaller gatherings that allowed for more variability and improvisation in the presentation of the deceased. However, she determined that a higher variation in body positioning does not necessarily imply reduced importance of the body display and less emotional commitment but might just represent an age and gender dependent funerary behavior.

Orientation

Graves that are orientated differently than the common west-east standard of medieval mortuary rite, are usually considered as deviant burials and commonly associated with a dissenting funerary practice.

With the change from cremation to inhumation, it was again necessary to assign a standard orientation for burials and grave pit. In contrast to the early Bronze Age burial rites (Rebay-Salisbury et al. 2022), for example, the Late Antique, medieval and post-medieval grave orientation was not bound to the gender or other identity traits of the buried individual. Instead, there was a uniform orientation for all genders and age groups. The head was placed west, and the view was towards the east. Although, this orientation norm is neither regionally nor temporally or culturally unique to Christian European Middle Ages (Schmitz-Esser 2020: ¶ 1). The significance of facing east did not only affect the burial rite, but

was also important in the course of prayer, baptism ceremonies, as well as alignments of churches and other liturgic-topographical concerns (Schmitz-Esser 2016: 57-63).

Even though the original meaning of the usual posture of Christian dead facing east is still ambiguous, it is commonly considered to symbolize the participation in Christianity as the return of Jesus on the Day of Resurrection is anticipated to come from the east. A deviating orientation and thus the denial of this direction of view could be interpreted as negative attitude towards the dead individual, a symbolic rejection from resurrection and an exclusion from the celestial sphere (Schmitz-Esser 2016: 57-63; Krack and Oberholzer 2015: 11-12).

A frequent interpretation for a deviating grave orientation is that they are burials of foreigners – of people with different cultural or spiritual backgrounds. Early medieval graves in north-south orientation, for example, are often interpreted as burials of people adhering to pre-Christian beliefs and like all other types of atypical burials, irregularly orientated burials are commonly viewed as bad post-mortem treatment (Gardeła 2020: 256; Meier and Graham-Campbell 2007: 432-433).

However, the west-east orientation is not always precisely aligned and can vary considerably within a site. This may be a result of topographical constraints that are no longer apparent in the current landscape (Hausmair 2015: 85). A slight deviation can also be explained by the change of seasons as the azimuth of the rising sun changes throughout the year. If the burials were orientated towards the sun rather than true east, the alignment of graves can be more irregular. Wolfgang Breibert (2015: 56-57) linked the orientation of graves at the early medieval burial site of Krungl, Styria, with the position of sunrise throughout the year in order to look into seasons with higher or lower mortality rates based on the assumption that sunrise served as the reference point for grave orientation. Given this was the premise, the peak of mortality was at the time of transition from winter to spring. An orientation towards a church, as for example of the graves around the basilica (church III) of Mikulčice (Ungermaier and Kavánová 2010: 76), towards a central grave as in the rotunda of Pohansko (Macháček and Sládek 2019: 11) (both in southern Czech Republic), or any other point of interest can also explain a deviating orientation from the west-east standard. A sudden change in orientation and striking alterations of the grave design found at the burial ground of Iffelsdorf (early 8th century to around 900 AD), southern Germany, could be an archaeological tangible indicator for a change in ritual or belief or at least another choice of reference point to align burials⁶.

The difficulty with differently orientated graves, however, is determining their intentionality because deviations from the specified direction might occur for a variety of causes that are not always

⁶ The site of Iffelsdorf is currently being excavated, with the author's participation.

connected to apotropaic measures or a negative sentiment toward the deceased individual. For some burial sites, it was not possible to determine a uniform orientation or an orientation norm due to their topographical setting or other reasons. In these cases, burials that were not oriented west-east were not included in further considerations. Graves were included if the intentionality behind a north-south, south-north, or east-west orientation could be recognized through a clear contrast to the surrounding burials.

A total of 56 graves in divergent orientations were recorded. In 38 cases this was the only deviation from the burial norm, 18 burials displayed a combination of deviating traits.

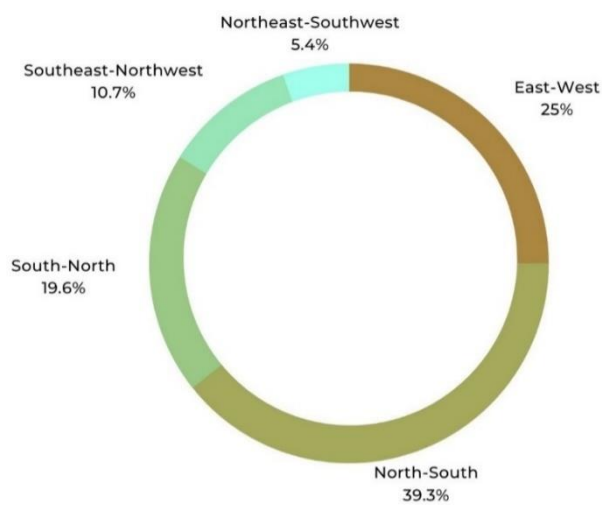


Fig. 26: Deviating orientations of medieval child burials.

In the Middle Ages, the majority of burials in deviating orientation are those of women and children (Nießen 2012: 13-15; Nowotny 2018: 32-42). At the burial ground of Altenerding in Bavaria, where 13 graves in east-west orientation were found, there is no evidence for this kind of deviant post-mortem treatment of an adult male. Only one early juvenile individual was identified as possibly male. This pattern could be related to the idea that these two social groupings in particular are more often associated with dangerous death (Losert and Pleterksi 2003: 40). However, the greater variation could also be explained with a similar approach that S. Mui (2018: 280) expressed in the context of body positions of women and infants in Anglo-Saxon burials. It is possible that there were simply fewer observers and less societal constraints during their interments, which allowed for more flexibility and improvisation.

Body Manipulation and Mutilation

Recognizing intentional peri- and post-mortem body manipulation and mutilation as part of a mortuary practice can be quite challenging in most cases. If manipulation was conducted around or shortly after death, it can be confused with trauma caused by accidents or lethal violence (Ortner 2003: 119). Furthermore, it might be difficult to discern the difference between deliberate modification and taphonomic processes if the skeletal remains are moved or damaged after soft tissue disintegration (Aspöck et al. 2020b).

Therefore, bioarchaeological investigation and in-depth understanding of palaeopathology, traumatology, and the causes and effects of fracture patterns on perfused and non-perfused bones are crucial for interpreting post-mortem alterations of the corpse (see for example: Lovell 1997).

An outstanding and to date unique example of severe peri-mortal manipulation of an infant was found in Pellendorf/Gaweinstal in Lower Austria. In total, three individuals were found buried within the settlement area. A woman, whose age-at-death was estimated 50-70 years was found in Grave 2. Grave 1 (Fig. 27) contained an almost completely preserved postcranial skeleton of a 25-30-year-old male (Ind.1), and an isolated skull of a 4-6-year-old child (Ind.2). C14 dating of the burials supports an interment between 680-970 (Novotny et al. 2006). The multiphase settlement was inhabited from the 7th to the 14th century (Kühtreiber 2022: 72). Grave 1 is oriented southwest-northeast. The child's skull was placed at the man's left shoulder and is tilted backwards. Because there were no indications of any secondary alterations visible in the stratigraphic context, it can be assumed that the arrangement of the remains of these two individuals reflects the actual and intentional mode of burial (Kühtreiber et al. 2008: 335-336; Kühtreiber 2020: 10).

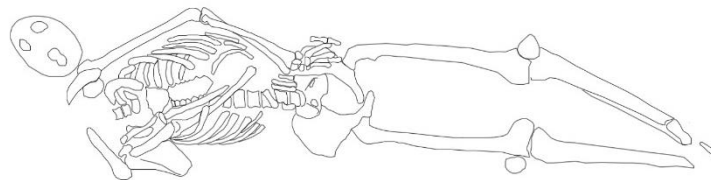


Fig. 27: Grave 1 from Pellendorf/Gaweinstal, Lower Austria (Drawing after: Kühtreiber et al. 2008: 349)

Both individuals display trauma that may indicate decapitation, either as a cause of death or performed briefly after death. In the case of the adult male, this is expressed by a loss of bone substance of the cervical vertebra, and of course by the absence of the skull and the upper cervical vertebrae. The child's

skull shows loss of bone substance on both ossa zygomatica and on both occipital condyles. The locations of the loss of substance and the morphology of the fracture margins suggest violence caused by a sharp instrument or weapon (Novotny et al. 2006; Novotny and Spannagl 2020).

Since there are no similar findings to make comparisons with, any interpretation of this discovery in the examined spatial and temporal context appears to be challenging. Indications concerning the circumstances that would explain the character of such a burial are very scarce in the contemporary written sources that have been examined for this study.

One point of reference could be the *Vita Sancti Arnulfi*, which is only marginally older than the Pellendorf burial. It references the beheading of a sick child. The text was written between 689 and 692 and describes the life of Bishop Arnold of Metz, patron saint of beer brewers. He came upon a man named Noddilo while traveling the Thuringian regions. Noddilo was preparing to decapitate a subadult family member, who was terminally ill, with the further intention to subsequently burn the headless dead body. According to prevailing folk custom, this was the appropriate procedure in order to prevent the boy from rising from the dead and causing harm. Fortunately, Bishop Arnold's spontaneous miracle healing prevented the child's horrible death and saved him (Nießen 2012: 10; Losert 2009: 225).

The Pellendorf skeletons are currently being subjected to macroscopic and biochemical examination, which will provide more details about the physical characteristics and health status of these individuals, and maybe even provide potential explanations for this unique manner of interment.

However, the intention behind the joint burial with the beheaded man is still unexplained, despite a possible correlation with the *Vita Sancti Arnulfi*. Another hypothesis for the interpretation of this extraordinary grave could be related to punishment and execution, similar to the notion that was formulated for Grave 107 (Fig. 28) from Złota Pińczowska, situated in the Świętokrzyskie Voivodeship in southeastern Poland. The grave included the skeletal remains of an adult male and a 12-year-old child. The child was placed in extended supine position within a large wooden coffin and was equipped with twelve bronze temple rings, a glass bead, and a knife, which is why the gender was assumed to be female. The skeletal remains of the adult male were found at the feet end of the coffin, stacked and out of their anatomical order. Cut marks on the bones suggest that the man was dismembered while the anatomical connection of the tendons was still intact. It is assumed that the individuals have not

been buried contemporaneously, but rather that the grave has been reopened in order to deposit the remains of the adult male.



Fig. 28: Grave 107 from Złota Pińczowska, Świętokrzyskie Voivodeship, Poland. Burial of a 12-year-old girl with possibly dismembered skeletal remains of an adult man at her feet (Gardeła 2020: 255).

An explanation offered for this case was that the man may have been accountable for the child's death and that as a result, he was executed and given an undignified burial next to his victim. A second approach considered a possible ritualized killing of the man. According to this theory, the man may have been murdered and dismembered as a sacrifice for the deceased child. However, there are no comparative examples or clear statements possible in this case as well (Miśkiewicz 1967: 318-319; cited after: Gardela and Duma 2013). In a more recent article by Gardela (2020), the burial from Złota Pińczowska is only referenced as an example for re-opened graves and secondary interments. Acts of violence, punishment, and such are not mentioned anymore. Consequently, the authenticity of the alleged cut marks, the violent motives, and the venturesome interpretations of these burials should be questioned. However, it provides a point of reference for supposed explanations of an adult-subadult co-burial that may have involved ritual killing or violence.

An example of possible decapitation of a child was found in Stradów, which is also situated in the Świętokrzyskie Voivodeship in Poland, and dates to the 11th/12th century. The child buried in Grave 7/222A was placed in a flexed position. According to A. Falis (2008: 112; cited after: Gardela and Duma 2013: 321) it appears as if the head was cut off. It was debated whether this should be considered as the cause of death or whether it was post-mortally beheaded because the mourners worried about a harmful return of the supposedly undead child.

Another burial that might also be an example of post-mortem body mutilation was discovered in the settlement area of Kána. Although there was no indication for this in the original publication, some characteristics suggest a deviant burial behavior, beside the fact that the child was buried in the

settlement context. The skeletons of two individuals and further isolated human bones have been found in the storage or refusal pit no. 6830 (Fig. 29). The lower body half of a 12-14-year-old child was placed in supine position on the bottom of the large, round pit. Some rocks were placed on the sites of the body and a large, round grindstone was placed on top of the child's legs. Subsequently, the body of an adult man was deposited on top. Based on the body position he was rather thrown in than carefully placed. The absence of the upper body half of the child could be an indicator for manipulation of the corpse. The lower body parts were found in an anatomically correct order and showed no signs of disturbance. Also, there is no adjacent archaeological feature that cuts this pit to cause a destruction to the closed context, leaving it unclear what happened to the upper body part (Vargha 2017: 277-278).

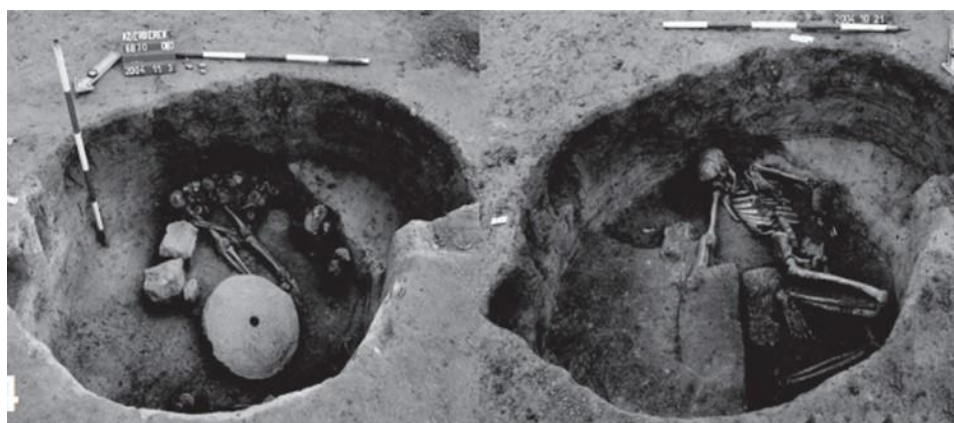


Fig. 29: Pit 6830 from the Arpadian village of Kána, Budapest XI. The picture on the right shows the later deposition of an adult male, on the left is the deposition of the lower body half of a 12-14-year-old child with a grindstone placed on top (Vargha 2017: 278).

Putative burial deviations involving body treatment, or the dislocation of individual skeletal elements must always be carefully considered and documented, because the final appearance of the grave can be substantially altered due to various factors. A mere dislocation of the head, without traumatic lesions of peri-mortal violence on the cervical vertebrae or on the skull itself, is challenging to address as a definite decapitation, because for example, interment in a void might also cause a considerable movement of the skull. A displacement of individual bones by small animals, earth and water movements, or roots must also be considered (Toplak 2017b: 47).

The category of graves with atypical body treatment also includes all those where the body is weighted down, held in the grave, or was otherwise prevented from possible movement in any other way. One of the most prevalent kinds involves piling big rocks on top of the corpse. The current database includes six examples where either the grave was entirely sealed with big rocks or the body itself was covered with stones. One example of rock covered graves was found at the burial site of Georgenberg, Upper Austria, where the body of a 3-6 month old infant was covered by a wooden board and an additional, quite massive layer of rocks (Tovornik 1980: 90). The catalog also includes five burials where the respective authors presume that the body was shackled or somehow restrained at the time of interment due to a particular body posture, for example Grave 157 from Wawrzeńczyce, Poland (Fig. 30). The skeleton of a 10-12-year old child were found in prone position. The feet were bent backwards with the heels touching the posterior surface of the pelvic girdle. The lower arms were found underneath the upper arms (Gardeła 2017: 100-102). This posture can only be maintained by shackling or other implements, as otherwise the legs would drop downwards, assuming that the burial took place after rigor mortis has resolved, which typically occurs 2-4 days after death (Hartwig 2016: 69).

If the deceased is secured in the grave by rocks, it must be verified whether the rocks were really intentionally placed on the corpse, or whether they are, for example, remains of the primordial grave construction that has been destroyed and moved by plowing activities.

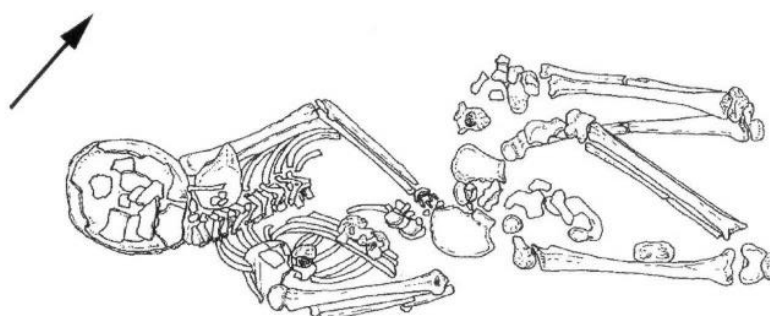


Fig. 30 Grave 157 from Wawrzeńczyce, Lesser Poland Voivodeship, Poland. Burial of a 10-12-year-old child in prone position. The feet were bent backwards with the heels touching the back side of the pelvis suggesting that the body has been tied up at the time of burial (Gardeła 2017: 102).

All types of deviations that directly affect the dead body and its positioning within the tomb are subject to precise documentation of grave appearance and taphonomy and an accurate understanding and

knowledge of thanatological processes (Duday 2009). Exhaustive bioarchaeological assessment is required in order to fully grasp the nature of a burial.

Unusual Burial Mode

Burial mode refers to the general treatment of a dead body and the subsequent condition of human remains. There are two principal forms of burial mode: inhumation or cremation burial. It is connected to religious and spiritual ideas and related to preconceptions of the afterlife. The burial mode is embedded into social traditions and canon law and has only become matter of personal choice in Western societies in recent times.

The incorporation of fire into the burial rite is bound to the relevance and meaning of fire to people. Since the earliest history of humankind, fire is an essential companion to people. It has a transformative character because it substantially and above all permanently alters materials through chemical reactions. Fire makes some food edible, some food easier to digest and some food simply tastier. It turns lumps of ore into sharp and shiny tools, soft clay into solid and impermeable vessels and can also transform entire settlements into dust. Fire, smoke, and ash are additionally thought to have a cleansing, purifying effect and are thus an integral part of many rituals and spiritual acts and also used in medicine (Rebay-Salisbury 2012: 16; Schmitz-Esser 2016: 555-556). The clearing features of fire were also believed to have anti-demonic powers, which links the cremation burial rite to interments of criminals, murders, suicides and other members of society that were considered as evil and thus marginalized members of the medieval community (Schmitz-Esser 2016: 556).

Cremation burials were the predominating burial rite in Central European Late Bronze Age and were also performed in Greek and Roman Antiquity (Rebay-Salisbury 2012: 15-17). In the later Roman era, inhumation burials became more common and temporarily coexisted with cremation burials. Inhumation eventually became the predominate mode of burial in Late Antiquity (Mlenek 2010: 16-18). The adoption of Christianity has been the significant element in this change in post-mortem body treatment. During the initial phase of Christianization, inhumation burial was utilized as a conscious distinction from pagan cremation practices. Records of such attitudes can be seen in the *Capitulatio de partibus Saxoniae*, enacted by Charlemagne in the late 8th century. It expresses disdain for pre-Christian beliefs and objections to incinerations. This conception of cremation persisted for several centuries, which is why burning a corpse or even living people was regarded as a punishment and intended to symbolize the anticipation of the time spent in hell or purgatory. In the context of Christian

burials in Western Europe from Late Antiquity until the 19th century, cremation was not considered to be part of the regular mortuary custom or an appropriate treatment for a Christian person (Schmitz-Esser 2016: 47-50, 554).

Given that Christianization processes were less linear in reality than written records suggest, there is a transitional period with a bi-ritual funerary practice before inhumation became the prevalent burial mode. It is thus difficult to establish if a single or a small number of cremation burials at an inhumation burial site are a witness of deviant mortuary treatment or if they represent this interim stage of gradual adoption of belief (Brather 2008a: 262). Such interpretations are highly dependent on the spatial, temporal, and cultural context of the site, as well as on the number of cremations uncovered or if the site was excavated extensively. It should always be considered that not all cremation burials may have been uncovered and that some of them might have been destroyed by modern agriculture or other soil movements. The excavators' attentiveness and knowledge about the physical appearance and handling of cremated remains is another factor that might limit sample size (Masanz 2010: 331-332).

Researchers have hypothesized several different approaches to interpret findings of medieval cremations and frequent explanations are usually the same as for other types of deviant funerary treatment; they are thought to be expressions of necrophobia or the undead, results of judicial actions, or burials of people with a different cultural or spiritual background. In the Alemannic and Frankish territories, cremation burials were typically linked to the migration of Slavic populations (Losert 1991) or groups within the autochthone community that adhered to heathen belief (Peschek 1975: 214; Koch 1977). For the early medieval site of Dittenheim, Bavaria, H. Dannheimer (1971: 78–84), however, noted that single incinerations could also be explained with a similar rationale as the Buddhist custom of widow cremation. This assumption was based on two bi-ritual burials of cremated female with inhumated males. The comparison is challenging considering the stark disparities in time, place, culture, and religion and the small number of examples, which does not represent any statistical relevance (cited after: Masanz 2010: 322-323).

The choice of burial mode depends on the required physical appearance of the corpse at the time of interment, which is dictated by social convention and burial custom. If ideas of life after death demand an intact body at the time of interment, its destruction represents an exclusion of the individual from that afterworld (Schmitz-Esser 2016: 558). For medieval burials the burning of a corpse, is frequently mentioned in the context of alleged revenant burials or burials for persons whose circumstances of life or death require a modified and adjusted burial procedure. They were considered to be a form of punishment, whether this was induced by secular misconduct or performed as a precaution for dangerous dead (Masanz 2010: 323-327; Schmitz-Esser 2016: 554-555). By depriving the dead of their

bodily integrity, they should be rendered incapable of rising from the grave and causing harm (Schmitz-Esser 2016: 444-446). It is also conceivable that an accelerated transformation through the exposure to fire was intended to shorten the unsafe intermediate phase between death and the integration into the realm of the dead in which it was believed that the undead could virtually reappear at any time (Krög 2015: 28). Cremation was already part of the punitive system in Merovingian times, according to the *Historia Francorum* V and VI, written in the 6th century (Masanz 2010: 369).

Incinerations are occasionally associated with socially subordinated persons, such as slaves (Roth 1984; cited after: Masanz 2010: 324). Due to their scarcity of grave goods, they were also addressed as burials of a low social class with few financial possibilities. However, the high financial cost and resource intensity of cremations make them an unsuitable method to dispose a body quickly and inexpensively. This interpretation is not overly convincing because they actually require a high level of commitment (Masanz 2010: 327).

Except for *bustum* graves, cremation burials involve much more intermediate stages than inhumations do before the deceased is brought to their final resting place, which adds to their resource and time requirements. In addition to the pyre being piled up and the duration of the active burning, the remains must cool down before being retrieved and/or sorted. The final step in this multi-phase process is to bury the remains, which can be done in a container or by pouring them into a pit (Rebay-Salisbury 2012: 22). A complete, but also a partial, cremation of a corpse is one of the most intensive and resource-consuming types of post-mortem body manipulation. This increased effort implies that there was a strong intention to substantially change the physical appearance of the dead body. The destruction and alteration of a corpse was the underlying motive in cremations as an act of execution, which is why incinerations were frequently performed in public to set an example. Burning was also the most commonly used form of death sentence during the witch hunts of the late medieval and early Modern Periods (Schmitz-Esser 2016: 554-555).

Nevertheless, other reasons except for social deviancy or different cultural background might have been influential for a diverging burial mode. Some bi-ritual burial sites in north-eastern Germany, such as Alt Käbelich (c. 800 – 1100), could indicate that the choice of burial mode might have been based on age-specific differentiation. Children were inhumed, whereas adults were burned. This phenomenon, however, has so far only been observed at a few burial sites along the coastal area of the Baltic Sea. Therefore, it is unclear whether this represents a common burial practice that has not (yet) been further confirmed in Slavic-occupied territories or whether it is limited to the coastal regions and possibly influenced by Scandinavian culture (Brather 2008a: 263).

An early mediaeval bi-ritual burial of two children (Fig. 31) discovered underneath the cathedral of Frankfurt am Main is one evidence that also refutes the notion that cremation burials were always associated with negative sentiments.

The grave dates to the late Merovingian period and was found within the fundamentals of the *domus ecclesiae*, the residential building of the cleric, of an early medieval predecessor building. It is the richest early mediaeval burial found in Frankfurt and overall one of the most elaborate infant burials of this period (Wamers 2012: 161). Two children with an estimated age-at-death at 4 years were buried in a coffin, which was placed in a large wooden burial chamber. A girl, whose sex was confirmed through aDNA analysis (Cemper-Kiesslich et al. 2021), was placed in the coffin in an extended supine position. To her right, also within the coffin, were cremated remains of another individual of approximately the same age. It was not possible to extract viable DNA from this individual, due to DNA destruction caused by high temperatures of cremation. The grave goods associated with this burial do not suggest a gender either. At the time of the interment, the small building was apparently no longer used for its original purpose and solely served as a tomb which could also indicate a high social status of one or both children (Wamers 2012: 161-162).



Fig. 31: Left: Reconstruction of the tomb of Frankfurt am Main. Two children of about 4 years of age were buried together. A girl was buried in supine position, with cremated remains of another subadult individual placed next to her (Cemper-Kiesslich et al. 2021: 286). Right: Reconstruction of the grave adornment of the girl (Wamers 2012: 160)

Apart from this outstanding example, which might rather be assigned to positive deviancy, findings of singular cremation burials of subadult individuals in medieval mortuary contexts are scarce, at least within the investigated geographical frame. There was no evidence of high or late medieval cremation burials of subadult individuals on the sites that were investigated in this thesis. However, two early medieval sites both included one infant cremation. They were both discovered in Slavic contexts and in both cases, they were the only burial deviating from the prevailing burial mode. Cremated remains of an approx. 6 month old infant were unearthed at the burial ground of Pitten in Lower Austria which dates to the time between 700 and 850 (Friesinger 1975-1977). The other individual, which was ascribed to the age class *infans I* without a more precise estimation of age, was found in Holubice, near Brno in the Czech Republic. The site dates to the 6th century (Čižmář 2011: 155, 188).

The purifying character of fire is also frequently addressed in the context of *charcoal burials* (Holloway 2008) or burials that exhibit traces of a *grave fire* (Biermann and Jungklaus 2013). Grave fire or charcoal burials refer to the habit of setting a fire inside the grave pit prior the actual burial. It is commonly connected with ritualized and apotropaic actions in the course of a funeral (Biermann and Jungklaus 2013; Jungklaus and Biermann 2021), but it could also have had more trivial reasons, for example to thaw frozen soil in winter. It seems also plausible that a layer of charcoal was spread on the floor of the grave to absorb decomposition fluids (Gardeła and Duma 2013: 322-323; Holloway 2008: 142).

The intention behind traces of ash or lumps of charcoal within graves as it was for example documented in Grave 02/1960 from Kremsdorf (Upper Austria; Hausmair 2016), Grave 1 from Poznań-Śródką (Poland; Pawlak and Pawlak 2015), Grave 126 Vác-Kavicsbánya (Hungary; Tettamanti 2000) and Grave 122 from Auhof bei Perg (Upper Austria; Tovornik 1986) is challenging to identify and to interpret. Especially if it is not recorded if the skeletal remains themselves display traces of fire exposure. Discolorations or heat induced deformations on bones would help to distinguish if a partial burning of the dead body was intended or if charcoal or ash was scattered in the grave pit beforehand to thaw soil or to create an absorbing layer (Jungklaus and Biermann 2021: 118-119). For the mentioned cases, it is neither recorded whether the skeletal remains themselves carry signs of heat impact, nor are there any references of discolorations of the floor or the walls of the grave pit. The latter would be an important indicator whether the fire was lit inside the grave pit or if charcoal or ash were picked up and transported from an external fireplace.

Pieces of charcoal or other traces of fire were also interpreted as remnants of feasting at or near the grave (Holloway 2008: 142; Losert 2020: 201-202). A description of the custom of feasting at graves, probably on specific dates, can be found, for instance, in the previously referenced *Slawensendrecht für die Main- und Regnitzwenden*, written in early 10th century. This tradition of commemorating the

dead was already practiced in Greek and Roman antiquity and is still performed in Orthodox communities today (Losert 2017: 37; Schwarzmaier 2003). The Austrian habit of *Totenmahl* or *Leichenschmaus* after the funeral, which is still an integral part of the post-mortem traditions, can also be linked to similar acts of commemoration.

Interment in unusual containers, such as burials of infants in vessels, are another type of deviant mortuary treatment that will be addressed within the category of unusual burial mode. Depositions of children in ceramic vessels are a phenomenon that has been discovered in medieval and Modern Period contexts dispersed throughout Central and Eastern Europe (Fig. 32). One example of such burials, a neonate found in Nowy Targ, Wrocław, Poland, has already been mentioned due to the striking placement in an already burned down house. The oldest finds with a reliable dating are from Slovakia and Hungary and belong to the 12th and 13th century (Gardeła and Duma 2013: 323-325).



Fig. 32: Distribution of child burials in ceramic vessels including burials from the High Middle Ages up until the 19th century (Gardeła and Duma 2013: 324). Modern Period sites and sites of uncertain dating have been not considered in the catalog of the present thesis.

According to Gardela and Duma (2013: 323), one theory of pot burials that is frequently addressed is that the bodies are placed in a vessel to conceal them after infanticide. Yet, the authors consider that this might not be true for all the examples found and propose a more caring and gentle interpretation. They believe that the burial of children in vessels represents the idea of a symbolic return to the mother's womb. These pot burials could also be connected to similar spiritual conceptions as the previously mentioned placenta pots (Dalacker 2017).

Ethnologic records from 19th century Bantu People of South Africa show evidence of a similar burial rite and similar approaches of interpretation. Stillbirths, infant death, but also the birth of disabled children or twins was considered as a *“deviation from the natural order of things”* (Boeyens et al. 2009: 232) and required for specific rites and apotropaic acts. Pottery is almost exclusively created by women in Bantu culture and is hence symbolically related to female fertility. Deceased infants were placed in vessels and interred close to the hut because pots are thought to be an embodiment of the womb. The underlying motive of this ritual act was to restore the woman's fertility and to regain social order that was destabilized through the death of a child (Boeyens et al. 2009: 232-234).

Multi-Phase Burials

For a long time, disturbed or altered graves were little considered within funerary archaeology and further investigation was neglected. Basic characteristics like body position as well as the quantity, variety, and arrangement of grave goods – which are typically considered to be vital to reconstructing society's funerary behavior – might not always be determinable when a grave has been disturbed. Many researchers, therefore, argued that incomplete or manipulated graves had no significant or informative value for research agendas in the context of funerary archaeology. If disturbed graves were considered in research at all, they were almost exclusively given a superficial diagnosis without additional analysis of the timeframe or possible motivation of the post-mortem interactions (Aspöck et al. 2020a: 1-2). As S. Zintl (2020: 95) summarized most researchers' attitude towards altered burials: *“Reopened graves were often rather seen as an obstacle to archaeological research than a phenomenon shedding light on past people's actions.”*

However, post-funerary intrusions into graves are an important source for the study of mortuary behavior since they reveal a further level of interaction with the dead and give additional insight into the afterlife beliefs of a given society. Therefore, disturbed or altered graves can be understood through two levels of activity. The basic level of activity consists of the burial itself and all associated

funerary rites and items. The second level of action begins when the grave is reopened. Grave interferences can happen at different points in time and for a variety of reasons. They permanently alter the appearance of the grave and result in the final grave composition as it is discovered at the excavation (Aspöck 2005: 226-227).

The timing of post-funerary grave interactions is crucial for its interpretation and a possible determination of underlying motives. The precise time of grave reopening can usually only be established if it took place soon after burial through observations of body part arrangements and joint articulations and can hardly be identified after the soft tissue has completely disintegrated (Duday 2009: 25-29). Establishing an approximate time frame is nevertheless important to distinguish whether the grave has been reopened intentionally or if it happened accidentally. It is assumable, that the more time has passed before a grave is reopened, the less personal connection has remained between the living and the departed. If a grave is disturbed a long time after it has been installed or even after the abandonment of the communal burial ground, it is probable that it did not occur as a part of the communal burial practices but was rather due to economic reasons or even without any intention at all (Aspöck et al. 2020a: 7, 15)

Broadly speaking, grave openings and associated interferences with the burial can often be classified into two categories. Any secondary intrusions into the grave complex that are specifically connected to the deceased and the local community's funeral customs belong to one category. Interventions without ritual motives and no personal connection between the people performing the opening and the person who is buried make up the second category. The most common interpretation of disturbed graves, grave looting, falls into the latter classification. Unearthing a burial in the course of an archaeological excavation can also be included in this category (Aspöck 2005: 229).

Roman law codes, as well as Germanic leges, describe an interdiction of post-burial interactions of all kinds. The evaluation of these written sources, modern Western conceptions of piety, and a discomfort with post-mortem interactions undoubtedly contributed to the widespread belief that grave reopening was connected to criminal acts such as grave robbing or desecration of the corpse. It was assumed that ancient grave disturbances were mostly carried out by criminals, strangers, or outcasts. The supposed aim was to take precious objects for personal material gain (Aspöck et al. 2020a: 4; Zintl 2020: 95). Observing large-scale post-depositional disturbances of early Bronze Age graves in eastern Austria, J.W. Neugebauer (1991) stated that he "*identified elements of violence and lack of respect for the human remains*" and concluded that grave reopening was carried out by "*armed bands*" (cited after: Aspöck et al. 2020a: 5). For the early Middle Ages, it has also been debated whether the bereaved themselves reopened graves of their relatives to extract valuable items due to a shortage of precious

materials, most notably metal, or because it was thought that they were only required for social representation during the burial ceremonies rather than for the use in the afterlife (Brather 2009a: 268; Klevnäs 2013: 49-51; Klevnäs et al. 2021: 1007).

While grave robbery is a common phenomenon in early medieval Western Europe, it is hardly recorded in Western Slavic areas. In these areas, post-funeral interventions in the grave can rather be assumed to be part of a multi-stage burial custom (Štefan 2009: 142).

Though post-depositional manipulations and interactions are generally linked to negative sentiments, they can be based upon several other reasons, such as a secondary burial of another individual, the rearrangement of human remains or grave goods due to ritual reasons, posthumous precautions against revenants, or the commemoration of the deceased (Mui 2018: 28). Yet, even the most varied reasons for reopening an interment tend to leave quite similar traces within the archaeological record, making it difficult to pinpoint their underlying motivation.

Ethnographic as well as historic records reveal that there are many instances of multi-phase funeral rites from various eras and regions (Aspöck et al. 2020a: 14). In some communities, there is a protracted period of time between a person's biological death and their social death, and several rituals and acts involving the dead body are performed during this period. A concluding action might entail reopening the grave and dislocate the skeletal remains to a new and eventually final resting place. This procedure can symbolize the final transition into the realm of the ancestors and mark the end of passage rites (Aspöck 2005: 227-228).

On the Indonesian island of Sulawesi, the Toraja people still perform a remarkable, compassionate, and complex multi-phase mortuary rite. The funeral itself might last up to two weeks and usually does not take place immediately after death, but only after a certain period of time that is needed to save enough money for an adequate burial. The dead body stays at the family home for the duration of this period, which can be for years in case of a poor financial situation. Death procedures continue even after interment and require ongoing interactions and routine exhumations of the bodies. In an elaborate annual ceremony called *ma'nene*, the tombs are swept, and the bodies are cleaned and re-dressed. Alongside this, there are sacrifices of livestock, and photographs are taken of and with the deceased family members to preserve their memories. Sometimes, after such an exhumation ceremony, the occasionally mummified remains, wrapped in ostentatious fabrics, are brought to another cemetery to be buried there in their final resting place (Fig. 33) (Putu 2020).

The origins, evolution, and initial significance of this funeral ceremony are no longer entirely understood by today's Toraja community, but it is thought that it is a testimony of an ancestor cult,

whose celebration is intended to promote a fruitful harvest. They still practice this ancient burial practice despite being Christianized a long time ago (Putu 2020).



Fig. 33: Impressions of a multi-phase burial rite from the Toraja People in Sulawesi, Indonesia. Left: A woman has gathered her grandmother's remains, who died in 1930, and wrapped them in a precious *Hello Kitty* cloth to rebury them in another cemetery in 2016. Right: The whole family, including children, examines and commemorates the remains of a long deceased relative (Putu 2020).

Grave opening and multi-phase burial rites as part of an ancestral cult were also discussed in the context of early medieval funerary rites from Northern and Western Europe. It is considered that this practice was still performed, particularly in regions, like Scandinavia or the Baltic coastline, that were formally Christianized but nevertheless retained previous, pagan rituals for a very long time. The rite probably also involved post-depositional interactions with human remains. Notions of an ancestor cult were recorded in the *Vita Wulframi*, which dates to the time around 740. M. van Haperen (2017: 162-164) also observed that in these particular regions, graves of children were less often opened and manipulated. This is consistent with the notion that ritual grave reopening favored adult individuals that were considered to be respected ancestors if it wasn't carried out for reasons of looting and economic benefit. Though children are typically not considered to be an *ancestor*, it seems that in individual cases they held an important social position which led to a post-mortem interaction.

On Viking Age graves in Scandinavia, there is also evidence of multi-phase burial rites, in which the skull is stored apart from the actual grave for a while and reunited with the postcranium at a later stage. This ritual involves several occasions of grave reopening (Toplak 2017b: 53).

Multi-phase burial practices can also be strongly tied to the fear of the dead and the belief in revenants. Opening a grave and manipulating the corpse by staking, beheading, or performing other sorts of mutilation were common practices against a dangerous dead. These actions must be classified as part of a multi-phase funerary practice if they did not take place before the burial or at the funeral itself. However, it is not always apparent at which point of post-mortem interval these actions were carried out (Aspöck 2005: 227-228).

Despite the fact that grave disturbances are frequently observed in medieval burial archaeology, the motives of the post-mortem intrusion are only rarely investigated or described. Only 22 of the 191 burials included in the catalog were labelled as undisturbed by the authors of individual case studies. Four graves were said to have been reopened in ancient times, and six have been disturbed during modern construction work or digging activities. 24 grave complexes have been solely noted as disturbed, but neither their background nor timeframe was stated or identified (Fig. 34). In some cases, a disturbance was attributed to the creation of younger graves. Only in one case (Neresheim, Grave 129/130), post-depositional alteration of the grave has been described in more detail.

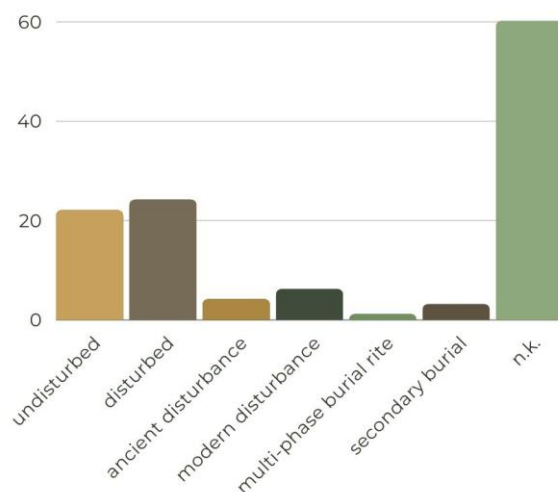


Fig. 34: Statistical distribution of grave disturbances. In many publications, the absence or presence of grave disturbance was not included in the description of the graves, which can be seen in the green column assigned as not known (n.k.). In some cases, however, secondary disturbance was recognizable in the images of the graves by means of dislocated bones, these were marked as disturbed even if the status was not noted in the original publication.

Grave 129/130 from Neresheim, Baden-Württemberg may represent a rare evidence of a multi-stage burial rite involving the relocation of a complete body in early medieval Central Europe. M. Knaut, author of the case study of this Alemannic burial site, argues that in the present case the primary and secondary burial locations of a 2-4-year-old child were found directly adjacent to each other. Accordingly, the body was intentionally taken out of the tree coffin and placed immediately next to it, following the same orientation (Fig. 35). Because most joint articulations were found in an anatomical in situ position, it is presumable that the relocation took place while ligaments and tendons were still somewhat intact or that particular care was taken to reposition the skeletal components in their original anatomical positions. However, one half of the pelvis and both arms are missing.

The grave goods found in both features also contribute to the hypothesis that the subadult individual was initially interred in that particular tree coffin because they match and represent a site-typical, cohesive ensemble (Knaut 1993: 298).

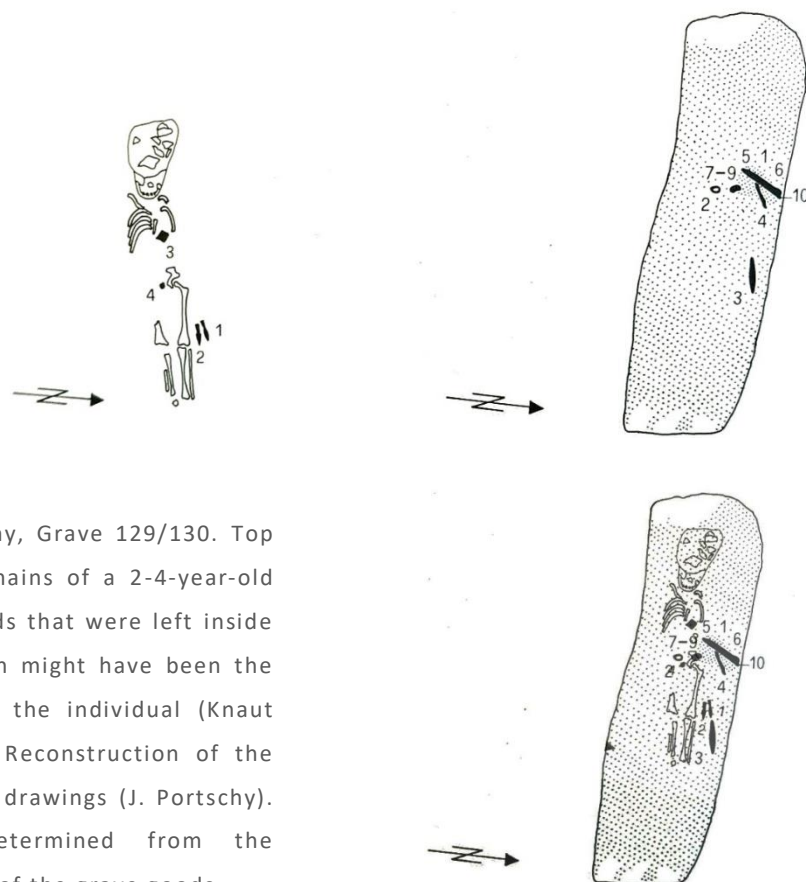


Fig. 35: Neresheim, Germany, Grave 129/130. Top left: Relocated skeletal remains of a 2-4-year-old child; Top right: Grave goods that were left inside the tree trunk coffin, which might have been the primary place of burial of the individual (Knaut 1993: 298). Bottom right: Reconstruction of the original burial with layered drawings (J. Portschy). The positioning was determined from the description of the locations of the grave goods.

Three isolated skulls of children, age class *infans I*, were discovered at Pohansko in Břeclav, Czech Republic, not far from the Lower Austrian border. They were found on the burial site Herrenhof. Two of them (Grave 165 and Grave 305) were deposited on respectively between flat stone slabs. These skull depositions were excavated on the burial site's periphery, with deposition 305 being discovered in a pit that had been deepened into a circumferential palisade ditch (THANADOS - Břeclav Pohansko Herrenhof, Grave 305). A further skull of an infant about 6 months old was discovered in the corner of grave pit 401, along with the complete skeleton of a two-year-old child (THANADOS - Břeclav Pohansko Herrenhof, Grave 401). A large proportion of the graves at this burial place at the early medieval central site of Pohansko were found disturbed. Most disturbances were probably due to further use of the burial site, limited space, and the constant installing of new graves (THANADOS - Břeclav Pohansko Herrenhof). No disturbance was recorded for Grave 401 (THANADOS - Břeclav Pohansko Herrenhof, Grave 401).

It is conceivable that all three of these skulls originate from graves that weren't deliberately reopened for ritual purposes but rather were accidentally destroyed whilst digging another grave. With this in mind, it seems likely that the postcranial bones were further shifted, and only the skulls were reburied, maybe for the sake of piety. This habit is quite common for burial places with a lack of space (Kenzler 2011: 13)

At the Lombard burial site in Brunn am Gebirge, Lower Austria, the excavators found two graves where an additional skull was interred together with another individual after the skeletal remains of several graves were presumably commingled in the course of looting. In one grave, the alien skull was found in the chest area of the primary burial (Aspöck 2005: 250, 252). Something similar might be conceivable for Grave 401 from Pohansko as well.

A reburial of skeletal parts as part of a multi-stage burial rite cannot be excluded in the given cases of Pohansko, however, a definite statement on the nature of these findings cannot be determined based on the available documentation. Nevertheless, the skull depositions were included within the classification of multi-phase burials because an intention to handle the skulls of these children in some (careful) way and to redeposit them can be determined in each case. In my opinion, this does not only concern the skull that was co-buried in Grave 401 but also the skulls that were placed on stone slabs. The skulls might have been held in place and kept from rolling off using these stone slabs, which could be also considered as a replacement for grave architecture or burial containers in the broadest sense.

In conclusion, traces of grave reopening are frequently found throughout the entire Middle Ages and post-depositional interference can be attributed to a variety of reasons. Economic factors as the main cause for grave looting are undeniable during the early Middle Ages when grave goods and costume components were a key component within the funerary practice. The question of whether grave goods and accessories were obtained by bands of criminals or by the relatives themselves cannot be resolved within the confines of this thesis. During the High and Late Middle Ages, grave disturbance was mostly caused by a lack of space in churchyards situated in the centers of cities and villages. Graves were only preserved for a limited time, after which the skeletal remains or even only parts of them were reinterred in ossuaries (see for example Fig. 36). Religiously or spiritually motivated post-depositional opening of graves, for example, to commemorate the dead, but also out of fear of supposedly dangerous dead, must also be taken into consideration within the issue of medieval multi-phase burials.

It can be challenging to identify multi-phase funeral practices in the archaeological record and to distinguish between different kinds of grave intrusion. The central impact of all types of grave disturbances is, nevertheless, an irrevocable alteration of the intrinsic structure and integrity of the grave, whether they are caused by later interferences into the ground, which were not intended to affect the grave and are no way related to the funerary rite, or if it was part of the mortuary behavior.



Fig. 36: The typical assemblage of crania and long bones in the ossuary of Hadersdorf am Kamp, Lower Austria, built around 1260.

Unusual or Apotropaic Objects

Early medieval funerary archaeology places great emphasis on the description, typochronological classification, and the interpretation of symbolic meaning of grave goods. Numerous scholars have focused their research on this topic, resulting in a wealth of literature that lists and compares these objects to draw connections between different regions and people or to reconstruct social structures. Grave goods, especially personal belongings like jewelry, weapons and other prestigious objects are considered as an indicator for gender, age, social status and affiliations, wealth, origin, and ethnic background of the buried individual (Brather et al. 2009: 274, 276; Graenert 2020: 48).

Seminal contribution to the study of the symbolic meaning of early medieval grave goods has been made by H. Härke (2003a; english translation: 2014; and also summarized in: Hausmair 2015: 41-42). Based on Härke, the term *grave good* refers to prestigious items like jewelry, weaponry, components of clothing and costume, as well as mundane objects like tools, knives, equipment for fire striking, etc. and further ritual items like food offerings. He separates objects found in graves into three levels that reflect their temporal significance in the course of death procedure and mourning (Fig. 37). The first group consists of all those objects that relate to the biography of the deceased, i.e., his or her past existence. These can be, for example, objects that represent their profession or remarkable milestones of a person's life course to embody the living identity of the social persona.

Personal things that the bereaved associate with valuable and emotional memories of the departed may also be buried with the body. These artifacts are typically interred alongside the deceased as a coping mechanism for grief and are also past-related because they reflect interpersonal relationships between the dead individual and the bereaved.

The second group includes objects that relate to the present existence of the person as a corpse or are of significance for the time around the funeral and the transformation from living to dead individual. These can be, for example, items that must be given to the deceased due to legal reasons. Some items had to be buried with the original owner since they could not have been inherited. The category of present-related burial artifacts might also include items that are regarded as impure after coming into contact with the corpse. In the late Middle Ages, for example, the bowl used for washing the corpse was occasionally given into the grave.

Potlatches and insignia of rank indicating a social position can serve both past- and present-related purposes. Potlatches are items that are purposefully destroyed or removed from circulation to demonstrate wealth and status.

The third category comprises of items that, in accordance with ideas about the afterlife, only serve a purpose in the hereafter or pave the way for it. This includes, e.g., a Charon's penny, but essentially all kinds of equipment that could be of use in the afterlife. Apotropaic objects, which are supposed to protect either the dead themselves or the living from any harm, can have both present- and future-related functions. Components of the funeral ceremony or food offerings which metaphorically allow the dead to participate in the funeral meal, can also be assigned to both categories.

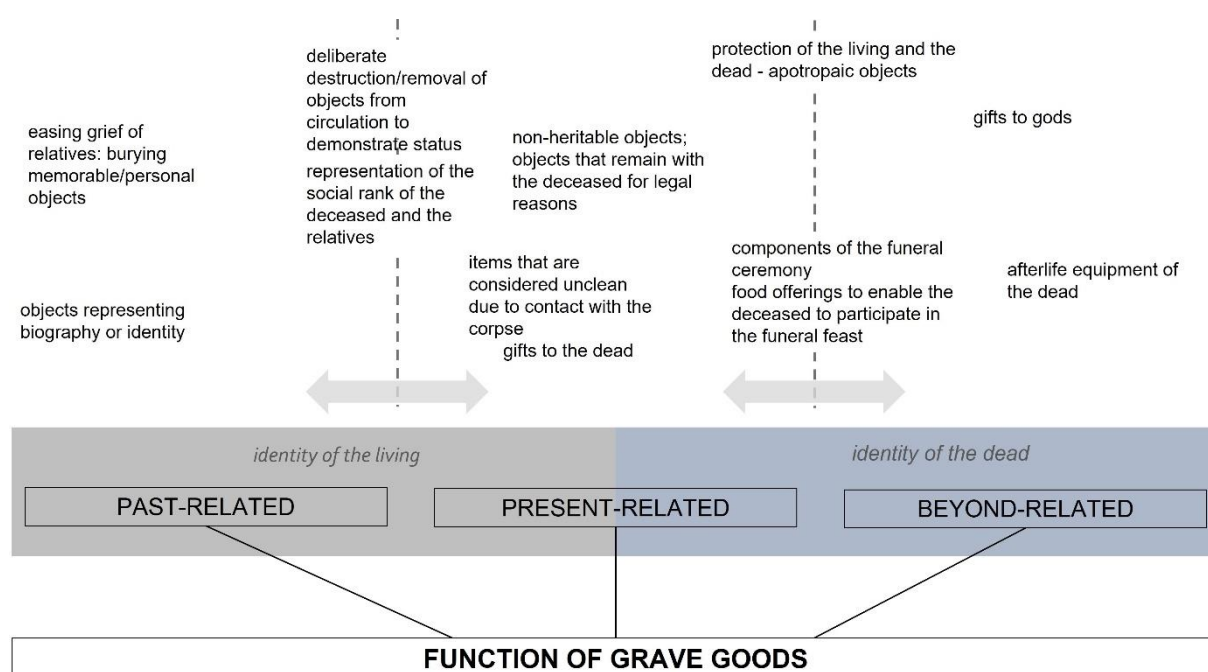


Fig. 37: The function of grave goods according to their temporal significance. Based on H. Härke (2003a; 2014), further modified after B. Hausmair (2015: 41).

Regarding the early medieval habit of providing grave goods, it has been discussed whether included items actually represent material possessions of the deceased individual or if they were purchased or crafted just for the purpose of the burial and were thus destined only for an afterlife use. The consideration that grave goods were possibly only displayed in the course of the funeral ceremony itself and removed before the final interment or in the course of a secondary grave opening has already

been briefly addressed in the previous chapter (Brather 2009a: 268; Klevnäs 2013: 49-51; Klevnäs et al. 2021: 1007). Additionally, it should be emphasized that burials without accompanying artefacts may not necessarily imply financial poverty or a low social status of the interred individual. The absence of grave goods could also be the result of an improper death, a death where funerary gifts were not considered appropriate (Hausmair 2015: 43).

In terms of a desired funerary display, it appears likely that it was influenced by the last social role that the deceased person held before their passing. For adult individuals this could be represented through grave goods that relate to their profession, for example people buried with smithing equipment (Brather et al. 2009: 256). The grave goods of children who did not yet have a profession or a specific function in society could possibly reflect individual phases of growing up. Based on this, it could be possible to determine the time when adulthood was attained, if we suppose that grave goods symbolize age frames or reached milestones. In exhaustive studies of Merovingian child burials, B. Lohrke (2004: 130) evaluated types, number and combinations of grave good assemblages and found a change in funerary behavior around the time of transition from infans II to juvenile (12-14 years). This corresponds with the notion on the age of adulthood given in several early medieval written sources. Lohrke's study of age-based funerary equipment is informative because it illuminates both the membership and social perspectives of different age groups. One aspect that has been little explored so far is the social representation of puberty and adolescents.

The description and interpretation of grave goods in the early Middle Ages is an extensive topic that can be viewed from countless angles. However, central to the present work are age-specific grave goods, grave goods that are considered to serve as an apotropaic, and items on the interface between these categories.

The *Handwörterbuch des deutschen Aberglaubens*⁷ (Bächtold-Stäubli 1927-1942), as well as the *Wörterbuch des Aberglaubens*⁸ (Harmening 2009) both list numerous objects that were ascribed magic, healing or harm preventing traits. Some objects that are listed in these exhaustive encyclopedias are regularly found as grave goods or are integrated into medieval funerary rites.

The investigation of folk belief and superstition had a first peak in the 19th century. At that time most of the scholars dealing with this issue agreed that these are relics of a pre-Christian, pagan spiritual conception, which have been passed on, with only minor modifications for centuries throughout most parts of Europe. While ethnographic records, as well as ancient and medieval texts reveal similarities and comparable rites, modern research now tends to avoid referring to a uniform and millennia-

⁷ 'Manual of Superstition' (author's translation)

⁸ 'Dictionary of Superstition' (author's translation)

overarching continuity of ideas and customs of folk belief. Expressions of superstition, that coexists with the primary and official religion are strongly influenced and shaped by the manner a society experiences and explains their environment and copes with obstacles. Folk belief as a complex and multipartite system is thus unique to a temporal and cultural entity. As a result, it is unclear if or to what degree superstitious acts that were tangible in the 19th century or that continue to this day can be transferred to the Middle Ages if they are not explicitly referenced in contemporaneous written texts or can be observed in archaeological records (Harmening 2009: 7-11). Thus, for the purposes of this thesis, only a selection of items that are claimed to have been of substantial importance to medieval folk belief regarding funerary rites by several of authors were taken into account. These are, for example, keys, amulets, eggs, bells, or chain links.

In archaeological literature, amulets in graves of the early to late Middle Ages are often referred to as being a part of pagan traditions and are clearly distinguished from Christian symbols or motifs. They are described as remnants of the old faith, excluded from the Christian belief. However, these amulets or other objects, with assigned apotropaic qualities, do not necessarily have to be an expression of heathen beliefs. Rather, they are supported by superstitions and are not in general contradiction to the Christian faith. Different forms of belief and superstitions did coexist and were both expressed by the same people (Brather 2009a: 274).

Generally speaking, there are two types of apotropaic objects and measures: those that help the deceased to transfer to the afterlife and secure their wellbeing, and those that safeguard the living community from the dead (Gregoricka et al. 2014: 1-2). Symbolic objects with a particular significance for funerary practices are usually linked to ideas of rebirth, eternal life and are thus also connoted with symbols of fertility and reproduction. These meanings are for example attributed to eggs, that are regularly found in medieval graves. The spiritual implication is based on the notion that an egg is a somewhat dead item, that is nonetheless capable to create new life. Especially in high and late medieval Christian tradition, eggs are a symbol of hope of eternal life and rebirth in the heavenly kingdom. At the same time, an egg prevents the intrusion of evil forces and has therefore multi-level importance as a grave-related item (Harmening 2009: 121-122).

Eggs as apotropaic grave goods were, for example, found in Grave 126 from Vác-Kavicsbánya, Hungary. In total, nine eggs and the bones of a newly hatched chick were found placed around the burial of a juvenile individuals. Lumps of charcoal found between the legs could further indicate a fire-related burial rite (Tettamanti 2000: 30).

Keys discovered in medieval burials are frequently given a similar meaning and are typically found in the graves of women and children (presumably girls). For one thing, they are regarded as a symbol of

a woman's authority over the family household. For another, they are associated with birth, marriage, and fertility, as well as rebirth from the dead. Keys can also be interpreted as a declaration of Christian faith or a souvenir of a pilgrimage to the tomb of St. Peter in Rome. In children's graves they are considered to bear amulet function, to ward off evil spirits or as a remedy for certain diseases. In addition, they can also be an indication of the position of the first-born daughter as the future key-bearer of the family, a position that could no longer be lived out due to her early death (Lohrke 2004: 111).

Elements of an apotropaic character, such as perforated animal teeth, metal pendants, chain links and amulet capsules, ornamental discs made of metal or bone, shells, amber beads, or antlers, are also frequently found on the belt chatelaines in graves of female individuals of all ages. These are also seen as protective and associated with death, (re)birth, and fertility (Lohrke 2004: 119). Grave 239 from Schretzheim in Bavaria contained the vertebra of an animal, as well as a small pot that had a tiny silver spoon inside. The animal remain can be assigned to an apotropaic rite in the context of mortuary practice as it was pierced with a bronze needle (Koch 1977: 56)

Similar to grave goods that are specifically associated with children, such as bells (Nowotny 2018: 82-83), there are also grave goods or combinations of specific objects that are primarily associated with adults. These can be weapons or tools that symbolize a profession, but also collections of individual pieces that have a particular meaning when they are put together as an ensemble, such as the jewelry arrangement of a wedding costume.

An indication of this is the isolated grave of a 12- to 14-year-old girl discovered in the southwest corner of a hall building (40 x 9 m) in Prague-Vinoř, Czech Republic. The burial was dated through typochronological classification of the grave goods and C14 to the time around 900. Several additional graves were found on the excavated site; however, they are not in the immediate vicinity of grave H2/2017 and are about 100 to 150 years younger. While the younger graves follow a strict west-east orientation according to Christian habit, the older, isolated grave was placed following the same orientation as the building it was buried in. The building is surrounded by a rampart. It is unique among early medieval contexts from Bohemia concerning its size and construction manner and was interpreted to be a sacred or gathering place for an elite group.

Aside from the grave's special and remote location, the costume components further provide a distinct character to the grave. A total of 17 pieces of jewelry made of silver and fire-gilded copper were uncovered from this grave. Among these were ten silver headdress rings in various designs, ranging from basic wire rings to rings with attached sheet metal beads, filigree ornamentation, and granulation. Furthermore, three silver beads and a knife were included in the grave.

The most precious objects, however, were two pairs of Gombíky, hollow beads made of gilded copper sheet (Fig. 38). The two larger pieces are 40mm in diameter and decorated with palm leaves and arcades, while the smaller ones are about 25mm in size and bear floral vine decoration. They were found lying in a row on the upper part of the chest. Textile remnants of a very fine linen weave adhered to each piece. It is assumed that these Gombíky were attached to the burial clothing because of the textile adhesions, their alignment, and the placement of the eyelets. One-sided abrasion of the surface suggests that the pieces were not made especially for her burial, but had been worn before, maybe even by someone else. According to the excavators, the jewelry ensemble embodies a complete female costume within the temporal and cultural context of the Great Moravian Empire. This find ensemble is usually not associated with the burials of children or adolescent individuals, but with adult women only and it is thus interpreted to be an imitation of a wedding costume.



Fig. 38: Gombíky from Grave H2/2017 at Prague-Vinoř, Czech Republic (Štefan and Hasil 2022)

Isotope analyses revealed that the girl's diet was one-sided and with hardly any protein-rich food. One of her legs was significantly shorter than the other, which may have hampered her ability to walk properly. Additionally, the girl displayed skeletal stress markers that indicated deficiencies and malnutrition. Nonetheless, there must have been a reason why this girl was buried in this particular location and was so richly adorned (Štefan and Hasil 2022: and further personal communication with J. Hasil).

The habit of providing children with a complete dress ensemble of grown-up women was also observed on two burials at the early medieval burial site of Dirmstein, Rhineland-Palatinate, Germany. The age-at-death of the individual buried in Grave 254B was estimated to 15 ± 3 years, the individual of Grave

190 was addressed as *infans II* (Leithäuser 2011: 364, 409). It seems likely that both were about the same age as the girl buried in Prague-Vinoř. This age corresponds also with Lohrke's observations for the age at which children gradually reach adult status and also with statements of age caesurae in the early medieval *leges*.

The individual in Grave 190, whose gender was assumed female because of the included artifacts, was buried in a broad rectangular grave pit with rock settings on the base. Postholes in the corners of pit suggest some elaborate tomb architecture. In the middle of the grave pit was a rectangular intrusive cut, probably an indicator of a failed attempt at grave robbery. The intrusion does not reach to the burial, it remained undisturbed. The girl was equipped with one pair of silver earrings with dark blue-violet stone inlay, a bronze needle with incised grooves and triangular ornament, chain links which were probably originally attached to an almandine disc brooch, a bronze wire ring with open ends and a bronze cross shaped pendant with zig-zag ornament on one side and circular eye decoration on the other side. Furthermore, the individual had a necklace made of almost 160 glass and 12 amber beads, a glass spindle whorl, a bronze wire ring with an attached hollow bead, a gilded bow brooch, three iron buckles a bracelet made of cast bronze and a bird-shaped fitting made of gilded bronze. The find ensemble was completed with a belt set comprised of 12 pieces, a knife, a fragment of a broad blade from a tool usually used for textile production, i.e., flax crushing and sheet iron fittings of a wooden container (Leithäuser 2011: 364-370).

Burial 254B was placed in a very prominent location, centrally inside a ring ditch. The grave construction was almost 4m long and 2m broad. The juvenile female individual had three pottery vessels, two spindle whorls made of pottery, one pair of gilded bow fibulas made of silver with almandine inlays, an animal-shaped brooch made of cast silver, an almandine disc brooch and a hoop-shaped finger ring made of bronze given into the grave. There were further four bronze rings with rhombic cross-section and three iron rings found next to the thighs. The grave also contained an iron key, a cylindrical amulet capsule made of bronze with organic and inorganic residues, a piece of fossilized wood, six shells, fittings of a wooden container made of sheet iron, a lock bolt, three small iron pins, three iron buckles and a fragment of a broad blade of a flax crushing tool. Furthermore, there was an iron nail with wooden remains adhering, a ring-shaped bone fragment, a pair of iron scissors, a rod-tanged iron knife, belt set components made of silver, a small bowl made of bronze (diameter 15 cm), five pendants made of sheet gold, a beaker made of light green glass, a necklace made of 49 glass beads, one horn bead, one meerschaum bead and eleven amber beads (Leithäuser 2011: 409-416). Besides the fact that both graves were very lavishly adorned and presented the appearance of an adult woman, both also carried apotropaic objects, such as amber beads or keys.

Another example of grave goods that are not age appropriate but rather express a certain status or profession of the deceased's family was found in Saffig-Wanneköpfen in Rhineland-Palatinate, Germany, dating to the 6th-7th century (Melzer 1993). A one-year-old infant was buried with a large set of smithing tools. Grave 110 was one of the most elaborately equipped graves on the site containing two pottery vessels and several objects that can be linked to smithing and metalworking. A wooden box was placed inside the coffin containing forging tools like a hammer, an iron awl with remains of a wooden handle, an iron knife with, another iron awl with eyelet and rectangular cross-section, further unidentifiable iron tools, and bronze needles. Moreover, there was a white substance which could probably be a lump of lead oxide, another highly corroded piece of lead which might have been a weight. Other objects of interest are a semi-finished bronze disc brooch, a round piece of sheet bronze with zig-zag rim and five Late Antique Roman coins made of bronze that were all perforated. Besides these numerous metal objects there were fragments of blue and green glass, a flint and a disc-shaped quartz token found in the grave ensemble (Melzer 1993: 79-86; Tobias 2021: 398).

During the Merovingian period, there is a more distinct age-specific representation of the different age stages through burial goods in the graves of female children and the passage into adulthood is also more clearly visible whereas the distinction between the graves of boys and men is more blurred and there are less funerary items that are typical for certain age categories. This could suggest that it was more crucial for girls to express their biological and/or social age through objects they carried or wore (Lohrke 2004: 133).

The inclusion of items with apotropaic characteristics in the grave is one of the most common methods to ban a potentially harmful dead or generally to ensure a quick and safe transformation to the sphere of the dead (Gregoricka et al. 2014). In this context, however, it must be emphasized that a major part of the acts and items surrounding a person's death were, in one way or another, assigned to have apotropaic qualities. Based on A. Gell's theory of artifact agency (1998), objects – especially those used in funerary related rites of passage – have a crucial role in human activities and should be considered animated (Walker and Berryman 2022: 6). Therefore, it must be presumed that every item in the grave has a level of significance within the context of burial practice that is incomprehensible or at least challenging to decipher from an extrinsic perspective. A specific placement or combination with other objects may also change or enhance the meaning of a single item. All aspects of funeral customs have a therapeutic background - on the one hand to accompany the grieving process of the bereaved, on the other hand to support the deceased on their way into the afterlife. Apotropaic precautions are also required to guarantee that these procedures advance successfully for everyone concerned and that all rites are performed without interruption. Objects in the grave and used during the funerary process are thus embedded in a unique context and possess a multi-layered level of meaning.

Distribution and Relative Frequency of Deviant Child Burials

A total of 48,116 graves⁹ from 453 sites in Austria, the Czech Republic, Poland, Hungary, Germany, Slovakia, and Switzerland were examined for the purpose of the present study. Besides looking into burial sites, churches, and churchyards, I included several other site types such as settlements, fortifications, production sites, and sacred places into the investigations to find graves outside the burial context.

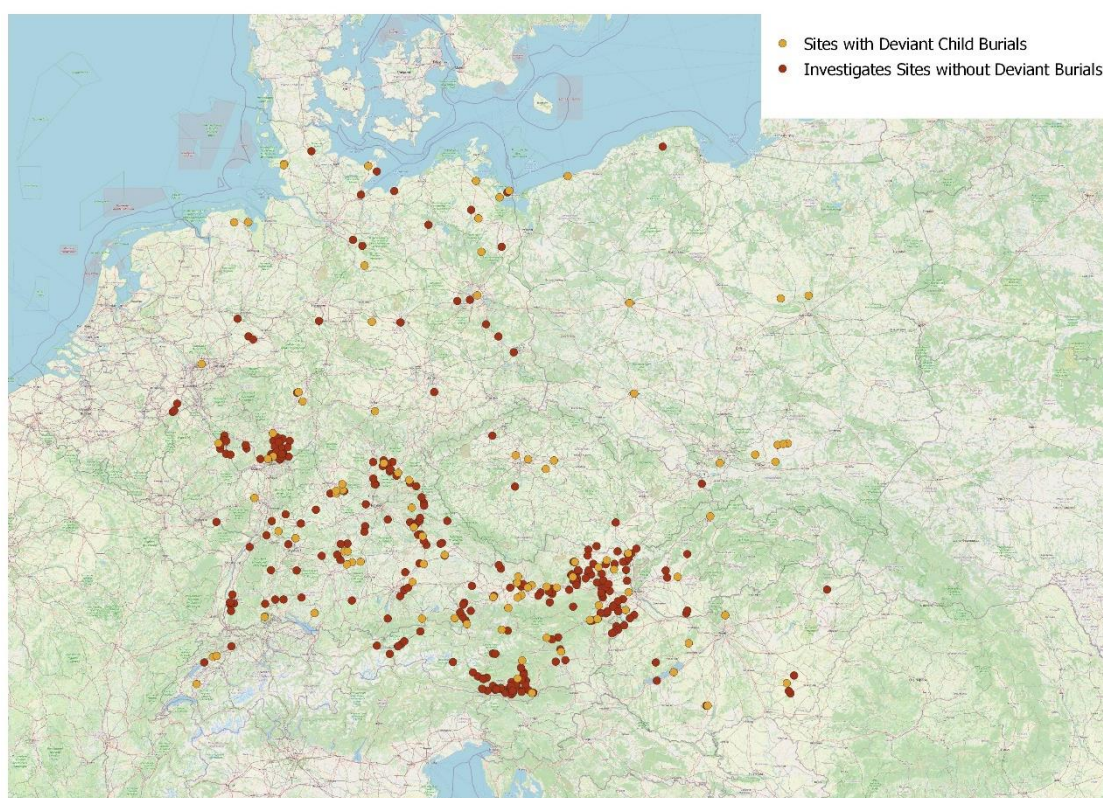


Fig. 39: Distribution of investigated sites.

The distribution map (Fig. 39) shows that deviant child burials spread across all over the investigated area. It was not possible to identify any regional focal points of a particular post-mortem treatment.

There is a slight irregular distribution of investigated sites which is for one based on the accessibility of publications and excavation data, as well as the language of publication, but it also reflects different levels of research activity in different regions and time periods. The region of today's Austria could be

⁹ The number of excavated burials could not be determined for all sites, so this count only includes sites with a recorded number of graves.

studied very closely, with a temporal focus on early medieval burial grounds, as these finds were easily accessible and efficiently surveyed through the THANADOS database. The concentration of points in Carinthia is largely due to the extensive work of S. Eichert (2010a; 2012a; 2020). The linear sequence of mapped points from Lower to North-Eastern Bavaria is, for example, the result of large-scale analysis of Carolingian sites by R. Pöllath (1998; 2002), and the density of points in South-West Germany illustrates the excellent state of research of burial archaeology in Baden-Württemberg. For Hungary and Slavic-speaking countries, it was only possible to include sites that had been published in German or English or burials that were mentioned in volumes or papers that feature this specific issue. Therefore, there are almost exclusively yellow dots in this area as it was not possible to examine entire sites, but only to include those burials that are already described in other studies.

Ultimately, 191 of these c. 48,000 burials reviewed were included in the catalog. 168 of these are single burials, and 25 are double or multiple burials or burial groups such as the eaves-drip burials of St. Georg bei Göttweig, Lower Austria.

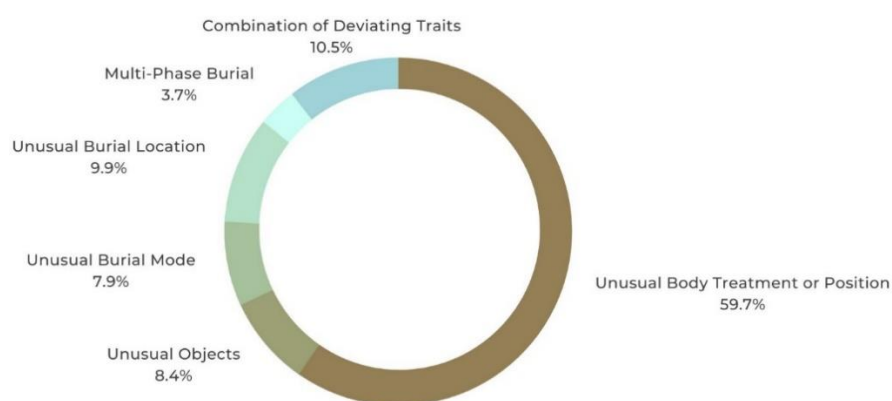


Fig. 40.: Frequency of different types of deviant child burials in Central European Middle Ages

The most common types of deviant child burials are those involving an unusual body position or treatment, e.g. all burials found in deviating orientation, prone or flexed position and all burials that showed any traces of intentional manipulation of the corpse (Fig. 40). This category includes around 60% of the burials listed in the catalog. The other categories, including the group of burials that exhibit a combination of deviating traits, are almost equally represented. The smallest group of special post-mortem treatment are multi-phase burial with only 4% of the recorded deviant burials. However, in

this case it is probable that this number does not reflect their actual frequency but is rather based on challenges of distinguishing multi-phase burial rites from unintentional grave disturbance or taphonomic processes.

Since the individual sites had variable burial patterns, standards of the individual funerary traits were determined for each site individually. In order to accurately reflect standards and the resulting deviations, only grave finds from burial sites with more than 20 individuals were included in the catalogue, with the exception of two burial sites (Duggendorf-Heitzenhofen, Bavaria and Ornding, Lower Austria).

The peak of recorded deviant burials that show unusual body treatment, such as mutilation or stoning, nailing or a diverging body position spans from the 11th to 13th century, the time when Christianity was introduced to almost all parts of Central Europe. These finds also have a spatial focus on Slavic territories in Eastern Germany, Poland, Czech Republic, and Slovakia. Alterauge et al. (2020: 24-25) propose some approaches to explain the concentration of medieval burials with unusual body treatment within Slavic territories. According to this, the fact that there are fewer of these types of deviant burials in Western Europe could either mean that people there did not know about or did not believe in the effectiveness of these anti-revenant measures, or that such beliefs did not exist until the late Middle Ages at all. Other types of deviant burials in these regions must therefore also be explained with different motives.

The 191 examples of child burials featured in the current database are examples of interments that deviated from the local funerary customs or burial standard based on one or more of the criteria presented within this thesis. However, it is difficult to discern with certainty if they are an accurate depiction of the relative frequency of deviant child burials in the medieval funerary record, primarily because of the lack of presented data in many publications as well as ambiguous use of terminology or unclear delineations of burial rites. During the initial phase of data collection for this project, much more burials were labelled as unusual than are now included in the final catalog. After a more thorough examination of microregional funerary behaviors, it became evident that some burial phenomena that had been initially classified as atypical did not actually represent an oddity or an age-specific treatment, but rather were simply described differently in various publications, either in terms of wording, or in terms of how they were understood. The database, however, displays a coherent and systematic list of deviant child burials because each site reviewed throughout this study was examined with the same approach and emphasis.

Interpretations of Deviant Child Burials

Parental Grief Response and Afterlife Concerns

In the Cambridge Dictionary, grief is defined as “*a feeling of great sadness, especially at the death of someone*”. Parents typically experience intense pain upon losing a child, whether it occurs through miscarriage, at or shortly after delivery, or at a later age. Emotional distress after death, as well as coping mechanisms and strategies are well-documented in modern psychological and medical research (see for example: Cacciatore et al. 2009; Kofod 2017; Gyulay 1989; McNeil et al. 2021; Lang et al. 2011; van der Geest et al. 2014).

There is a difference between grief and mourning when assessing actions and conduct of post-mortem processing. While mourning describes symbolic behaviors, gestures, and rites that are deemed appropriate in the context of societal specific ways for regulating emotions to convey sorrow, grief refers to the individual emotional response to the death of a beloved person (Veit 2013: 12). The death of an offspring is usually linked to a particularly painful, protracted, and multifaceted grief response compared to other forms of grief, such as the loss of a parent or sibling, because it is untimely, sometimes even sudden or following disease or violence (Gyulay 1989: 71; Lang et al. 2011: 184). There is a general assumption that pre- or perinatal death is less hurtful than the death of an older child, although empirical research came to the conclusion that the age-at-death of the child does not determine the severity of individual pain (Lang et al. 2011: 184).

The intensity of grief and associated coping mechanisms are inextricably linked to the emotional bond between the bereaved and the deceased individual. Based on the attachment theory (1951), the American pediatrician and psychoanalyst J. Bowlby formulated concepts on death handling, mourning processes and bereavement (1969; 1973; 1980). He contends that grief and mourning are necessary components for coping with pain following the loss of an emotionally attached person. Derived from his assumptions on the behavioral attachment system between two individuals, grief is an anxiety response triggered by the separation from each other. Similar emotional reactions can be observed on young infants when their caregiver leaves. Their subsequent behavior is intended to elicit a response from the caregiver, ensuring that they remain close to the infant or that the duration of detachment is shortened. However, since the receptive individual is no longer physically approachable in the case of death, there is no response that can be triggered; the state of separation is permanent. In order to accept this new situation and subsequently to establish modified life circumstances, it is necessary to find strategies and adaptations to cope with the loss and eventually heal from the intense experience of death. As an emotional bond between parents and the child is usually already evolving during early

stages of pregnancy, distress responses and grief can also be experienced after miscarriages (Bowlby, cited after: Cannon and Cook 2015: 403). Perinatal loss, especially at an early stage of gestation, can also lead to an issue of self-identification of the bereaved couple and opens the question “Are we even parents?”. This ambiguity might be followed by further emotional pain and a feeling of “*disenfranchised grief*” (Lang et al. 2011: 190)

In the context of loss coping strategies and anxiety responses, Stroebe and Schut (1999) proposed the *Dual Process Model of Coping with Bereavement* that differentiates between restoration-orientated coping strategies and loss-orientated activities. Loss-orientated tasks are for example active grief work, such as reading self-help books, going to therapy or group meetings, or simply thinking about the lost person and the former relationship as well as contemplating on the experienced pain. On the other side, restoration-orientated strategies are intended to establish new life circumstances and new relationships through distraction from sorrow, trying new things and gaining new experiences or even denying or avoiding confrontation with pain. The basic concept of the dual process model is that people alternate between loss-oriented and restoration-oriented stressors rather than moving through grief in a linear way (Fig. 41). It also argues that grief should be dosed based on the current mental state which is why oscillating between loss- and restoration-orientated behaviors is important for the healing process (Stroebe and Schut 1999: 211-215; Cannon and Cook 2015: 403-405).

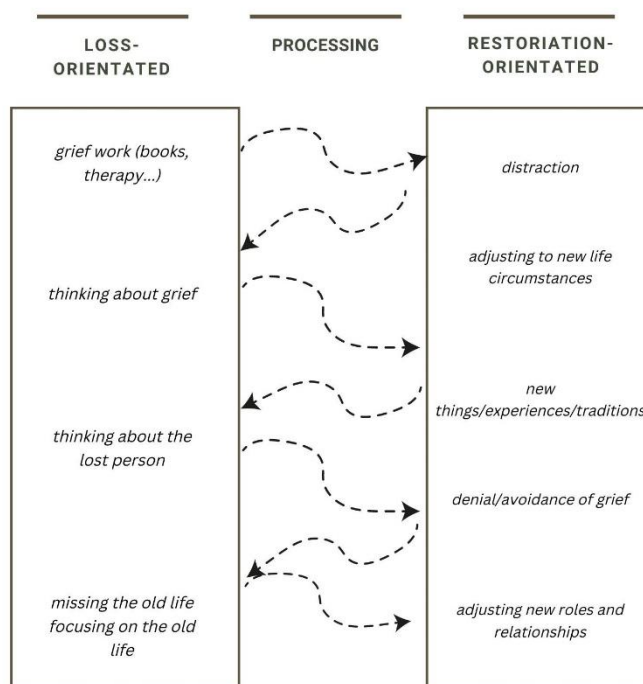


Fig. 41: The Dual Process Model of Coping with Bereavement. Concept and graph modified after Stroebe and Schut 1999: 2013.

As previously stated, some historians, like Ariès (1975; 1960), deMause (1975) and Shorter (1975), proposed the assumption that medieval parents did not develop a strong emotional bond with their children to ensure emotional self-protection due to high mortality rates and a low number of surviving offspring. Yet, there are contemporary written sources from England (Griego 2018), as well as Northern and Central Europe (Aldrin 2015) that actively tell stories about maternal and paternal grief, and also archaeologists frequently refute this notion by referencing attentive burials of stillborn, neonates, infants, and children as evidence of parental grief and afterlife concerns (Brather 2014: 18; Cannon and Cook 2015: 401).

Emotion, as a trigger of human behavior, can lead to various expressions of grief and mourning that are embedded into prevailing social standards and are usually constrained by norms and perceptions of adequate ways of handling death (Cannon and Cook 2015: 400). Expressions of individual pain and grief within the archaeological record is not always easy to identify. Especially in the case of atypical or non-normative burials, interpretations or motivations can be ambivalent. Storey and McAnany (2006: 67-70), however, concluded that *"exceptional infant burials can be explained by individual efforts to satisfy a personal need for loss-oriented grieving despite prevailing social standards"* (cited after: Cannon and Cook 2015: 412) in the course of their study on mortuary behavior in Maya culture.

In the already mentioned study on grief in English working-class families in the late 19th and early 20th century, Strange (2005) described a specific behavior of parental grief response within families with little financial resources. She argues that improvised burials of children (i.e. burials in unusual containers or a secret co-burial in another individual's grave) might *"represent a pragmatic resourcefulness, which enabled working-class families to retain all aspects of proper burial in spite of costs"* (Cannon and Cook 2015: 401). The funeral itself plays a major role in the context of rites of passage in most societies because it is a crucial component of the grieving process, of bidding farewell, and of altering the social roles of the departed (Strange 2005: 98-99).

Even though Strange's study was based on burials from a much later period than the one explored in this thesis, this idea may be arguable for medieval finds, especially from rural areas, as well. There are examples of burials of children and adults where the skeletal positions make it difficult to determine whether the co-burial was intended. This might be observable for instance in Grave 278 from the St. Johannis Churchyard in Nabburg, Bavaria, where skeletal remains of a neonate were found behind the legs of a senile woman lying on her right side (Fig. 42). Although stratigraphic observations indicate that both were probably interred at the same time, their placement does not give the impression that an attentive burial of two emotionally connected individuals was the intention (Hensch 2014: 428-429).

There are also several finds of infants being buried in unusual containers, such as the aforementioned pot burials (Gardela and Duma 2013: 323-325) which could also be compared to the infant burials in soapboxes that Strange (2005; Cannon and Cook 2015: 401) described within her study. Perhaps these atypical burial modes are driven by a similar motivation: to bury the lost child properly in terms of ritual acts in order to experience partial closure during the interment, even if material, financial, or spatial resources are insufficient or not available.

Following the classification of the present thesis, burials in unusual containers and in unusual location (e.g., the secret burial in someone else's grave pit) can be addressed as atypical or non-normative burials. In accordance with Storey and McAnany's conclusion (2006), these burials could be considered as an expression of loss-orientated stressors of parental grief.

Fig. 42: Burial of a senile woman lying on her right side in a narrow grave pit. Behind her legs were skeletal remains of a neonate. Stratigraphic observation suggested that the two individuals were buried at the same time at the St. Johannis churchyard in Nabburg, Bavaria. Early 15th century (Hensch 2014: 432).



However, grief is not only expressed in the general manner of a burial. Certain grave goods, such as those with apotropaic character, can also be interpreted as a reflection of parental afterlife concern or an expression of grief. B. Lohrke (2004: 111-112, 119) mentions, for example, the habit of placing keys in the grave, which she describes as a "*love gift*" from the mother to the deceased child. The same probably applies for finger rings, arm rings, fibulae, or other pieces of jewelry that, based on their size or wear patterns, likely belonged to an adult before entering the child's grave. Sometimes these objects were used differently from their original purpose or habit of wearing. Finger rings, for example, can be found slipped onto two of the child's fingers or worn around the neck or on a belt chain let. The

well-worn gombíky that were given to the girl buried in the isolated grave of Prague-Vinoř are just one example of reused adult jewelry (Štefan and Hasil 2022).

According to Härke's (2003a: 118-119) interpretation of the significance of grave goods in the context of mortuary behavior, personal items associated with valuable and emotional memories of the deceased, as well as other past-related artifacts, are buried for the means of grief coping. They may reflect interpersonal relationships between the deceased and the bereaved or have restoration-oriented qualities through the spatial removal of items that evoke painful memories.

Part of overcoming parental grief in the Middle Ages was the hopeful belief that the child will experience a good and secure life in the hereafter. One major tenet of medieval religious thought was the hope of resurrection on the Day of Judgment and eternal life in the kingdom of heaven. This was, however, only assigned to members of the Christian faith who had been introduced through the sacrament of baptism, which was also required for burial in the consecrated ground of the churchyard. The timing of baptism and the attitude towards unbaptized children and their post-mortem treatment varied throughout the Middle Ages. In early Christian periods, unbaptized infants were condemned to eternal hell and not allowed to be interred on the communal burial ground. In the 12th century the debate over the afterlife fate of unbaptized children found an answer with the introduction of the *limbus puerorum* (or *limbus infantium*). They found a refuge in the afterlife that seemed less appalling than actual hell, yet they were still denied a burial in sacred ground.

Although the concept of limbus may initially seem to be a way for Christian teachings to accommodate parental care, parents still made every effort to prevent their child from actually ending in limbus as it would have meant an eternal separation from the rest of the community, both physically regarding the place of burial as well as spiritually within the afterlife topography. Emergency and in utero baptisms, which were eventually permitted to be performed by laypeople, allowed a quick adaption of stillborn and infants with poor chances of survival rate and should guarantee that the child can be buried on the Christian burial ground (Cootes et al. 2021: 359; Hausmair 2017: 211; Hausmair 2018: 274-275; Hausmair 2020: 155-157).

The fact that unbaptized children were not allowed to be buried in consecrated ground of the communal churchyard led to a spatial dislocation and to maybe even clandestine burials of children on the churchyard, mostly along the churchwall. These are usually referred to as eaves-drip burials and represent an important testimony of parental afterlife care. In the already mentioned case of St. Georg's Church on Mount Göttweig in Lower Austria – a church without burial privileges – it seems that the local community found a way to circumvent this doctrine by burying their children away from

the actual communal burial ground, yet still in the vicinity of a church. As they were laid in sacred earth and facing east, they, nevertheless, showed all characteristics of a typical Christian burial (Hausmair 2018: 278-284). Similar observations were made at the sites of Gossam and Wien-Heiligenstadt (Lindenhöfer 2012: 43-67).

It's unclear whether the local clergy were aware of or even participating in these activities, yet B. Hausmair expresses skepticism that clergy did not notice recurrent digging and disturbed soil around the Church of St. Georg. As already described, the notion that child graves were buried beneath eaves so they could be baptized post-mortem through dripping rainwater is not tenable for the Middle Ages due to the lack of contemporary sources describing this idea. Instead, this particular location could have been selected to discreetly bury unauthorized graves. Parents ensured that their children may also access the celestial kingdom after resurrection by burying them in a Christian setting (Hausmair 2018: 278-284). Hausmair (2018: 283) further interprets this behavior to *"indicate a high degree of concern and devotion for such a problematic social group, reflecting a dissymmetry between the concepts and rules promoted by the Church and the ideas that were active in laic culture."*

Another vivid example for late medieval parental afterlife care, along with Göttweig, Gossam, and Wien-Heiligenstadt, are special pilgrimage sites, where children were taken to be post-mortally baptized. Through ritual acts, they were seemingly brought back to life, baptized, and subsequently buried at the site. Such places are found in Switzerland, southern Germany, Austria, northern Italy, France, and parts of Belgium, especially at the transition from the Middle Ages to Modern times (Hausmair 2020: 157).

One of the largest resurrection sites was located at the Church of St. Mary in Oberbüren, Switzerland, a late medieval to Early Modern place of pilgrimage. According to a letter from the Bishop of Constance addressed to the Pope, approximately 2000 children were resurrected and baptized here merely during the second half of the 15th century. However, the bishop doubted the supposed miraculous deeds and requested the pope to intervene. The pilgrimage and child resurrections at Oberbüren appear to have been fostered by economic interests of the associated monastery. The reawakening itself was also not carried out by members of the clergy, but by laywomen. The act involved warming the dead bodies in a room full of glowing coals and candles, and then taking them to the cold church and placing a feather on their lips. If the feather moved - simply explained by the alternation of temperature from warm to cold - the child was considered to be alive and was baptized. About 200 burials of stillborn, neonates, and infants up to a few months of age were found during excavations in 1993, allowing the archaeological evidence to support the written accounts (Ulrich-Bochsler 1997: 112-116; Ulrich-Bochsler et al. 2019: 255-260; Hausmair 2020: 157).

Another, yet younger place of pilgrimage where child resurrections and post-mortem baptisms were carried out was Schruns in Vorarlberg, Austria. According to records, 45 children were supposedly revived and baptized during the time from 1781 to 1785 (Ulrich-Bochsler 1997: 112).

Even if it is not evident from the archaeological or osteological record if a child was baptized and, if so, if the baptism was performed regularly or by a layperson as an emergency baptism, the burial of stillbirths and newborns at the communal burial ground is evidence of parental care for the afterlife. Obviously, they took charge of ensuring that a child was not separated from the community, neither physically nor spiritually. Attentive infant and stillborn burials can also be found in early medieval cemeteries. Even if not all children were buried in the communal cemetery, as was already discussed in the section on infant deficit, there is still evidence of a ritual handling of individuals who passed away at a young age. This is, for one, demonstrated by the fact that, like adults, they are given their own grave pits and that children of all ages are presented with the same or similar grave goods as grown-ups (Kraus 2002: 108; Lohrke 2002: 148).

Based on the evidence available, it could be discussed whether the children that are allegedly missing on the burial ground might also be connected to expressions of parental grief, in the sense that some parents preferred to bury their children in the shelter of their own homes or in other places that held special value for them. While not the norm in the early Middle Ages, child burials in a domestic setting were also not unknown (see for example: Beilke-Voigt 2015; Beilke-Vogt 2008b: 72). Isolated burials of children and adolescents like the double burial in Frankfurt (Cemper-Kiesslich et al. 2021; Wamers 2012), the juvenile horseman from Gnadendorf (Daim and Lauermaun 2006), and the girl from Prague-Vinor (Štefan and Hasil 2022), who were interred in prominent locations, are some examples for a great effort concerning post-mortem treatment outside of designated burial places.

Clustered graves of children on the communal burial site could be also discussed in the context of grief coping strategies. Cannon and Cook (2015: 404) evaluated remote positionings of children's graves in the light of the dual process model of bereavement and addressed the theory that infant graves were grouped in a separate area so parents could avoid frequent interactions and process grief without having to face reminders of their loss on a frequent base. Grief can be better dosed and loss-oriented activities can be postponed to a time of mental stability if the route to the child's tomb has to be consciously chosen and one does not automatically pass it on the way to the church service, for example. Assuming this is the case, designating a specific location for all or at least some of the children who passed away could have been a communal effort to alleviate the grief of bereaved parents.

It is difficult to determine how many archaeologically discernible characteristics of a burial can be directly linked to parental grief. For one thing, it must be emphasized again that only a fraction of the

actions carried out throughout the burial rite involve material goods or leave visible traces, and only a little portion of them is likely to survive in the ground, which is why it is always unknown how the actual funeral looked like and what immaterial components and actions were applied. Additionally, grieving is a profoundly personal experience that can take many forms. Even though basic psychological principles, like Bowlby's attachment theory (1951), are not overly reliant on sociocultural factors, the medieval imagination is more strongly influenced by religious constraints than our modern western Society, making it doubtful to what extent recent studies on coping with grief can be applied to earlier times.

However, it is important to consider how parental grief and coping mechanisms could affect mortuary behavior and whether acts triggered by emotional responses could influence the final appearance of a burial.



Fig. 43: *Dance of Death – Part 39: The Child*.
Woodblock printing by Hans Holbein, 1523-1525,
Rijksmuseum Amsterdam, Netherlands.

Representation of Lost Potential

During the Early and in some spatial setting the High Middle Ages, the staging of the deceased during the funerary is thought to represent his or her identity, social kinship or positions held within community and it was also utilized as a way to transport idealized images of societal orders (Brather 2009a: 248, 250-251). Social roles and individual identities continuously adjust throughout the life course and children slowly grow into the sphere of adulthood by passing several milestones on the way. Within mortuary contexts, their adaptation of maturity is usually expressed through changes in the number, types, and composition of grave goods (Brather 2009b: 95). Some child burials, however, do not follow this pattern and were more lavishly equipped with more high-quality pieces or objects that are not deemed to be age or status appropriate. This portrayal might have had the purpose to create images of an envisioned future and display the child's lost potential (Brather-Walter 2015: 91).

The desire of parents to represent their child's missed potential in the tomb and the afterlife can also be discussed in the framework of grief processing. Death signifies a discrepancy in the imaginations of the bereaved between their known world, where the deceased had a solid place, and the actual – new – reality, in which he or she is no longer there. A specific representation during funeral ceremonies could thus be seen as a way of restoring correspondence between the old and new reality and generate a new memory of the deceased. Providing material items or other particular funeral treatment which represent stages or future assignments that the individual missed out on due to the premature death may serve as compensation for lost experiences (Härke 2003a: 114).

These metaphorical grave goods can stand in for a specific social status, such as a warrior rank, symbolize a profession, or even marriage and parenthood as significant turning points in a person's biography in the Middle Ages (Brather 2009a: 256; Brather-Walter 2015: 91; Toplak 2017a: 130-131).

The child burial, which was discovered in the smithing workshop of Kümmersbruck, next to two adult males, can possibly be addressed in terms of the underlying idea of representation of lost potential. The burials, however, deviate from the temporally and spatially typical burial pattern in multiple ways, and therefore have to be considered on different levels of interpretation.

The age gaps between the three individuals of Kümmersbruck and the skeletal stress markers and activity patterns on the adult individuals might suggest that these are two generations of practicing blacksmiths and perhaps a third following generation (Hensch 2018: 83-84). In the (early) Middle Ages, the profession of the blacksmith was inheritable. This means that the blacksmith's tradition is passed on from one generation to the next, from father to son (Tobias 2021: 53; Melzer 1993: 82). In the medieval mindset, blacksmithing was also associated with something sinister or even magical. Smiths were highly respected, but at the same time they were also dreaded. The ability to transform a stone-

like piece first into something hot and liquid and finally into a steel hard, shiny, and powerful item, as well as the mastery of fire, seemed to be related to supernatural powers. The blacksmith held a position of "*marginalized centrality*" (Tormey 2017: 109); while he produced indispensable objects of daily life and represented a central person of society, people nevertheless tried to avoid him if possible (Tormey 2017: 109-111).

The burials date to the late 8th century (Hensch 2018: 83-84), a time when the area of today's Oberpfalz was no longer completely pagan, but Christianization had not yet progressed to the point of a total abandoning of pre-Christian customs, especially those surrounding death and mortuary treatment (Losert 2020: 204-205). In the case of Kümmersbruck, M. Hensch (2018: 83-84) considers that these interments away from the communal burial ground may represent a compromise between pagan and Christian burial traditions. Due to Christian doctrines, it was no longer customary to include grave goods beyond costume components. In order to represent their status as a blacksmith in the hereafter other than through co-buried items, they were buried in the spatial setting of their workspace. Since the graves can be dated to the first phase of use of the forge, Hensch addresses the possibility that the adult individuals could represent important personalities in the process of establishing the production. However, their burial location might also indicate that the community still wanted to maintain a certain distance from the blacksmiths, resulting in a spatial separation, with the infant being buried among them, maybe due to his status as the designated following smith.

Another unusual grave associated with blacksmithing is the burial of a one-year-old infant found in Saffig-Wannenköpfen, dating from c. 550 to 650. While in Kümmersbruck the profession of the smiths was reflected by the place of burial rather than through included grave items, it is the opposite in Saffig. The infant buried in grave 110 was equipped with a wooden box containing smithing tools, half-finished objects as well as raw material such as sheet metal and lumps of lead (Melzer 1993: 79-86; Tobias 2021: 53, 389).

Melzer (1993: 82) concluded that this child most likely hailed from a family of blacksmiths and that he was supposed to pursue this line of work in his later years, which was hindered due to his untimely death. Because of the missed chance to learn and practice the profession, the tools that were most likely intended for him were placed in his grave. The profession was thereby passed on, at least symbolically, to the designated heir. Through the goods that were provided, the child also took on a new identity, which depicted him as a blacksmith in the afterlife. Possibly the equipment was therefore also intended for the practice of the profession in the hereafter. Lohrke (2004: 105, 109) argues that tools in the graves of very young children in general could be seen as an expression of the heritability of crafts. Besides work utensil, the presence of weapons in the burials of subadult individuals is also

viewed as an imitation of the adult world, a display of family prestige, or a representation of lost warrior potential.

While the portrayal in boys who died at an early age usually refers to the representation of profession or warrior status, the focus in graves of girls in the early and high Middle Ages is rather placed on the representation of the lost potential as a married woman (Gutsmiedl-Schümann 2014: 420, 425; Brather 2008b: 482).

This is assumed, for example, for the grave good assemblage found in the isolated burial of Prague-Vinor, which I. Štefan and J. Hasil (2022) have interpreted as a wedding costume. A similar pattern was hypothesized for the graves 190 and 254B from Dirmstein, Rhineland-Palatinate, dating from c. 550 to 880. The grave goods are also addressed as a typical costume for a grown-up, maybe married woman the Rhine-Neckar region. Grave 254B was positioned prominently within a ring ditch and may have been mounded, making it noticeable from afar. Only a small portion of the 290 burials that were discovered at Dirmstein were buried beneath burial mounds, which might be a sign of the child or her family's privileged position (Leithäuser 2011: 364-370, 409-416).

The suggestion that young girls were dressed as brides during the funeral has probably been derived from comparisons with the Modern Period concept of *death marriage*, *Totenhochzeit* in German folklore. An unmarried person—female or male—received a death marriage during the funeral to compensate for the loss of an actual wedding. This becomes archaeologically tangible from the 16th until the 20th century through so-called death crowns or special flower bouquets in the graves of children, adolescents, or young adults (Lippok 2017: 82). A. Pollex (2003) attempted to decipher burial practices of Western Slavic tradition through the analysis of Modern Period folklore and concluded that the custom of burying unmarried girls in bridal attire dates can be observed based on grave good assemblages, especially the number of headdress rings. These observations, however, were based on graves of 18 females identified from a single site, the Late Slavic burial ground of Penkun (Mecklenburg-Vorpommern) which might be insufficient to draw inferences. S. Brather (2008b: 482-484) is doubtful of this explanation and instead connects the fact that female burials from juvenile to late adult age typically include more grave goods to the social worth of women during their reproductive years.

The representation of the lost potential of a prematurely deceased child can be an important coping mechanism for parents to gain an additional experience with their offspring. It is also a way to transport afterlife ideas and a display of dead identity (Brather-Walter 2015: 91; Brather 2009a: 248).

In his guidelines to help parents coping with perinatal the psychologist I. Leon (2008: ¶ 6) states that “*So much of perinatal loss involves grieving the loss of the future: relinquishing the wishes, hopes, and*

fantasies about one who could have been but never was.” Future experiences are not only taken from the departed individual, but the mourning parents also miss out on identity-forming experiences, such as childrearing or becoming grandparents.

On a TedX Talk, the bereaved mother Penny Kreitzer (2017: 2:50), summarized a child’s death as: *“the loss of child is always nature backwards.”* In the light of this statement, the representation of a child’s lost potential might symbolize a small step into an imagined future, a step forward, and thus might be a small piece of pain relieve.

Fear of the Dead and Death

Deviant burials are typically understood as an outcome of superstition, the profound fear of the dead or the undead. Specific mortuary treatment, as well as post-interment manipulations, are commonly interpreted as attempts to prevent the dead from returning and causing harm (Aspöck 2008: 21). To some extent, this notion is based on the dualistic perspective of the mediaeval imaginary world and a distinction between *valde boni*, the good death, and *valde mali*, the bad death, which was linked to ideas about how or when death should occur (Schmitz-Esser 2016: 160). A good death is timely, free of guilt, preferably surrounded by loved ones, and followed by a burial ceremony where all components and rituals have been conducted properly and without incidents. A bad death, on the other hand, is essentially the opposite. It refers to circumstances where people passed away violently, untimely, or unexpectedly. Many societies believe(d) that those who experienced a bad death were more likely to return as revenants (Gardeła 2017: 21; Hausmair 2015: 43; Heller 2009: 14). Negative perceptions of someone’s death can also result from improperly carried out or scheduled funerary rites, as well as from the absence of necessary elements (Franz and Nösler 2016a: 47-48; Krög 2015: 23-24; Schmitz-Esser 2016: 54).

The undead and the fear of the dead is a topic that has been covered in a considerable number of historic written sources, especially in the Late Modern period. There is a wealth of literature, particularly from the 17th to the 19th centuries, that explores this subject from various angles (Thomas 2015: 6). Medical treatises (for example: van Swieten 1768; Ranft 1728) sought to explain the rational basis for reported revenant occurrences and to persuade the public of their invalidity (Windgassen and Hartwig 2017), while from the 19th century onwards the theme was romanticized and portrayed in invigorating and erotic ways in lyrical and poetic works, such as Bram Stoker’s *Dracula* (Brandes 2015: 14). The topic has also been picked up in archaeological research and is sometimes referenced as the Archaeology of Fear (Biermann 2009; Brather 2007; Caciola 2016; Cherubini 2011; Crandall and Martin 2014; Franz and Nösler 2016a; Franz and Nösler 2016b; Genesis 2018; Gregoricka et al. 2014; Kaznakov

2013; Müller 2020; Nösler 2014; Pomberger and Stadler 2018; Stülzebach 1998; Taylor 2018; Thomas 2015; Tsaliki 2008)

Based on etymology, designations, and narratives about various kinds of undead date back to the early Middle Ages. The word *upir/upyr* originates from Proto-Slavic language and is the source of the modern term *vampire* as well as the Turkish word *uber* for witch (Etymologisches Wörterbuch 1993). Various Norse sagas mention the mythological figure *draugr* which is a kind of dangerous dead or undead (Gregoricka et al. 2014: 2-3; Thomas 2015: 7-8; Bodner 2006). However, the concept of revenants was not confined to Norse and Slavic regions, it was also a part of Germanic, Icelandic, and Anglo-Saxon culture (Stülzebach 1998: 99). The *Lex Salica* also recounts the belief in the undead and related grave intrusions (Seebold 2019: 6-10).

During the time between the 9th and the 12th century, as the church's authority increased, revenant tales, associated banishing rites, and other forms of non-Christian resurrection were rejected, euphemized or used as a propaganda tool against pagan forms of belief (Thomas 2015: 7). Though the number of written sources from the Early and High Middle Ages are significantly lower than from later periods, these notions were still written down, even by clerical people, for example in the *Chronicles of Bishop Thietmar of Merseburg* (Krög 2015: 26). Despite all attempts to limit folk belief and to provide Christian approaches, the fear of the undead endured in the common mindset of Christian Central Europe well until the 19th and even the 20th century (Franz and Nösler 2016b: 62).

Evidence of peri- and post-mortem body mutilation, immobilization of the dead body, and burials outside the communal burial ground may represent indications of belief in the undead from prehistoric times and testimonies from ethnological sources confirm that this is a phenomenon that transcends time, place, and culture and is not specific to certain religious groups (Gregoricka et al. 2014: 2-3; Thomas 2015: 7-8; Bodner 2006). Instead, it is argued that belief in the undead is a persistent, cross-societal, and cross-religious method of processing hope and fear in response to death that can reappear in all settings, even without a constant transmission of the idea (Biermann 2009: 6; Bodner 2006).

The basic element of revenant belief is the idea of a living corpse, i.e. the thought that the dead person lives on in the grave and still exhibits evidence of life (Stülzebach 1998: 99). Broadly speaking, European folk belief knows two categories of undead or restless dead: those who physically emerge from the grave and those who comfortably carry out their mischief staying in the grave. In German folklore, the later are called *Nachzehrer*, as they gain strength from feasting on people's vital energy from afar. The so-called *Neuntöter* were a particularly dreaded form of the subadult undead who did not have to leave their grave to bring harm. These were children that were born with teeth or displayed

hyperdontia, a surplus of teeth. If these children died prematurely, nine other family members were predicted to pass away soon after. In the 14th century, *Neuntöter* were also accused of being the cause of the plague. The adequate measure to keep these restless dead from causing harm, as transmitted in oral and written tradition, was to decapitate them before the burial (Gardeła and Duma 2013: 326; Bächtold-Stäubli and Hoffmann-Krayer 1942). *Zwiesäuger*, or children that were breastfed again after being weaned, are another type of dangerous undead children that could cause the following death of other family members (Thomas 2015: 10). The question of whether people in the Early and High Middle Ages already believed in the ideas of *Neuntöter* and *Zwiesäuger* cannot be resolved based on the existing written sources. The lack of description could be attributable to a general scarcity of sources compared to the subsequent periods, or to censorship. As other types of undead can be traced back to this time, it is reasonable to assume that these phenomena were also known longer than they were transmitted in writing.

Undead that actively leave their tomb are, for example, revenants, *Wiedergänger* in German. According to the *Reallexikon der germanischen Altertumskunde*, revenants are defined with the following criteria: It is a deceased person who does not enter the afterlife after biological death but continues to exist in the realm of the living for a limited or unlimited time. It maintains agency, rights, and obligations, and its presence potentially cause the deaths of surrounding persons. Additionally, revenants typically still have human emotions and desires, including hunger and sexuality. Unlike ghostly apparitions, they keep their physicality, but in some folktales, they can transform into animals or objects. They are also thought to have enhanced knowledge and physical power, which makes them exceptionally dangerous (Bodner 2006).

The reasons why a deceased individual might be considered as a dangerous dead can be divided into three groups. Individuals who already had a marginal social position throughout their lives, such as criminals, nomads, ill or disabled persons, or even foreigners, are the first category of people who are accused of returning from the dead. Victims of juridical acts are also included in this category of dangerous dead. The second group is defined by the violent nature of their death. These are either homicide victims or persons who committed suicide, as well as casualties of (natural) disasters or accidents. The third group of allegedly dangerous dead are people who passed away prematurely. These are children and adolescents, unmarried women, or mothers who died in childbed. People who passed away with debts or other unresolved affairs are also included in this category (Aspöck 2008: 20-21; Biermann 2009: 3; Franz and Nösler 2016a: 47-56; Gardela and Kajkowski 2013: 781; Thomas 2015: 23-25).

The idea that children, adolescents, or unmarried people become restless dead and thus must be treated differently in the event of their death can already be found in written records from both Greek and Roman Antiquity. In ancient Greece, the *aoroi*, i.e. individuals who passed away too soon, were feared because it was believed that they would cast evil curses on the surviving kin. In Christian settings, unbaptized children were of particular danger to be affected by satanic forces and to return from the dead, because they retained Original Sin and did not stand under godly protection (Cootes et al. 2021: 359).

Evidence for a particular way of post-mortem treatment of pregnant women, as well as women who died during or shortly after birth can for example be found in written sources. According to the historian and canonist Regino of Prüm (c. 840-915), children who die unbaptized and women who die during labor become revenants and should therefore be buried in *locis secretis* - in a secret place - and in complete secrecy. There are also indications for a special treatment from the archaeological record. One of the most striking finds might be the burial of a woman pregnant with twins (Grave 194) in the churchyard of Greifswald, Northeastern Germany (Fig. 44). The churchyard was used from the 13th to the 19th century. Based on stratigraphical observations Grave 194 can most likely be dated to the late Middle Ages. The adult female was buried in supine position, the right arm was stretched out next to the body, the left was bent above the chest. Well preserved skeletal remains of a fetus were found in the abdominal cavity and another fetus was found inside the birth canal. Although the discovery of a twin pregnancy is rare, the most remarkable feature of the burial was the fact that the woman's skull, including the first two cervical vertebrae, was missing. Two fragmented bricks were instead found in the place of the skull (Ansorge 2003: 185-187).



Fig. 44: Burial of a pregnant woman with the skeletal remains of a fetus inside the abdominal cavity and another one inside the birth canal. The skull of the woman was removed and replaced with bricks (Ansorge 2003: 188, Fig. 6).

From the moment of birth until the blessing of the mother and the baptism, mother and child were regarded as unclean and under the threat of evil spirits in Christianity, as well as in folk belief. As a result, pregnancy, birth, and the post-partum period are frequently accompanied by rites and rigorous rules of conduct. These rituals often involve a handling of the placenta, such as by burying it in containers (*Nachgeburtstöpfe*). Folklore from the late mediaeval and early Modern time suggests that the placenta was traditionally buried because of the possibility that an evil entity might steal it and use it to harm the family. Despite the absence of known finds from the early and high Middle Ages that indicate how the placenta was treated in this period, S. Dalacker (2017: 259; and further personal communication, 2018) considers that there should be analogous traditions and a similar significance of it in the context of post-partum rites as there is in the Late Middle Ages and Modern Period.

B. Thomas (2015: 21-22) argues that there are five distinct aspects that contribute to the belief in revenants. Besides eschatological (culturally and spiritually specific mortuary notions), social (e.g., the untimeliness of death or the social position of the deceased), and psychological (fear of the uncertainty of death) factors, these are of biological or epidemiological nature. From a biological perspective, a contributing variable to the fear of undead was a lack of understanding of putrefaction and decomposition processes observed during exhumations of allegedly dangerous dead. These included the bloating of the corpse caused by decomposition gases, which gave the impression that the person was still well-fed, wrinkle-free, and healthy. It might also result in penile erection, which was probably responsible for the sexual component in later vampire myths. Bloating can also lead to a post-mortem extrusion of a fetus in the case of the death of a pregnant woman (Thomas 2015: 14-16). Additionally, putrefactive gases produced sounds, which M. Ranft (1734; 1728) described as chewing and smacking noises. Fingernails and hair that appeared to be growing were other visual triggers. However, this illusion is simply generated by the skin shrinking and contracting. Aside from that, secretions associated with decomposition that resemble blood may leak from the mouth. In the further course of putrefaction, the epidermis peels off and reveals an underlying layer of skin which is elastic, moist, pinkish, and glowing. If a grave is uncovered at this stage of decomposition, these factors might give the impression that the corpse is still alive (Thomas 2015: 14-16). Possible sounds, described as moaning or screaming, that were heard during the staking of alleged vampires can be explained by the squeezing of the chest and the resulting movement of the vocal cords (Stülzebach 1998: 104).

The belief in *Zwiesäuger* can also be contested from a biological standpoint. There is a direct link between weaning and infant mortality, as several research on past and present populations have demonstrated (see for example: Dittmann and Grupe 2000; Beaumont et al. 2015; Pearson et al. 2010; Rebay-Salisbury 2017b). This is attributed to infectious or diarrheal diseases induced by contaminated food, intolerance to subsequent feeding or malnutrition. However, weaning can also have a negative

effect on the mother's health and immune system (Beaumont et al. 2015: 442). The following death of the mother might thus not have been uncommon, particularly in eras with unstable food supplies, poor hygiene standards, or inadequate medical care. Blaming the previously deceased child for feasting on the mother's vital energy and thus causing her death would probably have been a causal explanation in the medieval mindset.

Particularly during epidemics, tales of *Nachzehrer* and other restless undead multiplied. Diseases that are highly contagious and severe, like the plague, quickly claimed a large number of lives. People sought explanations for these occurrences and believed that the subsequent fatalities were brought on by restless undead rather than considering the disease as the reason for the deaths. The church was helpless to prevent these numerous deaths caused by seemingly invisible forces, and it appeared impossible to enact banishing measures quickly enough. Because the victims of epidemics frequently stayed unburied, at least temporarily, the reported smacking and chewing of the dead and visual expressions of putrefaction were more frequently experienced and described with particular emphasis which probably further promoted superstitious belief in undead (Thomas 2015: 18-19; Franz and Nösler 2016b: 64-65).

M. Ranft began looking for a psychological explanation for supposed revenants' recurring appearances in the dreams of their living relatives. According to his thesis *Dissertatio historica-critica de masticatione mortuorum in tumulis oder: Vom Kauen und Schmatzen der Todten in den Gräbern*¹⁰ (1728) an unexpected, violent, or sudden death creates more disruption to the bereaved than a death that was foreseen. This anguish causes suffering and depression, leading to sleepless nights and anxious dreams about the deceased. He also gave examples of instances in which immediate family members died soon after because of extreme exhaustion brought on by a string of restless nights and scary nightmares. Ranft concluded that following deaths of several persons within a short time might thus be the deadly result of physical and emotional collapse rather than a wandering vampire dragging people into the afterlife with him (cited after: Franz and Nösler 2016a: 14-15). This corresponds with the notion that violently or untimely deceased individuals were feared to end up as restless dead.

Examples of banishment practices against undead that actively leave the tomb and that are tangible in the archaeological record include securing the grave with rocks or other heavy objects, as well as fixing the body with knives, sickles, or nails. The 8–9-year-old child that was buried in Grave 11/92 in Dziekanowice, Poland, displays both measures. It was placed on a layer of stones and covered with additional rocks. Furthermore, a knife that was thrust vertically in the ground was found immediately next to the skeleton (Gardela and Duma 2013: 321). Another method of immobilization

¹⁰ *The chewing and smacking of the dead in the graves (author's translation)*

was to tie up the corpse. Burials with an unusual body posture which suggested that the subadult individual was shackled or otherwise restricted in a certain position at the time of interment, were found, for example, in Berlin-Spandau (Stülzebach 1998: 113), as well as Wawrzeńczyce and Cielmice, Poland (Gardeta and Duma 2013: 321).

Another possibility to prevent alleged *Nachzehrer* from causing harm was to put objects made of imperishable material on their face or into their mouth. This was, for example, observed in Grave 53, of Növenthien, in Germany, where a child that was buried in the 12th or 13th century was found with four coins in the mouth cavity (Peters 1966: 111; Stülzebach 1998: 110). Similar motivation could be discussed for the burial of an approx. 9 months old infant buried along the church wall in St. Thomas in Holzheim, Germany, which was found with a rooftile covering its face (Wand 1989: 56-57) and for the infant buried in the church St. Catharine am Jellenbek, northern Germany, in the late 16th century, which had a drop-shaped rock placed between its jaw (Wehner and Grüneberg-Wehner 2014). The Tunel-Wielki burial, which was previously examined in the context of graves in unusual places, might also be addressed here because of the finch heads discovered inside and next to the girl's mouth (Wojenka et al. 2021). Aside from preventing the undead from rising from the grave, coins found in or near the mouth are usually associated with the concept of the Charon's penny, which was already known in ancient Greek. This refers to the notion that deceased had to tip the ferryman in order to proceed into the afterlife. Yet, these ideas are somehow connected since in both spiritual contexts, a coin is used to help the departed to transcend from this world and to enter the realm of the dead (Stülzebach 1998: 110).

Placing the dead in a prone position as was, for instance, observed in three burials in the Avar burial ground of Orosháza-Bónum Téglagyár (Hungary, Juhász 1995), in Ornding (Lower Austria, Wais 1967), Schwanenstadt (Upper Austria, Tovornik 2002), Mockersdorf (Bavaria, Brundke 2013b) and Langenau (Baden-Württemberg, Hachmeister 1992) are also usually considered to be a banishing practice to keep the dead in the grave. This was supported by the idea that if the deceased awoke from being dead, they would dig themselves deeper into the earth rather than upward. It was also believed that this position would prevent the evil soul of the deceased to exit the grave and was interpreted as an act against the evil eye to protect the living from harm. In times of epidemics, it was further thought that prone burials would trap the disease in the body of the deceased to avert transmission to the living population (Toplak 2017b: 44-45).

Compared to turning the corpse upside down or placing objects on their face, active mutilation of the dead body is a more violent and vehement anti-revenant action. This involves the amputation of body parts or the removal of the head, as well as the complete dismemberment of the corpse with a ritual

or apotropaic background. Staking the dead body is an additional method and entails driving a (wooden) stake through the heart. Impaling and decapitating are noted in Modern Period folklore as the most effective defenses against undead of all kind (Stülzebach 1998: 111).

The staking of children was already recorded in written documents at the beginning of the 11th century by Bishop Burchard of Worms. In his collection of canon law, *Decretorum*, he criticizes the custom of impaling and burying unbaptized deceased children in hidden places. He provides historical evidence of this behavior among the lay population as well as the fact that this act was condemned by church doctrines. At the same time, this source indicates that prematurely deceased children were regarded as potentially dangerous dead on the transition from Early to High Middle Ages. Burchard of Worms documented similar conduct for women who died during or shortly after childbirth. He claims that mothers were also frequently impaled with stakes prior to being buried together with their child (Aspöck 2005: 234; Hausmair 2020: 154).

In conclusion, it can be argued that anti-revenant practices can be identified in written sources and the archaeological record for a very long period. These, however, are not relics of a pagan belief, but rather represent a continuous and subconscious apprehension of death, burial sites, and associated supernatural powers that transcends society and faith (Biermann 2009: 7). Banishing measures and post-mortem rites must be evaluated in terms of their effort and level of interaction with the corpse. It must have been undoubtedly simpler and discreet to put a coin in the deceased's mouth at the time of burial, for example, than to reopen the grave, exhume a decomposing body to manipulate or mutilate the corpse (Stülzebach 1998: 106).

In archaeology, the interpretation of unusual burials as a response to a dangerous and restless dead has long been overstretched and applied to burial finds in a simplistic manner, often without a careful evaluation of contemporary sources. Given that many written documents describing encounters with undead originate from modern folklore, any assertions on mediaeval graves must be approached with skepticism. Nonetheless, there is evidence and confirmation that the fear of the undead was part of the mindset in Antiquity and, later, in the Early and High Middle Ages, though it is not entirely clear how these notions are perceived and handled (Brather 2007: 114-116).

The Intersection of Childhood Identity and Burial Treatment

This thesis is based on the assumption that age was an influential factor for the way an individual was treated after death. Reaching a specific stage of physical development, as well as the completion of initiation rites can be the determining factor for whether a subadult person is disposed without any ceremonies, informally buried within the family context, or granted community-typical funerary treatment. This habit is well known from different ethnographic and archaeological records, for example in Roman tradition (Lewis 2007: 31). Funerary treatment may also serve to monitor a child's development from not being considered a complete member of society, or even as being only partially human, to a fully socialized human being (Lancy 2014: 87-88; Grove and Lancy 2018: 91).

During the Middle Ages, the funerary behavior was tailored to the respective individual, referring to the social identity of the deceased, as well as the timing and manner of death (Hausmair 2015: 44). Based on this, one objective of the present study was to distinguish other identity-forming characteristics, such as gender, health, or social position, that were highlighted in the funerary conduct and which of these elements may have contributed to a deviant treatment of children after death.

Like the concept of childhood, the term *identity* is complex and difficult to outline. At a macro level, it is defined as *"the individual characteristics by which a person or thing is recognized"* and as *"the state of having unique identifying characteristics held by no other person or thing"* (Colins English Dictionary). It can relate to a collective social identity, as well as to a personal identity or self-identification. Identity traits that are typically discussed are sex/gender, age, ethnicity or origin, socioeconomic status, as well as religion and these can be linked to both social and personal identity (Díaz-Andreu 2005: 1-2). Further aspects, such as parenthood (Rebay-Salisbury 2017a: 67; Fadjuoff et al. 2016) or diseases and disabilities (Smith and Mueller 2021) contribute to the shaping of an individual's unique traits. Identity is influenced by interpersonal interaction and the process of developing agency (Díaz-Andreu 2005: 1-2).

The idea of a distinct identity is typically associated with adulthood, with persons who are fully developed and mature, rather than with childhood and evolving individuals. However, the foundation of identity is established in childhood. Children consequently do not lack identity; rather, it is advancing and taking on different forms with each stage of a person's growth, every experience, and every interaction with other people (Dommasnes 2008: XIII). Identity does not develop independently at different stages of the life course, but is connected to previously gained knowledge, past experiences, and future prospective (Hausmair 2013: 273-274). Regarding the extended life course, in the medieval mindset the individual is still considered to have its own identity after death and sometimes even before birth (Hausmair 2015: 40; Gilchrist 2012).

By using social bioarchaeological approaches, the primary goals of studying prehistoric and medieval grave sites are to reconstruct the social structure and obtain inferences about past life derived from funerary practices. Within this scope, individuals are generally classified into social clusters based on identifying characteristics. Distinct identity traits such as gender, age category, social status, profession, or origin are typically reconstructed through the analysis of accompanying grave goods, which is a suitable method for prehistoric and early medieval graves with a lot of co-buried items and dress components. However, for burials with few or no grave goods, such as those in the High or Late Middle Ages, this source is limited, making it difficult to infer a materially articulated identity (Hausmair 2013: 274). Osteological and biochemical examination of human remains provides further hints on a person's visual appearance through a precise assessment on age-at-death, health status, pathological condition, phenotype and morphological, or chromosomal sex. This enables additional indications about perception, abilities, and limitations (Brather 2005: 157; Brather 2015: 56; Bösl 2017: 268).

Different expressions in the burial process, such as the burial mode, grave design, grave goods, etc. are utilized to reflect numerous facets of identity, interpersonal relationships, societal structures, as well as religious and spiritual ideals (Toplak 2017a: 126). On the other hand, some characteristics cannot be expressed through conventional funeral customs and necessitate special treatment, leading to atypical burials.

Sex, as well as gender, is an important factor in interpreting identity since in most communities it defines a level of participation and capability, establishes a social affiliation, and indicates how societies articulate the expression of culturally constructed gender and biological sex. During the Middle Ages, the perception of genders and their roles were determined by religion, not only Christianity, but also Islam and Judaism and all of them *"spoke about women and gender in a remarkably coherent chorus"* (Bennett and Mazo Karras 2013: 5). Women were subordinate to men in every way and the differences between male and female were considered to be God-given (Bardsley 2007: 2-3; Bennett and Mazo Karras 2013: 5). While this thesis does not allow for a comprehensive discussion of overall gender inequality throughout the Middle Ages and beyond, I do want to stress some notions on differences between girls and boys in the context of atypical burial treatment and within archaeological research itself.

Given the major disparities between men and women that are detailed in written sources (Bardsley 2007) and visible in the osteoarchaeological record (Uren 2021), it is assumable that girls and boys were already differently approached starting from early childhood or even birth (Bennett and Mazo Karras 2013: 2). The limited number of biochemical sex assessment of prepubertal skeletal remains that has been done so far, as well as the minor number of written sources that provide precise

indications of how boys and girls were treated still present challenges to this notion. Yet, there are several common preconception concerning differences between girls and boys in prehistory and medieval societies. One of them is that sex-based infanticide was a common practice with the anticipation that girls were more frequently killed or abandoned than boys (Scott 2001: 143; Vuolanto 2011: 4).

Evidence for infanticide in archaeological records is indirect and typically inferred from the discovery of skeletal remains in the housing context or other burial clusters of neonates outside of the community burial site, as well as an imbalanced male-to-female ratio in the adult population. Victims of infanticide are usually thought to be illegitimate, ill, or disabled children or girls and there is a general differentiation between active infanticide through killing and passive infanticide through conscious or unconscious lower parental investments (Lewis 2007: 90; Lohrke 2004: 37; Ulrich-Bochsler 1997: 94). Complex regulations for legal infanticide are, for example, known in Ancient Rome where sick or disabled children were allowed to be killed. Furthermore, a child's survival depended on factors including sex and birth order. While all boys and the first-born daughter were obligated to be raised, following female offspring were free to abandon or murder (Rebay-Salisbury et al. 2020: 265; Krauß 1998). Sex-based infanticide is also recorded in medieval literature such as in the *Vita of Saint Liudger*, written c. 850 (Lohrke 2004: 36). The *Vita of Otto of Bamberg*, written in the mid-12th century, also recounts the intentional killing of girls in Slavic communities around the Baltic Sea. Similar to Roman custom, if a woman had multiple daughters, it was acceptable for society and existing legislation to kill some of them to be able to take better care for the others (Biermann and Wenzel 2017: 126).

These sources are, however, insufficient to offer comprehensive answers because they only provide a superficial insight of this challenging subject. Although the deliberate murder of girls has been documented across time and space and sex-based selection occurs to this day in some regions of the world (OHCHR 2011), it is unclear how common this practice was during the Middle Ages. Particularly given the generally small sample size of stillborn and newborn children from several early medieval burial sites and the dearth of biochemical sex identification (Ulrich-Bochsler 1997: 93-94). Neonaticide, infanticide, as well as abandonment and neglect of children due to various reasons is nevertheless practiced throughout the entire Middle Ages as indicated by the fact that it is continuously recorded within laws and regulations (Obladen 2016). The *Lex Alemannorum*, for example, documents care for girls, which is evidenced by a higher amount of *wergeld* in the instance of murder or physical abuse, providing a contrast to the supposed sex-based infanticide (Coleman 2012: 60; Lohrke 2004: 29). The high price for girls is commonly interpreted as a reflection on the female importance of a community's persistence, which is also highlighted by lavish burial for girls and women during late infancy-II-juvenile

and adult age in the Early and partially the High Middle Ages. These life stages correspond to the biological stage of reproduction and the legal age for marriage. S. Brather (2008b: 482-483) contends that elaborate burial goods, which usually outshine male burials, should be seen as an indication of the biological and social significance of women.

However, a child's sex not only affected whether or not it was consented to live, but also its subsequent societal perception. Women were typically more often connected with evil energies and perceived impure during the Middle Ages, a view that was further motivated by Christian teachings (Bennett and Mazo Karras 2013: 1-2; Gardeła and Duma 2013: 326). Since adult women were frequently feared to become dangerous dead (Aspöck 2008: 20-21; Biermann 2009: 3; Franz and Nösler 2016a: 47-56; Gardeła and Kajkowski 2013: 781; Thomas 2015: 23-25), it seems plausible that subadult girls likewise were linked to negative sentiments. The gender division within the present catalog could be a reflection of this specific attitude towards female children. While there are 44 individuals whose gender and/or sex was identified as female or probable female by means of grave goods, skeletal morphology, or aDNA analyses, only 11 individuals were addressed as male or probably male. The majority of the recorded burials, however, remained unsexed. In my opinion, it is debatable whether this unequal gender distribution necessarily reflects disparities in the funerary protocol of boys and girls or if it is the result of a methodological issue or a pervasive research bias.

Within funerary archaeology it has been established that certain grave goods or dress items, such as weapons or jewelry, are typical for one gender, while some are not gender-specific (Härke 2003b). This categorization was initially based on graves of adult individuals, for which it was easier to identify both sex and gender. Despite the inability to double-check the correlation between sex and gender due to the uncertainty of sex assessment based on subadult skeletal morphology (see for example: Lewis 2007: 47-55), the ostensible outcome of a gender division of objects was transferred to the graves of children. Archaeological gender evaluation has frequently taken the place of anthropological sex assessment.

In early medieval burial archaeology, the gender of buried infants is usually determined by the presence or absence of beads or other pieces of jewelry that are considered to be female adornment. In some Merovingian cemeteries way over 50% of the graves of children of the age group *infans I* included beads, which led to a supposed surplus of girls of this age class. This fact has frequently been linked to lower parental investment, differences in rearing or diet, or sex-based infanticide. However, B. Lohrke (2004: 36-37, 174) as well as S. Brather-Walter (2014: 408-409) both contend that the habit of adorning a deceased child with beads might rather be age- than gender-specific within the temporal and spatial context of the Alemannic regions. The number of infant graves containing beads might

therefore not show a surplus of girls and a higher mortality rate for female infants. Consequently, this means that boys are not underrepresented in these early medieval cemeteries; instead, they would simply not be portrayed as male but as infants. It appears that age, rather than gender, served as the primary, influencing factor for grave good components of individuals of the age class infants I in Merovingian traditions in today's southwestern Germany. According to Lohrke and Brather-Walter's argumentation, there is no imbalance in the percentage of boys and girls on burial sites, but rather a difference in the visibility of the allegedly gender-typical grave goods and a biased research opinion concerning gender representation. Though, these assumptions are not confirmed through biomolecular analyses either, they nevertheless raise source-critical considerations about the gender conceptions of archaeological research.

Another striking observation in the scope of the present study was that the vast majority of graves that were equipped with grave goods that are assigned protecting, healing and apotropaic features were described as those of female children. There is no evidence that female individuals are more likely to be buried with these items due to the general lack of case studies of early or high medieval burial sites that correlate gender expressed through grave goods with biochemically assessed sex. This might raise the question of whether the presence of such artefacts tempts researchers to automatically infer the gender and sex of the buried child and thus result in a circular argument of the gender-specificity of certain goods and the general overemphasize of female individuals to end up as restless or dangerous dead.

Besides age and gender, the most decisive characteristic for a person's status and identity in the Middle Ages was their socioeconomic position (Bardsley 2007: 1-2). This is also evident in the present study, since the majority of the documented burials, that display positive deviancy, can undoubtedly be attributed to children from a higher social level according to their burial characteristics and the high quality of artifacts. The most striking examples for this are burials with the intention of a representation of loss of future status or profession, such as the burial of Saffig-Wannenköpfen or Prague-Vinoř. This notion calls into question if afterlife care could only be afforded by families of an upper socioeconomic strata with proportionate financial resources. Referring again to the study of J. Strange (2005), parental grief and afterlife concerns are, however, not only manifested in material goods, but are also expressed through immaterial acts and behavior. Similar to the notion on gender-specific grave goods, social status might not per se determine the way the dead identity of a child is perceived, but mainly influences the visibility of the manner the dead child was treated.

One possible influential factor for the burial treatment of a child might also be the household size or the number of children within the family. According to D. Gutsmedl-Schumann (2014: 419), the death

of the only child of a family, marking the loss of the only heir, would have had a different impact on the presentation of the family's social status during burial procession than the death of a child who had multiple, healthy siblings.

In the context of non-normative burials, physical deformities, congenital diseases or impairments are another issue that is regularly discussed (Aspöck 2013: 26; Kaznakov 2013: 154). Many archaeologists and historians adopted the mostly unsubstantiated assumption that physical or mental disabilities led to a profound discrimination in pre-modern societies resulting in widespread abandonment and murder of disabled children (Halle et al. 2019: 220).

Regardless of how much love, care, and attention the child receives later in life, the expectation of every birth is that the child is delivered healthy and looks perfectly normal and parents around the world and in all eras struggle to comprehend if this is not the case. While in the modern Western world, parents are usually informed during pregnancy that their child will be disabled, medieval parents were only confronted during birth, giving them little to no time to adjust to the situation. Within the medieval mindset, which was influenced by spiritual conceptions and limited medical knowledge, one important coping mechanism was the search for an explanation, which was found in supernatural forces such as devils, witches, or fairies who were blamed for delivering the *wrong* child (Metzler 2015: 163). This context also features the notion of changelings, a non-human creature that has been swapped by the devil in exchange for the actual child. Especially sick, physically disabled, weak, or whining children were often thought to be changelings and the measures that such a presumed exchange required often ended fatally (Kuuliala 2011: 80-82; Trattnig 2013: 51-52; Gardela and Duma 2013: 326).

Though it seems very probable that disabled children received a special burial treatment, because their alleged restlessness after death is continuously mentioned by historic authors (Laes 2011) but also in modern research (see among many others: Aspöck 2013: 26; Kaznakov 2013: 154), most disabilities and congenital diseases are hardly visible in the archaeological record as they do not manifest in the skeleton (Roberts 2009: 189). In their study on correlation between health status and deviancy in post-medieval Poland, T. Betsinger and A. Scott (2020: 285-288) did not find a statistical significant between these two variables. However, due to the stated difficulties in identifying physical impairments and the overall impossibility of detecting mental disabilities, absence of evidence, in this case, is not evidence of absence.

A congenital malformation was, for example, found on the juvenile skeleton of Gnadendorf (Pany et al. 2006). The skeleton shows numerous pathological changes and anomalies, such as a fusion of cervical and thoracic vertebrae, spina bifida and a deformation of the calvarium and the skull base,

that can be assigned to the congenital disease Klippel-Feil-syndrome. Constriction of the auditory canal which possibly causing deafness or hearing loss were also identified. The individual further showed unspecific stress markers such as sinusitis, stomatitis, cribria orbitalia and linear enamel hypoplasia, as well as new bone formation on both femurs and traumatic lesions on the right os parietale with signs of healing processes.

Characteristics of Klippel-Feil-syndrome are a low and webbed neck, restricted neck movement facial asymmetry, hearing impairments and occasionally cognitive impairment (Human Phenotype Ontology) which impacted the individuals physical appearance and possibly also his social perception. While the male adolescent was buried lavishly, he still was separated from the community. Pathological deformation of the spine were also recorded on the prone burial Grave 132 from Pleidelsheim, Bavaria (Koch 2001: 155, 466-467).

The settlement burials discovered at Starigrad-Oldenburg and Elisenhof may be an indicator of a correlation between the place of interment and the circumstances surrounding birth and subsequent infant health. In both instances, hematomas on the inside of the skulls of newborns and infants revealed signs of birth trauma (Beilke-Voigt 2007: 398-399; Teegen and Schultz 1998: 94-95). In severe cases birth trauma can not only lead to blood stagnation between the skull and the dura but may result in brain damage and even death (Lewis 2007: 168-169). In addition to previously proposed explanations for why some infants at these sites were buried in the residential area while others were buried on the communal burial ground, I further want to stress the possible relationship between difficult births that result in irreparable harm and an unusual treatment after death.

Birth related trauma could also be observed on the burial from Növenthien and the burial from Jellenbek. In the case of Grave 53 from Növenthien this is indicated by a hydrocephalus, while in Jellenbek the child displayed epidural hematoma. Both were buried with items placed in their mouths. (Peters 1966; Stülz bach 1998: 111; Wehner and Grüneberg-Wehner 2014)

The prospect that birth-related circumstances, such as a particularly traumatic birth in which the mother might also have suffered harm, could be an impacting factor for burial treatment or the place of burial, in my opinion, cannot be entirely ruled out. This hypothesis is difficult to confirm on multiple levels, however, it may represent one possible approach of interpretation. Comparative palaeopathological examinations of neonatal and infant skeletons from settlement contexts and contemporaneous local cemeteries could possibly provide information on this.

Among the burials recorded within this study (and for example in these: Betsinger and Scott 2020; Gregoricka et al. 2014; Hadley 2010), there was no correlation between a distinct identity trait tangible through archaeological or osteological research and one type of deviant burial. Though in theory, the

analysis of skeletal remains could reveal demographic trends in mortuary practices and indicate some potential reasons for differential treatment, the original publications for most of the sites under investigation did not provide enough pertinent information to address these specific questions.

Discussion

In the previous chapters, I highlighted burials of children and adolescents that deviated from surrounding burial customs in a variety of ways. Following that, I reviewed various approaches of interpretation and evaluated them individually for some of these burials. Although the study of deviating burial practices and their underlying motivations, along with written sources, yielded some important conclusions about how children were perceived in the Middle Ages, there are still several unanswered questions and pursuing issues to be discussed.

One of the most fundamental difficulties was defining the concept of deviant burial. Although, the term is commonly used and described in archaeology, scientists have not agreed on its exact definition, and it is implemented in various contexts. Furthermore, it can be challenging to distinguish between standard, variance from the norm, and actual deviation because scholars frequently fail to develop a precise identification of a society's, period's, or region's burial customs. If a presumptive burial standard was established, it was based on adult graves, usually ignoring the fact that many communities habitually treat subadults differently in the burial context. Deviant burials of children are thus especially difficult to identify since it is often challenging to determine whether a particular burial treatment indicates a deviation referring to the individual or if it represents an age-specific mortuary custom that has not yet been reported because children are commonly given less attention in research or are less frequently found in the archaeological record (see for example the chapter 'Fragile bones and shallow Graves' in: Lewis 2007: 20-37).

The identification of deviant child burials, therefore, revealed another major limitation of the term deviant burial: it does not provide a threshold for the frequency of atypical burials, raising the question of how often a particular special treatment may occur within the funerary rite before it must be considered a variation and not a deviation. Is it even reasonable to label burial customs as unusual when an entire social group is treated in this manner, as in the case of Kanín II, where all the individuals of a particular age group were buried in the same body posture, however, in a manner that was different from other age groups (Hosek 2020)?

The consideration of whether a burial type represents an age-specific treatment or a deviation in the context of post-mortem concerns leads to one research issue addressed at the beginning of this thesis: Are there separate burial customs for children across the different periods of the Middle Ages? The answer to this question is rather ambiguous based on the variety of religious and spiritual notions and accompanied burial customs of this time. While there are phases, communities, and beliefs in which children, mostly newborns and infants, are subject to a separate burial rite or even excluded from the communal burial place due to various reasons, there are equally burial communities whose post-

mortem treatment does not seem to be influenced by the age of the buried individual, such as in most early medieval burial grounds in today's Austria, where no significant differences between graves of subadult and adult individuals could be determined and only individuals, of all age groups, display deviancies.

Written sources, however, provide only limited information on these issues, and generally on the manner how children were treated. Most knowledge about early medieval children comes from the *leges*, which note age caesura and, indirectly, their social value expressed through *wergelder*. Records are also scarce during the High Middle Ages and historical research mainly relies on baptismal registers, death books, as well as files of medical examiner, inscriptions on tombstones, inheritance documents, saints' vitae, as well as presentations in pictorial art. It wasn't until the Late Middle Ages that "*institutionalization of child care*" accelerated and more written sources were addressing child rearing, education, daily life, as well as theological issues pertaining to children's sinfulness, became available (Winkler 2017: 29). Nevertheless, the archaeological record offers much more informative value than written sources in determining how children were treated, especially after their untimely deaths.

The above-mentioned eaves-drip burials deserve further attention at this point because for one, they offer insight into Christian burial practices and on individuals who are excluded from it. On another notion, they display discrepancies between written sources, burial restrictions, and actual parental behavior following a child's death. While the fact that unbaptized children were not allowed to be buried in the church or on the churchyard is frequently mentioned in texts, there is no known source that tells about alternative manners of handling or burying the dead body of a stillborn or an infant that has not been introduced to Christian community, not even concerning simply hygienic and pragmatic reasons. Social rules were established by the church and solidified by its doctrines throughout the High and Late Middle Ages as well as in the Modern Era. By giving parents no other option for their children's salvation, they encouraged emergency baptisms and left no room for actions aside regulations and a strict code of conduct. However, it is unlikely that all children could have been christened, especially since emergency or in utero baptism was only incorporated in doctrines in the High Middle Ages. Furthermore, it's imaginable that it was sometimes challenging to acquire someone who could administer an emergency baptism in line with church regulations in rural areas with little knowledge of Latin or the conduct of rites. Burials around churches without burial privileges, like in Göttweig, or near churches that were already abandoned may have provided compromise between the prohibition to bury unbaptized children on the communal burial place and parental afterlife care.

The locations of children's graves who were not guaranteed a spot on the regular cemetery during the early phase of Christianization or in pre-Christian beliefs are still unknown. One tenable explanation

for their place of burial is that they were either interred close to or within the settlement, like the burials in Starigrad-Oldenburg, or, like other socially marginalized groups, in secret locations away from the community and burial contexts. This circumstance does not exclude loving and caring sentiments, as it is imaginable that the children were placed in locations that held special meaning for their parents (see: Hausmair 2017; 2018; 2020: and further personal communication). The impact of parental grief and afterlife care on the burial rite was not only evident in the burials of Göttweig, Gossam, and Wien-Heiligenstadt, where parents may have deliberately disregarded the church's burial regulations but is in cases also expressed through lavish grave goods or a burial place in prominent location.

Pain and grief responses after a child's death can be very individual and might also lead to allegedly irrational behavior and actions (Cannon and Cook 2015), that do not follow conventions and rules. At the same time, the funerary rite is one of the most conservative and stringent elements of society and its conducts are deeply embedded into cultural and spiritual tradition. During the Middle Ages, Christian authority was indoctrinated in people's minds (Grabner-Haider et al. 2012: 44-45), however, it is uncertain to which degree people believed in the all-encompassing effectiveness of the given burial rite or if they scrutinized elements of the mortuary behavior. Nevertheless, it is difficult to imagine that medieval parents would consciously choose a deviating funerary treatment for their child if doing so may endanger its wellbeing in the afterlife. Instead, it appears that unusual or unauthorized burial practices were employed if an individual lacked certain prerequisites, in this case baptism, and it was necessary to provide assistance on the way into the afterlife. In Göttweig, for instance, despite all the restrictions and the missing burial privilege, the interments followed almost all criteria of a normative Christian burial, as the placement in consecrated ground, west-east orientation, and the posture in supine position, but because their burial was not authorized by the church and their place of interment was not the one that has been designated, they must be categorized as deviant burials. To some extent, this could suggest that the parents' concern for the secular repercussions following concealed burials was less severe than their concern for their child's possible eternal damnation in limbus.

This is an important observation in the understanding of parental grief responses and afterlife care. The main conclusion that can be drawn from these findings, as well as other examples for burials that were mentioned in this context, is that emotion and anxiety as a trigger for human behavior following the death of an offspring must be considered as an influential factor for burial treatment.

Another important desideratum of past childhood research is the investigation of individual childhood identity and agency of subadult members of society. There is a general lack of knowledge on how individual children were perceived in the Middle Ages and what identity-shaping traits, such as gender, social status, or social age were recognized and emphasized resulting in the fact that almost every

statement on medieval childhood is usually generalized and summarizes children of all ages, gender, and origin.

B. Lohrke's (2004: 130-133) investigations showed that there are age-specific burial rites concerning the habit of providing grave goods in the Merovingian Regions, and to some extent, gender-specific when it comes to express social maturation, but there is significantly less knowledge about the perception of age and subadult gender in periods without grave goods. Research gaps and pursuing issues within the exploration of individual identities of children in the Middle Ages have already been thoroughly covered in the previous chapter, providing plenty of potential for future studies and discussion. While it does not seem purposeful to address these challenges again, the following paragraph will briefly address notions on a possible link between aberrant behavior, childhood, sin, and agency as they might provide more insight into deviant child burials that are linked to negative sentiments.

The introduction of the limbus teachings in the 12th century was accompanied by a discussion about sinfulness and evil agency of children. While newborns and infants were assumed to only carry original sin within them as they had not yet acquired sin on their own, questions of conscious action, imputability and consequences of behavior concerning older children were raised indicating that children were regarded to be capable of moral decision making, recognize ethical issues and to be able to distinguish between *right* or *wrong* (Winkler 2017: 32; Trattnig 2013: 31). This debate calls into question whether children were actually considered to be capable of acting irresponsibly, resulting in a modified form of funerary treatment similar to that of adult criminals or other socially outcast individuals, or whether they were only negatively approached and treated if they were thought to be under the influence of evil forces (Kuuliala 2011; Katajala-Peltomaa 2011). It seems further arguable to which extent they were considered to have agency, of if this agency was limited to a liminal phase between life and death, where they were able to cause substantial harm.

While it seems like the present studies offers more following questions than it provides answers, substantial conclusions were, however, drawn from an in-depth investigation of deviating burial traits and an evaluation of possible approaches for interpretation. Though all these interpretations, such as a negatively connoted fear of death and the undead, as well as loving and caring motives like expressions of parental grief and the representation of lost potential are challenging to verify, my results suggest that they were significantly influential for the way a child was buried, leading to deviations from the norm.

Conclusion

This thesis investigates deviant child burials in the regional setting of Central and parts of Eastern Europe for insights into the social value and perception of children in the Middle Ages. While research on deviant burials of adult individuals has a long tradition, atypical burials of children have only been investigated through individual case studies and a comparative study has not yet been carried out. Most scholars, however, follow the paradigm that deviant burials are linked to socially marginalized individuals, the fear of death and undead and are considered in the context of superstitions and the belief in life after death.

A challenging problem which arises in this field is the definition of the term deviant burial, as well as its conception and the fact that there is no consensus on how to clearly outline this phenomenon within the scope of funerary archaeology. Therefore, this thesis proposed a classification of deviant burials based on formal criteria by implementing deviating traits that have been described in previous study. These characteristics and statements were further modified to provide a comprehensible taxonomy of atypical burials and diverging burial traits.

Another major obstacle in the course of this study was the uncertainty and complexity of the concept of childhood in the Middle Ages. Historical research has long spread the notion that children were regarded to have lower social value and were invisible members of mediaeval society. According to the French historian Philippe Ariès, this rejecting attitude was attributed to the high infant mortality rate until the late Modern Times. He claimed that parents in the Middle Ages lacked compassion for their children because of the low chance of survival of their progeny, which he interpreted as psychological self-protection, and several researchers followed this approach.

The examination of child burials discovered in the archaeological record, however, offered a different perspective of the value and social standing of children. Through a detailed investigation of age-specific burial treatment and an illustration of the range of deviant child burials in mediaeval Central Europe, this thesis was able to formulate different approaches of interpretation, beyond the notion that children were restless undead because they have unfinished business or missed out on life experiences. The main outcome of this study is the statement, that not all atypical burials are the result of superstitious belief in dangerous dead but that a significant number of divergent mortuary treatment should be seen as expressions of emotional responses, such as pain or grief, and strategies to cope with the loss of a child.

Deviant treatment is therefore always associated with afterlife concerns and handling anxiety. Precautions are employed to ensure that the child enters the realm of the dead safely and does not

wander around as a restless undead causing harm to the living family and community, or they are focused on a pleasant afterlife existence.

The present study faced limitations in answering the question on the intersection of childhood identity and burial treatment as the available data was insufficient to draw further conclusions or observe causalities. While during some phases of the Middle Ages, age has been the determining factor for the conducts of mortuary behavior, the opposite has likewise been observed. This circumstance indicates that other identity traits than age or age group must be decisive for the burial manner, which in turn suggests that the medieval society noticed and emphasized other characteristics of an individual's appearance, both in children and grown-ups.

Future research will consider the potential effects of gender, disability, and social status on the funerary treatment in more depth, for example through the application of biochemical analyses, closer interdisciplinary collaboration of (bio-)archaeologists and historians, or simply by paying more attention to the traces of children within the archaeological context.

Zusammenfassung

Die vorliegende Arbeit beschäftigte sich mit Sonderbestattungen von Kindern im zentral- und osteuropäischen Mittelalter. Ziel war es neue Erkenntnisse zum sozialen Wert und der Wahrnehmung von Kindern in der mittelalterlichen Gesellschaft basierend auf einer Evaluierung der Bestattungsart zu gewinnen. Während Sonderbestattungen von erwachsenen Individuen in der archäologischen Forschung bereits vielfach diskutiert wurden, werden abweichende Bestattungen von Kindern nur in Einzelfällen beschrieben, eine umfangreiche Studie, die sich mit einem zeitlich und regional größerem Rahmen beschäftigt, fehlte bis dato. Eine gängige Prämisse bei der Untersuchung von Sonderbestattungen stellt die Annahme dar, dass es sich hierbei um die Gräber von sozial marginalisierten Personen oder vermeintlichen Untoten handelt. Sie werden damit in den Kontext von volks- und abergläubischem Brauchtum gestellt.

Da Begrifflichkeiten, die Bestattungspraktiken und rituelle Handlungen betreffen, in vielen Fällen unklar dargelegt sind, bestand ein wesentliches Forschungsvorhaben dieser Abschlussarbeit daraus eine klare Definition für die Ansprache von Sonderbestattungen zu bieten. Basierend auf formalen Kriterien wurde daher eine Taxonomie für unterschiedliche Arten von abweichenden Bestattungen formuliert. Gleichmaßen wurde das häufig wage Konzept von Kindheit im Mittelalter umrissen und für die unterschiedlichen Subphasen des Mittelalters individuell betrachtet. Dies bildet die Basis für eine umfassenden Darstellung, Interpretation und Auswertung von atypischen Bestattungen von Kindern und Jugendlichen und sollte Einblicke in die soziale und kulturelle Wahrnehmung von Kindern, aber auch in ihre aktive Handlungsfähigkeit ermöglichen.

Während die historische Forschung, vor allem vorangetrieben von Philippe Ariès, lange Zeit die Ansicht vertrat, dass Kindern im Mittelalter nur ein geringer sozialer Wert zugesprochen wurde und die elterliche Bindung aufgrund der hohen Kindersterblichkeitsrate marginal bis nicht vorhanden war, lassen Beobachtungen aus archäologischen Kontexten auf das Gegenteil schließen. Die zentrale Aussage dieser Studie ist die Tatsache, dass nicht alle atypischen Bestattungen das Ergebnis einer Angst vor gefährlichen Toten sind, sondern dass eine Vielzahl an besonderen Grablegen auch als Ausdruck elterlicher Emotionen, wie Schmerz oder Trauer, sowie als Strategien zur Bewältigung des Verlusts eines Kindes zu sehen sind.

Besondere Bestattungsmaßnahmen sind demnach in jedem Fall mit Jenseitsfürsorge, dem Respekt oder einer unterschwelligten Angst vor dem Tod, den Toten oder vor Bestattungspätzen und damit assoziierten übernatürlichen Kräften verbunden. Ob diese zur Anwendung kamen um dem unzeitig verstorbenen Kind einen raschen und mühelosen Übertritt in das Jenseits und um ihm und ihr dort

eine angenehme Existenz zu ermöglichen, oder ob sie einer schützenden, Unheil abwehrenden Motivation zugrundeliegen, muss im Einzelfall entschieden werden.

Während in einigen Phasen des Mittelalters das Alter der bestimmende Faktor für das Bestattungsverhalten war, zeigte sich fallweise das Gegenteil, was darauf schließen lässt, dass andere Identitätsmerkmale als das Alter oder die Altersgruppe für die Gestaltung des Begräbnisses ausschlaggebend waren. Dies könnte wiederum darauf hindeuten, dass in manchen mittelalterlichen Gesellschaften andere Merkmale, die ebenso das Erscheinungsbild einer Person ausmachten, sowohl bei Kindern als auch bei Erwachsenen beachtet und im Bestattungshabitus ausgedrückt wurden.

Zukünftige Forschungen könnten demnach die möglichen Auswirkungen von Geschlecht, Gesundheitsstatus oder sozialer Stellung auf die Bestattungsweise verstärkt berücksichtigen, beispielsweise durch die Anwendung biochemischer Analysen, eine engere interdisziplinäre Arbeit zwischen bioarchäologischer und historischer Forschung oder einfach dadurch, dass den Spuren von Kindern im archäologischen Kontext mehr Beachtung geschenkt wird.

Abstract (english)

Deviant burials, here defined as burials that deviate from a regionally and culturally specific mortuary standard, are a well-known element in the archaeological record of the time between Late Antiquity and the Late Modern Period. Commonly these burials are associated with fear of the undead, and superstitions as a remnant of pagan religion, or are considered as a manifestation of belief in a life after death. Although deviant burials of adult individuals are widely discussed in archaeological literature, little attention has been paid specifically to atypical burials of children and adolescents.

By defining the framework of deviant burials and investigating the concept of childhood, this thesis presents a comprehensive presentation, interpretation, and evaluation of deviant child burials from Central Europe to answer the question of the value and position of children in the Middle Ages. An exploration of the intersection between deviancy and childhood identity allows insights into children's social perception and parental responses to premature death.

While historical studies have long considered that children in the Middle Ages were not given much emotional value due to a high infant mortality rate, archaeological finds of elaborate and distinctive burials reveal the opposite and, in many cases, indicate a close parent-child relationship. This thesis tries to illustrate the range of deviant child burials in medieval Central Europe and emphasizes that not all atypical burials are the result of superstitious belief in dangerous dead but may also be read as an expression of individual grief.

Abstract (deutsch)

Sonderbestattungen, also Bestattungen, die sich von der zeitlich- und regionspezifischen Bestattungsnorm unterscheiden, sind ein viel beschriebenes Phänomen aus archäologischen Kontexten zwischen Spätantike und später Neuzeit. Zumeist werden diese Gräber mit der Angst vor den Toten und der Furcht vor Wiedergänger assoziiert. Sie werden als Ausdruck des Glaubens an ein Leben nach dem Tod betrachtet und gelten als Überreste heidnischer Religionen. Obwohl atypische Bestattungen in der archäologischen Forschung eine häufig diskutierte Thematik darstellen, gibt es nur wenig Arbeiten, die sich gezielt mit Sonderbestattungen von Kindern und Jugendlichen beschäftigen.

Basis der vorliegenden Arbeit bildet eine klare Definition für das Konzept Sonderbestattung, sowie eine umfassende Darstellung von Kindheit im Mittelalter. Die darauffolgenden Beschreibungen, Interpretationen und Auswertungen von atypischen Bestattungen im zentraleuropäischen Mittelalter sollen Einblicke in die soziokulturelle Wahrnehmung und Handlungsfähigkeit von Kindern und

Jugendlichen ermöglichen. Während die historische Forschung lange davon ausging, dass Kindern in mittelalterlichen Gesellschaften aufgrund der hohen Sterblichkeitsrate nur wenig emotionale Nähe entgegengebracht wurde, lassen aufwändige und außergewöhnliche Gräber aus verschiedenen Zeiten und ökonomischen Kontexten häufig auf das Gegenteil schließen. Ziel dieser Arbeit war verschiedene Arten von Sonderbestattungen zu beschreiben und die unterschiedlichen Motivationen dahinter zu illustrieren. Demnach sind Sonderbestattungen nicht immer als eine Maßnahme gegen Wiedergänger zu interpretieren, sondern können auch Zeugnisse elterlicher Trauerbewältigung darstellen.

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Appendix A: Catalog of Deviant Child Burials

This catalog was created from publications, excavation reports, or unpublished summaries of the researchers who conducted the respective case studies. Osteological data on age, sex/gender, and pathologies, as well as taphonomical observations have been accepted and incorporated as stated in the original publications.

Terms such as *Merovingian*, *Carolingian*, *Avar* or *Arpadian* etc. listed in the catalog are not to be considered as ethnic attributions but are used as common *terminus technici* for a chronological classification if the description of a site did not offer a more precise reference for dating.

Double and multiple burials, as well as burial groups like the eaves-drip burials of Göttweig, Gossam, and Wien-Heiligenstadt, were each combined as one data set and recorded as one entity.

Aegerten, Canton Bern, Switzerland

Site Type: churchyard

Site Date: c. 1100 - 1900

Number of excavated Burials: 181

Citation: Bacher et al. 1990

Eaves-drip burials

Number of individuals: 115

Age Class: stillbirth – neonates – infans I/I

Number of Burials until 1500: 1

Number of Burials from 1515-1622: 52

Number of Burials from 1622-1850: 58

Number of Burials from 1850-1950: 1

Deviant/Special Traits: clustered location along the church wall

Type of Deviant Burial: unusual burial place

Interpretation: parental grief response and/or afterlife concern

Alt Käbelich, Mecklenburg-Vorpommern, Germany

Site Type: bi-ritual cemetery

Site Date: c. 800 – 1100

Number of excavated Burials: 12

Citation: Stülzebach 1998: 108, Schmidt 1985

Grave 67

Burial Mode: inhumation burial

Age Class: subadult

Description of the Grave and Burial:

the skeleton was completely covered with rocks

Deviant/Special Traits: securing of the body in the grave by covering it with rocks

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Altenberg bei Linz, Upper Austria, Austria

Site Type: church, churchyard

Site Date: c. 1200 - 1600

Citation: Wimmer 2016

Eaves-drip burials

Number of individuals: 13

Age Class: stillbirth – neonates – infans I/I

Deviant/Special Traits: clustered location along the church wall

Type of Deviant Burial: unusual burial place

Interpretation: parental grief response and/or afterlife concern

Altenerding, Bavaria, Germany

Site Type: inhumation cemetery

Site Date: c. 400 – 800

Prevailing Orientation: west-east

Number of excavated Burials: 1360

Citation: Losert and Pleterski 2003

Grave 9

Burial Mode: inhumation

Orientation: east-west

Body Position: supine

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 76

Burial Date: c. 475-500

Burial Mode: inhumation

Orientation: east-west

Body Position: supine

Age Class: subadult

Gender: female

Deviant/Special Traits: Orientation

Type of Deviant Burial: unusual body treatment or position

Grave 353

Burial Date: c. 575-625

Burial Mode: inhumation

Orientation: east-west

Body Position: supine

Age Class: subadult

Gender: female

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 722

Burial Date: c. 600

Burial Mode: inhumation

Orientation: east-west

Body Position: supine

Age Class: juvenis

Gender: male

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 723

Burial Date: c. 570/580
Burial Mode: inhumation
Orientation: east-west
Body Position: supine
Age Class: subadult
Gender: female
Deviant/Special Traits: orientation
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 1030

Burial Date: c. 600
Burial Mode: inhumation
Orientation: east-west
Body Position: flexed, right side
Age Class: subadult
Deviant/Special Traits: orientation and position of the body
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Auhof bei Perg, Upper Austria, Austria

Site Type: inhumation cemetery
Site Date: c. 700-900
Prevailing Orientation: West-East
Number of excavated Burials: 98
Citation: Tovornik 1986

Grave 122

Burial Mode: inhumation
Orientation: west-east
Body Position: supine
Age Class: infans I
Age: 3 years
Grave construction: earth pit
Deviant/Special Traits: traces of fire and charcoal in the grave
Type of Deviant Burial: unusual burial mode
Interpretation: fear of the dead and death

Bad Deutsch-Altenburg, Lower Austria, Austria

Site Type: inhumation cemetery
Site Date: c. 975-1050
Prevailing Orientation: west-east
Number of excavated Burials: 69
Citation: Obenaus 2010

Grave G010(1966)S01

Burial Mode: inhumation
Orientation: west-east
State of Preservation: poor
Body Position: flexed
Age Class: subadult
Description of the Grave and Burial: burial of a child in slightly flexed position. The skull is missing, but it is unclear whether this was due to grave disturbance, preservation conditions or if it was intentionally removed
Deviant/Special Traits: position of the body
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Bad Reichenhall, Bavaria, Germany

Site Type: inhumation cemetery
Site Date: c. 500-800
Prevailing Orientation: west-east
Number of excavated Burials: 525
Citation: Bertram 2002

Grave 142

Burial Mode: inhumation
Orientation: west-east
Body Position: supine
Age Class: juvenis
Gender: female
Sex: female
Grave Depth: 89cm
Description of the Grave and Burial: the grave was cut into the bedrock and the walls were coated with clay. Around the lower body half were visible traces of heat impact/fire
Grave Goods: (1) disc-shaped spindle whorl, placed on the chest; (2) Roman coin made of copper (Valens) placed inside the right hand; (3) bronze buckle; (4) iron buckle; (5) iron knife; (6) necklace made of glass and amber beads
Grave Goods with possible apotropaic characteristics: coin; amber beads
Deviant/Special Traits: fire exposure; grave goods with apotropaic characteristics
Type of Deviant Burial: unusual burial mode
Interpretation: unclear

Grave 373

Burial Mode: inhumation

Orientation: southwest-northeast

Body Position: flexed

Gender: female

Age Class: infans II - juvenis

Age: 13-15 years

Description of the Grave and Burial: burial in flexed position turned to the right side. The skull was resting on the right hand. A circle of rocks was placed around the skull.

Grave Goods: (1) bone comb found underneath the skull

Deviant/Special Traits: body position; stone placement

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 423

Burial Mode: inhumation

Orientation: south-north

Body Position: supine

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 466

Burial Mode: inhumation

Orientation: south-north

Body Position: supine

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 467

Burial Mode: inhumation

Orientation: south-north

Body Position: supine

Age Class: subadult

Grave Goods: unidentifiable iron fragments

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 478

Burial Mode: inhumation

Orientation: south-north

Body Position: supine

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 480

Burial Mode: inhumation

Orientation: south-north

Body Position: supine

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 483

Burial Mode: inhumation

Orientation: south-north

Body Position: supine

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 508

Burial Mode: inhumation

Orientation: south-north

Body Position: supine

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 509

Burial Mode: inhumation

Orientation: southeast-northwest

Body Position: supine

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Bayreuth, Stadtkirche, Bavaria, Germany

Site Type: churchyard, church

Site Date: High Middle Ages – Modern Period

Prevailing Burial Mode: inhumation

Prevailing Orientation: west-east

Citation: Wintergerst 2013, Alterauge et. al 2020

Grave 55

Burial Mode: inhumation

Orientation: west-east

Body Position: prone

Age Class: subadult

Description of the Grave and Burial: burial in a shroud

Deviant/Special Traits: body position

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Berlin-Spandau, Germany

Site Type: inhumation cemetery, fortified settlement

Site Date: c. 1000-1200

Prevailing Orientation: west-east

Citation: von Müller 1999, Stülzebach 1998

Grave 4627

Burial Mode: inhumation

Orientation: west-east

Body Position: prone

Age Class: subadult

Description of the Grave and Burial: burial in a shroud

Deviant/Special Traits: body position

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Berlin Petriplatz, Germany

Site Type: churchyard

Site Date: c. 1250-1600

Prevailing Orientation: west-east

Number of excavated Burials: 3717

Citation: Rothe and Melisch 2021, Alterauge et al. 2020

Grave 12

Burial Mode: inhumation

Orientation: west-east

Body Position: flexed

Age Class: juvenis

Sex: probably female

Description of the Grave and Burial: Burial in flexed position, turned to the right. High content of ash and charcoal in the backfilling

Manipulation of the Body: the body could have been tied up

Deviant/Special Traits: body position and treatment, maybe fire exposure

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Břeclav Pohansko, Jihomoravský kraj, Czech Republic

Site Type: central place - inhumation and cremation burial sites, settlement and workshop area, fortification

Site Date: c. 800-100

Prevailing Orientation: west-east

Number of excavated Burials: 1056

Citation: Kalousek 1991, Macháček 1994, Přichystalová 2011, Macháček 2019

Herrenhof – Grave 73

Burial mode: inhumation

Orientation: northwest-southeast

Body position: supine

State of Preservation: very good

Age Class: infans I

Grave Construction: rectangular earth pit with stone placements on the sides

Grave Dimensions: L: 140 cm, W: 70 cm, D: 90 cm

Grave Goods: (1) bronze nail, found on the viscerocranium

Deviant/Special Traits: positioning of the bronze nail

Type of Deviant Burial: unusual objects

Interpretation: fear of the dead and death

Herrenhof – Grave 136

Burial mode: inhumation

Orientation: southwest-northeast

Body position: not identifiable

State of Preservation: poor, almost completely disintegrated

Age Class: infans II

Gender: female

Description of Grave and Burial: rectangular earth pit – a covering layer of large flat stones, 40-50cm thick, was placed about 80cm above the burial.

Grave Dimensions: L: 170 cm, W: 70 cm, D: 123 cm

Grave Goods: (1) 2 spherical hollow metal beads, gilded and decorated with bird depictions (Gombecki); (2) 1 spherical hollow bead made of silver; (3) 2 silver earrings

Deviant/Special Traits: grave was covered with rocks

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Herrenhof – Grave 165

Burial mode: deposition

Location: peripheral location

Orientation: facing north

Age Class: infans I

Age: 2 years

Description of Grave and Burial: slightly fragmented skull of a two-year-old infant deposited between two large, flat rocks; the skull was facing north

Deviant/Special Traits: secondary deposition of the skull?

Type of Deviant Burial: multi-phase burial

Interpretation: unclear

Herrenhof – Grave 293

Burial mode: inhumation

Location: peripheral location

Orientation: north-south

Body Position: supine

State of Preservation: poor

Age Class: infans I/I

Age: c. 1-2 years

Grave Construction: rectangular earth pit

Grave Dimensions: L: 120 cm, W: 80 cm, D: 70 cm

Deviant/Special Traits: orientation and peripheral location; the grave pit follows the orientation of the palisade, rather than the orientation of the church and the other graves

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Herrenhof – Grave 305

Burial mode: deposition

Location: peripheral location

State of Preservation: poor

Age Class: infans I

Age: 2 years

Description of Grave and Burial: skull of a two-year-old infant deposited upon a large, flat rock

Deviant/Special Traits: secondary deposition of the skull? The skull was found deepened in the ditch of the outer palisade not far away from the other skull deposit (Grave 165)

Type of Deviant Burial: multi-phase burial

Interpretation: unclear

Herrenhof – Grave 401

Grave with multiple individuals

Number of individuals: 2

Burial mode: inhumation

Location: peripheral location

Orientation: southwest-northeast

Age of Ind. 1: Infans I/I (c. 2 years)

Age of Ind. 2: neonatus-Infans I/I (c. 6 months)

Grave Dimensions: L: 135 cm, W: 60 cm

D: 55 cm

Description of Grave and Burial: burial of a 2-year-old infant in supine position, the skull was turned to the right side. Another skull of a 6-months-old infant was found in one corner of the rectangular grave pit

Deviant/Special Traits: secondary deposition of the skull?

Type of Deviant Burial: multi-phase burial

Interpretation: unclear

Lesní školka - Grave 31

Burial mode: inhumation

Orientation: west-east

Body Position: flexed

Age Class: subadult

Deviant/Special Traits: body position

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Lesní hrúd – Obj. 19

Burial mode: inhumation

Location: interred in a pit within the settlement area

Age Class: subadult

Deviant/Special Traits: burial outside of designated burial locations

Type of Deviant Burial: burial in an unusual place

Interpretation: unclear

Southern bailey – Obj. 6

Burial mode: inhumation

Location: interred in a pit in the settlement area

Body Position: flexed

Age Class: subadult

Deviant/Special Traits: burial outside of designated burial locations in flexed position

Type of Deviant Burial: combination of deviating traits

Interpretation: unclear

Chotín, Nitransky kraj, Slovakia

Site Type: inhumation cemetery

Site Date: c. 900-1000

Prevailing Orientation: west-east

Citation: Točík 1968

Grave 9

Burial mode: inhumation

Orientation: east-west

State of Preservation: poor

Body Position: supine

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Cielmice, Silesian Voivodeship, Poland

Site Type: inhumation cemetery

Site Date: Early to High Middle Ages

Citation: Szydlowska 1967, Gardeła and Duma 2013

Grave 2

Burial Date: c.1150-1200

Burial Mode: inhumation

Body Position: extremely contracted flexed position

Age Class: infans II

Manipulation of the Body: most likely tied up at the time of burial

Deviant/Special Traits: fixation of the body

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Csákberény-Orondpuszta, Com. Fejér, Hungary

Site Type: inhumation cemetery

Site Date: Avar

Prevailing Orientation: west-east

Number of excavated Burials: 452

Citation: László 2015

Grave 220

Burial Mode: inhumation

Orientation: east-west

State of Preservation: very poor

Age Class: subadult

Grave construction: earth pit with a wooden coffin

Grave Depth: 160 cm

Grave Goods: (1) bronze headdress ring, according to László worn on the finger; (2) eye beads made of

black and white glass; (3) beads made of reddish-brown opaque glass with yellow glass threads

Deviant/Special Traits: orientation, particular position of the headdress ring

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 257

Grave with multiple individuals

Number of Individuals: 2

Burial Mode: inhumation

Orientation: west-east

Age of Ind. 1: infans II-juvenis (c. 13 years)

Age of Ind. 2: neonatus-infans I/I

Grave Dimensions: L: 130 cm, W: 50 cm,

D: 55 cm

Grave Goods Ind. 1: (1) fragments of a chain mail; (2) fragments of a lamellar armor; (3) iron knife; (4) blue glass pendant of an earring

Grave Goods Ind. 2: (1) iron bracelet; (2) iron wire ring; (3) 1 biconical red bead; (4) 1 turquoise bead; (5) 1 eye bead made of red and white glass

Grave Goods with apotropaic Characteristics: chain mail, lamellar armor, iron wire ring

Deviant/Special Traits: grave goods with apotropaic characteristics

Type of Deviant Burial: unusual objects

Interpretation: parental grief response and/or afterlife concern

Diepensee, Brandenburg, Germany

Site Type: churchyard

Site Date: c. 900-1375

Prevailing Orientation: west-east

Number of excavated Burials: 489

Citation: Jungklaus et al. 2015, Alterauge et al. 2020

Grave 278

Burial Mode: inhumation

Body Position: prone

Age Class: subadult

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

**Dirmstein, Rhineland-Palatinate,
Germany**

Site Type: inhumation cemetery

Site Date: c. 530-800

Prevailing Orientation: west-east

Number of excavated Burials: 290

Citation: Leithäuser 2011

Grave 19

Burial Mode: inhumation

Burial Date: c. 530-580

Location: inside a ring ditch

Orientation: southeast-northwest

State of Preservation: only teeth preserved

Age Class: infans I

Methods of Age Estimation: dental development, size of the grave pit

Grave Dimensions: L: 95 cm, W: 45 cm, D: 15 cm

Description of the Grave and Burial: the teeth were found at the southeastern end of the grave pit

Grave Goods: (1) fragments of a small pottery bowl

Deviant/Special Traits: presumed deviating orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 44

Burial Mode: inhumation

Burial Date: c. 530-580

Location: next to a ring ditch, following its orientation and aligning with the ditch

Orientation: south-north

State of Preservation: almost completely disintegrated

Grave Disturbance: disturbed during excavation works

Age Class: infans I

Methods of Age Estimation: size of the grave pit

Gender: female

Grave Dimensions: L: 100 cm, W: 50 cm, D: 10 cm

Description of the Grave and Burial: The teeth were found at the southeastern end of the grave pit

Grave Goods: (1) pottery vessel, decorated with two circumferential grooves on the shoulder; (2) fragment of a Roman brick (in the backfilling); (3) unidentifiable iron fragment (in the backfilling)

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 190

Burial Mode: inhumation

Burial Date: c. 630-650

Orientation: west-east

Location: peripheral location

Body Position: supine

State of Preservation: very poor

Age Class: infans II

Methods of Age Estimation: size of the grave pit

Gender: female

Grave Dimensions: L: 290 cm, W: 180 cm, D: 114 cm

Description of the Grave and Burial: broad, rectangular grave pit with rock settings on the bottom. Visible soil discolorations of postholes in the corner, which indicate grave architecture. Another feature in the middle of the grave pit was interpreted as a failed attempt at grave robbery. The robbery shaft did not disturb the burial itself

Grave Goods: (1) 1 pair of silver earrings with dark blue stone inlaying; (2) bronze needle with incised grooves and triangular ornaments; (3) cross-shaped pendant made of bronze. On side is decorated with circles and eyes, the other one with a zig-zag pattern; (4) hollow bronze bead attached to a bronze wire ring; (5) sheet bronze strap; (6) 3 rectangular bronze fittings; (7) 1 open-worked bronze disc framed with a ring made of bone; (8) rod-tanged iron knife with remains of the wooden handle; (9) 5 bronze strap-ends; (10) 1 square bronze fitting with 4 rivets; (11) 1 bronze buckle; (12) 2 triangular bronze fittings; (13) sheet iron fitting, part of a wooden container; (14) bronze finger ring; (15) 1 gilded bow fibula; (16) 3 iron buckles; (17) 1 bracelet made of cast bronze; (18) gilded, bird-shaped bronze fitting; (19) fragment of a broad blade of a flax crushing tool; (20) 158 glass beads; (21) several long bones and teeth of a large mammal; (22) 12 amber beads; (23) chain links; (24) spindle whorl-shaped glass bead

Grave Goods with apotropaic Characteristics: bronze disc with bone frame; spindle whorl-shaped glass bead; cross-shaped pendant; chain links

Deviant/Special Traits: presumed peripheral location (the site is not completely excavated); grave goods with apotropaic characteristics; richness of grave goods – according to the publication, the outfit is described as a ‘complete ensemble of the regional women’s costume of the Main-Neckar region’; elaborate grave construction

Type of Deviant Burial: unusual objects

Interpretation: representation of lost potential

Grave 254B

Burial Mode: inhumation

Burial Date: c. 580-700

Orientation: west-east

Location: centrally buried within a ring ditch
Body Position: supine
State of Preservation: poor
Age Class: juvenis
Age: 15 years (+/- 3 years)
Methods of Age Estimation: skeletal maturation
Gender: female
Sex: probably female
Grave Dimensions: L: 370 cm, W:170 cm, D: 95 cm

Description of the Grave and Burial: rectangular grave pit. Visible rectangular discoloration of some tomb construction at the base in the north-eastern part of the grave pit, in some distance to the body. The dimensions of this structure were estimated to be at least 240cm.

Grave Goods: (1) 3 pottery vessels; (2) 2 spindle whorls made of pottery; (3) 1 pair of gilded bow fibula made of silver with almandine inlaying; (4) animal-shaped brooch made of cast silver; (5) almandine disc brooch; (6) hoop-shaped finger ring made of bronze; (7) 4 bronze rings with rhombic cross-section found next to the thighs; (8) 3 three iron rings found next to the thighs; (9) iron key; (10) cylindrical, bivalve amulet capsule made of bronze with organic and inorganic residues found between the thighs: (10.1) 1 piece of fossilized wood; (10.2.) 6 tower shells; (10.3) exoskeletons of 6 bugs (10.4) very thin fragments of translucent inorganic matter inside; (11) fittings of a wooden container made of sheet iron; (12) 1 lock bolt; (13) 3 small iron pins; (14) 2 iron fragments with bent ends; (15) 3 iron buckles; (16) fragment of a broad blade of a flax crushing tool; (17) 1 iron nail with wooden remains adhering; (18) ring-shaped bone fragment; (19) fragment of sheet bronze; (20) 1 pair of iron scissors; (21) rod-tanged iron knife; (22) fragment of a bronze buckle; (23) 2 lancet-shaped strap-ends made of silver; (24) small bowl made of bronze (diameter 15 cm); (25) 5 pendants made of gold sheet; (26) 1 beaker made of light green glass; (27) necklace made of 49 glass beads, 1 horn bead, 1 meerschaum bead and 11 amber beads; (28) cyprea fragment; (29) further fragments of bone rings with bronze patina

Grave Goods with apotropaic Characteristics: keys; amulet capsule and its content; amber beads

Deviant/Special Traits: prominent location as central and only burial inside a ring ditch; grave goods with apotropaic characteristics; richness of grave goods – according to the publication, the outfit is described as a ‘complete ensemble of the regional women’s costume of the Main-Neckar region’; elaborate grave construction

Type of Deviant Burial: unusual objects

Interpretation: representation of lost potential

Duggendorf-Heitzenhofen, Bavaria, Germany

Site Type: inhumation cemetery

Site Date: Carolingian

Prevailing Orientation: northwest-southeast

Citation: Pöllath 2002

Grave 3

Grave with multiple individuals

Burial mode: inhumation

Orientation: northwest-southeast

Number of individuals: 2

Age of Ind. 1: subadult

Age of Ind. 2: unknown age and sex

Description of Grave and Burial: intact burial in supine position (age and sex not stated) with the skull of a child at the feet

Grave Goods: (1) iron knife

Deviant/Special Traits: Deposition of a child’s skull

Type of Deviant Burial: unusual burial mode

Interpretation: unclear

Dziekanowice, Lesser Poland

Voivodeship, Poland

Site Type: inhumation cemetery

Site Date: Early Middle Ages

Citation: Wrzesińska and Wrzesiński 1993, Gardela and Duma 2013

Grave 11/92

Burial Mode: inhumation

Body Position: supine

State of Preservation: poor

Age Class: infans II

Age: 8-10 years

Description of the Grave and Burial: grave pit with stone placement on the floor and another layer of stones on top of the body

Grave Goods: (1) iron knife that was thrust vertically into the ground

Deviant/Special Traits: securing the body with rocks and striking positioning of the knife

Type of Deviant Burial: combination of deviant traits

Interpretation: fear of the dead and death

**Echenbrunn - Mühlenweg, Bavaria,
Germany**

Site Type: churchyard

Site Date: c. 1200-1600

Prevailing Burial Mode: inhumation

Prevailing Orientation: west-east

Citation: Bohnet und Seidel 2017, Alterauge et al. 2020

Grave 789

Burial mode: inhumation

Orientation: west-east

Body Position: prone

Age Class: subadult

Description of Grave and Burial: double burial

Deviant/Special Traits: body position

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

**Elisenhof bei Tönning, Schleswig-Holstein,
Germany**

Site Type: settlement

Site Date: c. 700-800

Citation: Teegen and Schultz 1999; Beilke-Voigt 2007

House 2 – Ind. 1 and 2

Number of individuals: 2

Burial mode: inhumation

Location: inside the house *Orientation:* northwest-southeast

Age of Ind. 1: neonatus-infans I/I

Age of Ind. 2: neonatus-infans I/I *Description of the Burials:* burials of supposed twins inside the housing area of a byre-dwelling, about 4m apart

Pathologies, non-metric Variations, anatomical Anomalies: both individuals show pathological changes that indicate rickets; further epidural hematoma on the insides of their skulls, which could have been caused by birth trauma

Deviant/Special Traits: burials within the settlement context

Type of Deviant Burial: burial in an unusual place

Interpretation: unclear; possible foundation sacrifice (?)

House 2 – Ind. 3

Burial mode: inhumation

Location: inside the house *Age Class:* fetus-neonatus

Age: 9-10 lunar month

Description of the Burial: buried inside the byre part of the byre-dwelling

Pathologies, non-metric Variations, anatomical Anomalies: endo- and ectocranial hematoma, probably caused by birth trauma

Deviant/Special Traits: burials within the settlement context

Type of Deviant Burial: burial in an unusual place

Interpretation: unclear; possible foundation sacrifice (?)

House 6 – Ind. 1

Burial mode: inhumation

Location: inside the house *Age Class:* neonatus

Age: max. 3 months

Description of the Burial: burial of a neonatus in the northwestern corner of a byre-dwelling

Pathologies, non-metric Variations, anatomical Anomalies: pathological lesions, probably caused by birth trauma

Deviant/Special Traits: burials within the settlement context

Type of Deviant Burial: burial in an unusual place

Interpretation: unclear; possible foundation sacrifice (?)

House 6 – Ind. 2

Burial mode: inhumation

Location: inside the house *Age Class:* neonatus-infans I/I

Age: max. 6 months

Description of the Burial: burial of a neonatus-infans I/I in the northeastern corner of a byre-dwelling

Deviant/Special Traits: burials within the settlement context

Type of Deviant Burial: burial in an unusual place

Interpretation: unclear; possible foundation sacrifice (?)

House 28

Burial mode: inhumation

Location: inside the house *Age Class:* neonatus

Age: max. 3 months

Description of the Burial: burial of a neonatus in the northeastern corner of a byre-dwelling

Pathologies, non-metric Variations, anatomical Anomalies: pathological changes on the inside of the internal auditory canal

Deviant/Special Traits: burials within the settlement context

Type of Deviant Burial: burial in an unusual place

Interpretation: unclear; possible foundation sacrifice (?)

House 33

Burial mode: inhumation

Location: inside the house *Age Class:* neonatus - perinatal

Description of the Burial: burial of a neonatus in the byre-part of a byre-dwelling
Pathologies, non-metric Variations, anatomical Anomalies: epidural hematoma caused by birth trauma, sinusitis
Deviant/Special Traits: burials within the settlement context
Type of Deviant Burial: burial in an unusual place
Interpretation: unclear; possible foundation sacrifice (?)

Eperjes, Com. Csongrád-Csanád, Hungary

Site Type: settlement
Site Date: Late Avar
Number of excavated Burials: 5
Citation: Bálint 1991

Grave 3

Burial mode: inhumation
Location: in a pit house
Orientation: southwest-northeast
Body Position: flexed
Age Class: infans II
Age: 8-9 years
Description of Grave and Burial: burial of an 8-9-year-old child in flexed position, in the northwestern corner of a pit house. The body was facing the walls of the house. As the burial was not placed into a deepened pit, but laid down on the floor of the house, it can be assumed that the house was not used for living at the time of interment
Deviant/Special Traits: burials within the settlement context in a deviating body position
Type of Deviant Burial: combination of deviating traits
Interpretation: unclear

Grave 4

Burial mode: inhumation
Location: in a pit house
Orientation: southwest-northeast
Body Position: flexed
Age Class: infans II
Age: 13 years
Description of Grave and Burial: burial of a 13-year-old child in flexed position interred in a rectangular grave pit deepened into a ditch within the settlement area. The body was turned to the right side. The left hand was placed on the face with the fingers covering the eyes
Deviant/Special Traits: burials within the settlement context in a deviating body position
Type of Deviant Burial: combination of deviating traits
Interpretation: unclear

Ergolding, Bavaria, Germany

Site Type: inhumation cemetery
Site Date: c. 600-800
Prevailing Orientation: west-east
Number of excavated Burials: 446
Citation: Koch and Stelzle-Hüglin 2001, Koch and Alt 2014

Grave 224

Bi-ritual grave with multiple individuals
Number of individuals: 9
Orientation: west-east
Grave Disturbance: ancient grave reopening
Age and Sex of inhumated Ind. 1: early adult (20-25) male
Age and Sex of inhumated Ind. 2: early adult (20-25) male
Age and Sex of inhumated Ind. 3: early adult (20-25) male
Age and Sex of inhumated Ind. 4: early adult (20-25) male
Age and Sex of inhumated Ind. 5: early adult (20-25) male
Age and Sex of inhumated Ind. 5: early adult (20-25) male
Age and Sex of cremated Ind. 1: early adult (20-25) male
Age and Sex of cremated Ind. 2: early adult (20-25) female
Age of cremated Ind. 3: infans I (3-4)
Burial mode: inhumation
Description of Grave and Burial: large grave chamber with remains of the wooden construction preserved. The grave chamber was in the middle of a circular ditch and was probably covered with a mound.

6 inhumation burials were placed in two parallel rows of each three individuals. All these early adult male individuals were equipped with weapons and lavish belt sets. The southern row of individuals was robbed, some grave goods were removed, and the skeletal remains were displaced, the northern row remained untouched. Some (maybe selected) remains of three cremated individuals were also deposited in the grave chamber
Deviant/Special Traits: cremated remains of a child within a very striking burial of multiple individuals
Type of Deviant Burial: unusual burial mode
Interpretation: unclear

Eschborn, Hesse, Germany

Site Type: inhumation cemetery
Site Date: c. 500-700
Prevailing Orientation: west-east

Number of excavated Burials: 50

Citation: Ament 1992

Grave 165

Burial mode: inhumation

Orientation: west-east

Body Position: supine

State of Preservation: mediocre

Age Class: infans I

Age: 2-2.5 years

Gender: female

Grave Dimensions: L: 145 cm; W: 60 cm; D: 143 cm

Grave Goods: (1) pottery bowl; (2) pottery balsamarium; (3) spindle whorl; (4) 2 needles found left of the skull; (5) silver Roman coin, placed in the mouth; (6) bronze Roman coin, placed on the throat; (7) 1 pair of bow fibula on the chest; (8) finger ring on the left hand; (9) bow fibula on the right pelvis; (10) iron ring on the right thigh; (11) a key and bronze ring at the left knee; (12) bell; (13) 10 glass beads, found around the area where the left lower arm would have been; (14) 1 glass beaker; (15) 1 glass bowl

Grave Goods with apotropaic Characteristics: coins, especially because of their placing; key; bell; balsamarium

Deviant/Special Traits: grave goods with apotropaic characteristics, lavishly equipped burial compared to the other burials of the site

Type of Deviant Burial: unusual objects

Interpretation: representation of lost potential

**Flintsbach am Inn, St. Peter am Madron
Bavaria, Germany**

Site Type: churchyard

Site Date: High to Late Middle Ages

Prevailing Burial Mode: inhumation

Citation: Alterauge et al. 2020

Grave 84

Grave with multiple individuals

Number of Individuals: 3

Burial Mode: inhumation

Orientation: west-east

Body Position: prone

Age Classes: 1 subadult individual, no note on the other individuals

Sex of subadult Ind.: female

Deviant/Special Traits: body position

Type of deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

**Frankfurt am Main, Bartolomäuskirche
(Kaiserdom), Hesse, Germany**

Site Type: church, churchyard

Site Date: Merovingian predecessor building (c. 600-800); start of construction of the present church: 1239

Prevailing Orientation: west-east

Prevailing Burial Mode: inhumation

Number of excavated Burials from the Merovingian Period: 35

Citation: Wamers 2013, Cemper-Kiesslich et al. 2021

Grave 95

Bi-ritual grave with multiple individuals

Number of Individuals: 2

Burial Mode: bi-ritual

Burial Date: c. 700-800

Location: within the foundations of a clerical residence belonging to a predecessor building

Orientation: west-east

Age and Sex of inhumated Ind: infans I (4-5 years), female

Methods of Sex Estimation: DNA analysis

Age of cremated Ind: infans I (4-5 years)

Grave Dimension: L: 270 cm, W: 170 cm

Description of Grave and Burials: two children (c. 4 years) were buried in a coffin inside a wooden burial chamber. A girl (DNA confirmed) was buried in extended supine position; to her right, also within the coffin, were cremated remains of another individual of approximately the same age; because of the find of 8 bear claws, it is assumed that the second child was placed on a bearskin and cremated on a pyre; remains of a piglet were found commingled with the cremated human remains

Grave Goods: (1) 3 pottery vessels; (2) 1 golden cross; (3) 2 golden earrings with spherical metal beads, decorated with filigree and granulation; (4) a pectoral consisting of 12 different pendants made of gold and amethyst, in between the pendants were small beads made of sheet silver and sheet gold and glass beads; (5) a small container (7.5cm) made of copper alloy sheet, found underneath the skull of the girl, attached to a leather band and probably worn around the neck (probably containing aromatic substances); (6) disc-brooch with almandine inlays; (7) bow fibula made of gilded silver with niello inlays; (8) three finger rings made of copper-silver-gold alloy, decorated with filigree and granulation; (9) three bracelets: (9.1.) one twisted bracelet made of silver (9.2.) one simple bracelet made of silver (9.3.) one made of bronze; (10) belt chain let made of wire rods and chain links (90cm long); (11) a pair of scissors; (12) a needle;

(13) beaker made of blue glass; (14) decorative disc made of mammoth ivory (attached to the belt chain let); (15) bone comb;

animal remains as food offerings: (1) on the floor of the grave chamber were bones of calves, piglets, and vertebrae of a salmon. (2) two pots contained beef ribs and a chicken; (3) wooden bucket (with iron fittings) and a wooden beaker (with silver fittings) which probably contained juice

Deviant/Special Traits: bi-ritual burial of two individuals of the same age, buried in a prominent position. It is unclear whether the residential building in which grave chamber was integrated was still in use at the time of burial; richness of grave goods

Type of deviant Burial: combination of special traits

Interpretation: unclear

Frankfurt am Main-Harheim, Hesse, Germany

Site Type: inhumation cemetery

Site Date: c. 450-750

Prevailing Orientation: west-east

Number of excavated Burials: 141

Citation: von Freeden 2020

Grave 18

Burial mode: inhumation

Orientation: northwest-southeast

Body Position: flexed

State of Preservation: good

Age Class: juvenis

Sex: female

Methods of Sex Estimation: skeletal morphology

Description of Grave and Burial: the burial was not placed in a regular grave pit but interred in an irregularly shaped pit that superimposed grave 22; the body was found in a flexed position turned to the left side with the chest lying on the ground. The arms are bent. The right hand bent unnaturally upwards against the right forearm.

Grave Goods: (1) snail shells (unclear whether they were intentionally deposited or are just a biofact from the backfilling)

Deviant/Special Traits: body position and superimposition of another grave

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Georgenberg, Upper Austria, Austria

Site Type: churchyard

Site Date: c. 850-1000

Prevailing Burial Mode: inhumation

Prevailing Orientation: southwest-northeast

Number of excavated Burials: 64

Citation: Tovornik 1980

Grave 34

Burial mode: inhumation

Orientation: southwest-northeast

Grave Disturbance: yes – unclear mode of disturbance

Body Position: supine

State of Preservation: good

Age Class: neonatus-infans I/I

Age: 3-6 months

Grave Dimensions: L: 110 cm, W: 36 cm,

D: 80 cm

Description of Grave and Burial: rectangular grave pit with rounded corners. Cut into the bedrock and supplemented with further rock placements. The grave pit was additionally covered with a wooden board and a heavy, dense layer of rocks, especially on top the lower body.

Deviant/Special Traits: the grave was covered up with rocks

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Gleink-Steyr, Upper Austria, Austria

Site Type: inhumation cemetery

Site Date: c. 700-800

Prevailing Orientation: west-east

Number of excavated Burials: 46

Citation: Russ 2016, Weberstorfer 2013

Grave 002/1991

Burial mode: inhumation

Orientation: north-south

Body Position: supine

State of Preservation: the skeletal remains are almost completely preserved, yet the bone surface is partially eroded

Age Class: infans II

Age: 9-10 years

Grave Dimensions: L: 180 cm, W: 90 cm

Description of Grave and Burial: rectangular grave pit with rounded corners; linear soil discolorations of wooden boards

Pathologies, non-metric Variations, anatomical Anomalies: porosities on the sinus maxillaris (both sides); porosities on the external auditory canal (left); porosities on the palatine; linear lamellar new bone formation (striae) on both femurs

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Gnadendorf, Lower Austria, Austria

Site Type: single burial site

Site Date: 1039 ± 34 AD (cal)

Citation: Daim and Lauermann 2006

Grave 1

Burial mode: inhumation

Orientation: west-east

Body Position: supine

State of Preservation: good

Age Class: juvenis

Age: 15-18 years

Methods of Age Estimation: dental development, body height, epiphyseal closure status

Gender: male

Sex: probably male

Methods of Sex Estimation: skeletal morphology

Grave Dimensions: L: 200 cm, W: 60 cm, D: 80 cm

Grave Disturbance: disturbed due to construction works

Description of Grave and Burial: most of the skeletal remains were preserved. The skull was moved due to construction work and thus slightly fragmented. The mandible was found in situ.

Pathologies, non-metric Variations, anatomical Anomalies: the skeleton shows several pathological changes and anomalies that can be assigned to the congenital disease Klippel-Feil-syndrome and to physical stress during his entire lifespan:

Klippel-Feil: skull bones are thickened - the skull in general is slightly deformed: it is wide and flat. The base of the occipital is malformed and shows bilateral symmetrical hypoplasia. The connection between occipital and sphenoid remained unfused - probably remained cartilaginous. the condyle occipitalis are asymmetric and the foramen magnum is indented - basilar impression/basilar invagination. Constriction of the auditory canal - possibly causing deafness or reduced hearing. Cervical vertebrae 2 and 3 are fused. Thoracic vertebrae 2 and 3 are fused. The right side of the first element of the coccyx is fused to the sacrum. Spina bifida.

Skeletal stress marker: Sinusitis, Stomatitis, Cribria orbitalia and Linear Enamel Hypoplasia, new bone formation on the right maxilla, new bone formation (woven bone) on the diaphyses of both femurs.

Trauma on the right Os parietale with signs of healing processes.

Unspecific bone change: Bone defect on the Caput and Collum radii as well as the corresponding parts of the ulna. finger-thick roundish-oval recess with smooth edges on the capitulum and trochlea humeri

Grave Goods: (1) 2 headdress rings, one made of silver alloy, one made of copper alloy; (2) fragment of an iron belt buckle; (3) 6 belt fittings made of gilded silver; (4) iron loop as part of the belt accessories; (5) 2 Denars, mint under king Berengar (in Venice or Verona); (6) 5 silver coins, mint under king Berengar; (7) 3 silver coins, mint under king Ludwig - most of the coins were worn attached to a garment and thus perforated; (8) fitting of the saber made of gilded silver; (9) ornamented, high quality saber; (10) fittings made of gilded silver; (11) components of a bridle; (12) stirrups; (13) iron knife; *Animal remains:* (1) foot bones and skull of a seven-year-old stallion, no cut marks visible which might suggest a very careful dismemberment; (2) femur of a three-year-old horse with cut marks on it and a knife stuck in it; (3) remains of fish skin associated with a handle covering of the saber or scabbard. Probably from a shark or ray. Found corroded to the saber

Deviant/Special Traits: isolated and very rich equipped burial

Type of Deviant Burial: burial in an unusual place

Interpretation: representation of lost potential

Göttweig, St. Georg, Lower Austria, Austria

Site Type: church

Site Date: c. 1200 - 1600

Number of excavated Burials: 38

Citation: Wimmer 2016, Hausmair 2018, Hausmair 2020

Eaves-drip burials

Number of individuals: 38

Age Class: stillbirth – neonates – infans I/II

Deviant/Special Traits: clustered location along the church wall; the church of St. Georg had no burial privileges

Type of Deviant Burial: unusual burial place

Interpretation: parental grief response and/or afterlife concern

Gossam Burgkirche, Lower Austria, Austria

Site Type: church
Site Date: c. 1100 - 1600
Number of excavated Burials: 31
Citation: Lindenhofer 2012, Großschmidt und Winkler 1994

Eaves-drip burials

Number of individuals: 31
Age Class: stillbirth – neonates – infans I/I
Deviant/Special Traits: clustered location along the church wall; the church of Gossam had no burial privileges
Type of Deviant Burial: unusual burial place
Interpretation: parental grief response and/or afterlife concern

Grzybów, Podkarpackie Voivodeship, Poland

Site Type: churchyard
Site Date: medieval
Citation: Gardela and Duma 2013

Burial mode: inhumation
Burial Date: c. 1300-1400
Age class: subadult (probably neonatus-infans I)
Description of Grave and Burial: burial in a pottery vessel
Deviant/Special Traits: unusual burial container
Type of Deviant Burial: unusual burial mode
Interpretation: unclear

Hemmaberg, Carinthia, Austria

Site Type: churchyard
Site Date: c. 700-1700
Prevailing Burial Mode: inhumation
Prevailing Orientation: west-east
Number of excavated Burials: 29
Citation: Eitler and Seidel 2022; anthropological report by N. Richards (<https://thanados.net/entity/175496>)

Grave 7

Burial Date: 1160 ± 30 cal.
Burial mode: inhumation
Orientation: west-east
Body Position: supine
State of Preservation: good
Age Class: juvenis
Age: 15 ± 3 years
Methods of Age Estimation: dental morphology
Sex: probably male
Methods of Sex Estimation: skeletal morphology

Grave Disturbance: yes – unclear mode of disturbance

Description of Grave and Burial: grave pit cut into the bedrock with additional rocks placed on the northern side of the grave. Burial in supine position, the right arm was slightly bent upon the pelvis. The left arm was also bent, the hand was placed on the sternum. The right leg was bent.

The feet area of the grave pit is disturbed, yet the right lower legs are still in situ. A large rock was found lying on the left stretched leg. It is not mentioned whether this could be intentionally placed there, but according to a drawing of the grave, the leg was still intact which could be an indicator that the rock has not fallen down but was placed on top before decomposition.

Pathologies, non-metric Variations, anatomical Anomalies: the skull was blackened due to heat impact (maybe because of easter fires that are celebrated on the Hemmaberg?).

New bone formation on the maxilla, temporal squama and porotic hyperostosis on the right Os parietale. Linear enamel hypoplasia, caries, and apical processes on the teeth.

Rhomboid fossa on the left clavicle and a roughening of the Impressio ligamenti costoclavicularis and osteophyte formation on the proximal end of the right clavicle (possible evidence of habitual stress markers?).

Further new bone formation on both femurs
Deviant/Special Traits: possible restriction of movement through the placement of a rock
Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Grave 29

Burial mode: inhumation
Orientation: south-north
State of Preservation: good
Grave Disturbance: yes – unclear mode of disturbance
Body Position: supine with slightly bent legs
Age Class: neonatus-infans I/I
Age: 6-12 months
Methods of Age Estimation: dental morphology, long bone lengths
Pathologies, non-metric Variations, anatomical Anomalies: new bone formation on the left humerus; Cribra orbitalia and further new bone formation on the left orbita; new bone formation on the both Ossa zygomatica; new bone formation on the Tabula externa of the Os frontale just above the orbitals and on the Tabula interna left of the Sutura coronalis; new bone formation on the left Os parietale; new bone formation and porosities on the right Os occipitale and Sinus transversalis; new

bone formation on the Os sphenoidalis and on the mandible; additional left upper lateral incisor (hyperdontia); flaring of several sternal rib ends and deformation of some ribs – some of these pathological changes might be an indicator for vitamin C deficiency (scurvy)

Deviant/Special Traits: orientation

Type of Deviant Burial: combination of deviating traits

Interpretation: unclear

Hessens in Wilhelmshaven, Lower Saxony, Germany

Site Type: settlement

Site Date: early medieval

Citation: Siegmüller 2010, Schlabow 1958, Teegen and Schultz 1999, Beilke-Voigt 2007

Burial mode: inhumation

Location: inside the house, underneath a hearth
Class: neonatus

Age: c. 3 months

Description of the Burial: burial of a neonatus that was completely bound in woollen fabric. A cord was wrapped around the neck and body. The cervical vertebrae were found in a twisted position; strangling with the cord in combination with the backward bending of the head was seen as the cause of death in the original examination. Further trauma on the ribs was seen as evidence that the child had been additionally stabbed in the chest with a dagger-like object

Deviant/Special Traits: burial within the settlement context, manipulation of the body, maybe traces of severe violence

Type of Deviant Burial: combination of deviating factors

Interpretation: unclear; possible foundation sacrifice (?)

Holubice, Jihomoravský kraj, Czech Republic

Site Type: inhumation cemetery

Site Date: c. 500-600

Prevailing Orientation: west-east

Number of excavated Burials: 105

Citation: Čížmář 2011

Grave 55

Burial mode: cremation

Age Class: Infans I

Description of Grave and Burial: small urn, deposited in a round pit

Deviant/Special Traits: only cremation burial on site

Type of Deviant Burial: unusual burial mode

Interpretation: fear of the dead and death

Holzheim, St. Thomas, Hesse, Germany

Site Type: churchyard

Site Date: c. 1000-1100

Prevailing Burial Mode: inhumation

Prevailing Orientation: west-east

Citation: Wand 1989

Grave 6

Burial mode: inhumation

Location: along the church wall

Orientation: west-east

State of Preservation: good

Body Position: supine

Age Class: neonatus-infans I/I

Age: 9 months ± 3 months

Manipulation of the Body: a rooftile was placed on the child's face with the hollow side covering the face

Deviant/Special Traits: covered face

Type of Deviant Burial: unusual body treatment and position

Interpretation: fear of the dead and death

Jellenbek, St. Catherinenkirche, Schleswig-Holstein, Germany

Site Type: church, churchyard

Site Date: c. 1200-1800

Prevailing Burial Mode: inhumation

Prevailing Orientation: west-east

Number of excavated Burials: 70

Citation: Wehner and Grüneberg-Wehner 2014

Burial Mode: inhumation

Burial Date: c. 1550-1600

Location: inside the church

Orientation: west-east

Body Position: supine

State of Preservation: good

Age Class: neonatus-infans I/I

Age: 1 year (± 4 months)

Methods of Age Estimation: skeletal and dental morphology

Grave Disturbance: disturbed due to construction works

Grave Dimension: L: 90 cm, W: 50 cm

Description of Grave and Burial: burial in a wooden coffin; the lower legs were dislocated due to the erection of another grave in 1651 (inscription on the tombstone - serves as a *terminus ante quem*);

Manipulation of the Body: the tip of a drop-shaped rock was placed inside the child's mouth. The grave taphonomy suggests an intentional placement as no disturbance or dislocation of the upper body parts was noticed

Pathologies, non-metric Variations, anatomical Anomalies: meningitis; epidural hematoma; Moeller's disease; chronic inflammation of the middle ear; tuberculosis

Deviant/Special Traits: placement of a rock inside the child's mouth

Type of deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Kána, Budapest XI, Hungary

Site Type: settlement, church, churchyard

Site Date: c. 1150-1300

Prevailing Burial Mode: inhumation

Prevailing Orientation: west-east

Number of excavated Burials: 1100

Citation: Terei 2005, Vargha 2017

Pit 3209

Burial mode: deposition

Location: round refuse/storage pit *Age Class:* infans II

Age: 10-11 years

Description of the Burial: the body was found in a supine position, yet with twisted limbs. it seems as if it was not placed in a formal position but rather thrown into the pit. An iron pike was found underneath the right arm (probably not as an intentional grave good)

Deviant/Special Traits: burial in a settlement context, deposited without funerary rituals

Type of Deviant Burial: burial in an unusual place

Interpretation: disposal of a body (?)

Pit 6820

Grave with multiple individuals

Number of individuals: min. 2

Burial mode: inhumation

Location: storage/refusal pit

Orientation: southwest-northeast

Age of Ind. 1: Infans II (12-14 years)

Age and Sex of Ind. 2: adult male

Description of Grave and Burial: the lower body half of a 12–14-year-old child was found in a supine position with stretched legs in a storage/refusal pit. A large, round grindstone was placed in the middle

of the pit on top of the child's legs. The body of an adult male was also deposited in the pit, some cm above the child, it was obviously thrown into the pit. Further individual human bones were found at the bottom of the pit

Manipulation of the Body: the upper body half of the child is missing, while the lower body half is in correct anatomical order – it is not stated whether these might be due to a manipulation/dismemberment of the body, but there is no adjacent pit or other feature that might have disrupted the skeletal position

Deviant/Special Traits: burial within the settlement context, placement of a grindstone on the child's legs, maybe mutilation of the corpse

Type of Deviant Burial: combination of deviating traits

Interpretation: unclear

Kleinlangheim, Bavaria, Germany

Site Type: bi-ritual cemetery

Site Date: c. 500-700

Prevailing Orientation: west-east

Number of excavated Burials: 289

Citation: Peschek 1996

Grave 213

Burial mode: inhumation

Orientation: north-south

Body Position: supine *State of Preservation:* very poor

Age Class: infans I

Age: 1-2 years

Grave Dimensions: L: 70 cm; W: 49 cm

D: 87cm

Grave Goods: (1) hand-formed, small bowl-like pottery vessel

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Köisingen, Baden-Württemberg, Germany

Site Type: inhumation cemetery

Site Date: c. 525-700

Prevailing Orientation: west-east
Number of excavated Burials: 82
Citation: Knaut 1993

Grave 11

Burial Mode: inhumation
Burial Date: 565-620/630
Orientation: west-east
State of Preservation: very poor
Body Position: supine
Age Class: infans II
Age: 8-10 years
Grave Dimensions: L: 180 cm; W: 77 cm
D: 95cm
Grave Disturbance: though the publication states that the grave was not disturbed, the location of bone fragments as depicted indicates some disturbance
Description of the Burial: earth pit with remains of a wooden coffin. According to the excavation report, the grave was covered with rocks
Grave Goods: (1) 2 small pots, probably deposited on top of the coffin; (2) minor remains of sheet iron, found next to the left arm; (3) beaker made of greenish glass
Deviant/Special Traits: rock covering of the grave
Type of Deviant Burial: unusual body treatment and position
Interpretation: fear of the dead and death

Grave 37

Burial Mode: inhumation
Burial Date: 545-600
Location: peripheral location
Orientation: west-east
Body Position: supine
State of Preservation: mediocre
Age Class: infans II
Age: 6-8 years
Gender: female
Grave Dimensions: L: 238 cm; W: 82 cm
D: 195cm
Grave Disturbance: ancient grave robbery
Description of the Burial: earth pit with remains of a wooden coffin, relatively large and deep. Parts of the upper body were found dislocated, according to the excavation report due to grave robbery, a discoloration of soil indicates a looting pit. The skeleton was placed in the western area of the grave pit. Lower legs and feet were still in situ.
Grave Goods: (1) double-conical spindle whorl; (2) small, hand-formed pot; (3) a pair of bronze keys with ornamentation, attached to a ring made of twisted bronze wire; (4) 6 glass beads (one millefiori bead); (5) 3 fragments of Roman glass (from the

backfilling); (6) spindle-shaped bead made of green glass, overlaid with white glass thread (worn as a belt pendant); (7) perforated tooth of a bear (worn as a belt pendant); (8) eggshells; (9) 3 disc-shaped amber beads

Grave Goods with apotropaic Characteristics: amber beads; bear tooth; spindle-shaped glass pendant; keys; eggshells

Deviant/Special Traits: grave goods with apotropaic characteristics

Type of Deviant Burial: unusual objects

Interpretation: parental grief response and/or afterlife concern

Kremsdorf, Upper Austria, Austria

Site Type: inhumation cemetery

Site Date: c. 700-875

Prevailing Orientation: west-east

Number of excavated Burials: 97

Citation: Hausmair 2016

Grave 2/1960

Burial Mode: inhumation
Orientation: north-south
Body Position: supine
Age Class: infans I
Description of the Burial: Parts of the grave were covered with a layer of rocks; large lumps of charcoal were found at the feet
Grave Goods: (1) wire earring; (2) finger ring; (3) chain links found between the thighs; (4) fragment of a rim of a small vessel made of translucent, turquoise glass; (5) semitranslucent, dark blue, slightly faceted glass stick with hexagonal cross-section – possible used for bead production
Deviant/Special Traits: covering of the grave with a layer of rocks, possible traces of fire rites, orientation
Type of Deviant Burial: unusual body treatment and position
Interpretation: fear of the dead and death

Grave 8/1960

Burial Mode: inhumation
Orientation: northwest-southeast
Body Position: supine
Age Class: infans II
Grave Depth: 105 cm
Grave Depth: 105 cm
Description of the Burial: the grave was covered with a layer of rocks
Grave Goods: (1) wire earring with attached glass bead
Deviant/Special Traits: covering of the grave with a layer of rocks

Type of Deviant Burial: unusual body treatment and position

Interpretation: fear of the dead and death

Krungl, Styria, Austria

Site Type: inhumation cemetery

Site Date: c. 740-1000

Prevailing Orientation: west-east

Number of excavated Burials: 274

Citation: Breibert 2015

Grave 79

Burial Mode: inhumation

Orientation: north-south

Body Position: supine

Age Class: subadult

Grave Depth: 45 cm

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment and position

Interpretation: unclear

Grave 114

Burial Mode: inhumation

Orientation: northwest-southeast

Body Position: According to excavation report the skeleton was found in a 'deviating position' with the skull turned to the south, the position is not described further

State of Preservation: poor

Age Class: subadult

Deviant/Special Traits: position

Type of Deviant Burial: unusual body treatment and position

Interpretation: unclear

Kümmersbruck, Bavaria, Germany

Site Type: settlement, smithing workshop

Site Date: c. 700-900

Number of excavated Burials: 3

Citation: Hensch 2018

SE 142

Burial mode: inhumation

Location: in the smithing workshop

Orientation: west-east

State of Preservation: good

Body Position: supine

Age Class: infants I

Age: 2-3 years

Sex: male

Methods of Sex Estimation: not stated

Description of the Grave and Burial: earth pit with rows of rocks on the long sides; burial of an infant in supine position, the left arm is slightly bent, the right arm stretched out next to the body

Deviant/Special Traits: burial of a child and two adult male individuals in the smithing area

Type of Deviant Burial: burial in an unusual place

Interpretation: representation of lost potential

Langenau, Baden-Württemberg, Germany

Site Type: inhumation cemetery

Site Date: Merovingian

Prevailing Orientation: west-east

Number of excavated Burials: 114

Citation: Hachmeister 1992, Nießen 2012

Grave 138

Burial Mode: inhumation

Body Position: prone

Age Class: subadult

Gender: female

Description of the Burial: burial of a girl in prone position. The legs are slightly bent, the lower arms are placed underneath the chest area, the fingers were crawled into the soil. Interpretation of Hachmeister: the girl was pushed into the pit alive

Deviant/Special Traits: body position

Type of Deviant Burial: unusual body treatment and position

Interpretation: fear of the dead and death

Leerhabe, Lower Saxony, Germany

Site Type: church, churchyard

Site Date: late medieval – Early Modern Period

Citation: Bärenfänger and Grefen-Peters 2015, Gardela and Duma 2013

Burial mode: inhumation

Burial Date: c. 1200-1400

Location: outside, yet in the immediate vicinity of the church

Age class: fetus-neonatus

Age: 8.-9. lunar month

Description of Grave and Burial: burial in a broad pottery vessel

Deviant/Special Traits: unusual burial container outside the churchyard

Type of Deviant Burial: unusual burial mode

Interpretation: unclear

Leihgestern, Hesse, Germany

Site Type: inhumation cemetery

Site Date: c. 500-700
Prevailing Orientation: west-east
Number of excavated Burials: 22
Citation: Thiedmann 2008

Grave 3

Burial mode: inhumation
Burial Date: earliest phase of burial ground occupancy
Orientation: south-north
Body Position: supine
State of Preservation: poor
Age class: juvenis
Method of Age Estimation: according to coffin size
Gender: female
Description of Grave and Burial: Wooden chamber made of vertically placed wedge-shaped planks. Inside the chamber was a wooden coffin (length 135cm, width 65cm, height 30cm)
Grave Goods: (1) jug with handle and spout; (2) small tube made of gilded sheet bronze with incised cross ornament; (3) bronze bell; (4) decorated handle of a small key made of gilded bronze; (5) a set of leg bindings including: (5.1) 2 small, rectangular and slightly curved bronze fittings; (5.2) various small buckles; (5.3) 2 golden strap-ends; (6) necklace made of 35 glass beads; (7) a bear claw; (8) remains of a wooden basket with engraved ornaments and hazelnuts inside; (9) remains of a wooden plate with geometric ornamentation and poultry bones on it; (10) beaker made of olive green glass
Grave Goods with apotropaic Characteristics: bell, bear, claw, key
Deviant/Special Traits: grave goods with apotropaic character, deviating orientation and elaborate grave construction
Type of Deviant Burial: combination of deviating traits
Interpretation: parental grief response and/or afterlife concern

Leobersdorf, Lower Austria, Austria

Site Type: inhumation cemetery
Site Date: c. 600-850
Prevailing Orientation: west-east
Number of excavated Burials: 188
Citation: Daim 1987

Grave 130

Burial Mode: inhumation
Orientation: west-east
Body Position: supine
Age Class: infans I
Gender: female
Grave Dimensions: L: 165 cm; W: 65 cm
D: 135 cm
Grave Goods: (1) iron chain links found scattered all over the body; (2) iron buckle; (3) iron bell found at the right foot; iron knife found at the feet
Grave Goods with apotropaic Characteristics: chain links, bell
Deviant/Special Traits: grave goods with apotropaic characteristics
Type of Deviant Burial: unusual objects
Interpretation: unclear

Libice - Akropolis, Středočeský kraj, Czech Republic

Site Type: inhumation cemetery
Site Date: c. 900-1200
Prevailing Orientation: west-east
Number of excavated Burials: 369
Citation: Mařík 2009

Grave 227a

Burial Mode: inhumation
Orientation: west-east
Body Position: supine
Age Class: infans II
Description of Grave and Burial: earth pit with wooden construction
Grave Goods: (1) 1 iron spur; (2) 1 iron sword
Deviant/Special Traits: grave goods that are not age-appropriate; most of the graves on the site are without any objects – this is the only sword on the site and 1 out of 5 spurs on the site
Type of deviant Burial: unusual objects
Interpretation: representation of lost potential

Libice – Kanín II, Středočeský kraj, Czech Republic

Site Type: inhumation cemetery
Site Date: c. 900-1200
Prevailing Orientation: west-east
Number of excavated Burials: 143
Citation: Mařík 2009, Hosek 2020

Grave 62

Burial Mode: inhumation
Orientation: northeast-southwest
Body Position: flexed
Age Class: infans II
Description of Grave and Burial: earth pit with remains of a wooden construction
Deviant/Special Traits: body position and orientation
Type of deviant Burial: unusual body treatment and position
Interpretation: unclear

Grave 81

Burial Mode: inhumation
Orientation: northeast-southwest
Body Position: flexed
Age Class: juvenis
Grave Disturbance: yes – unclear mode of disturbance
Description of Grave and Burial: the skeleton was found lying on its right side, with the legs slightly bent and the feet crossed. The lower leg bones and the feet were found in the backfilling about 30-40 cm above the ground
Deviant/Special Traits: body position and orientation
Type of deviant Burial: unusual body treatment and position
Interpretation: unclear

Grave 88

Burial Mode: inhumation
Orientation: southwest-northeast
Body Position: flexed
Age Class: juvenis
Description of Grave and Burial: earth pit with wooden construction
Deviant/Special Traits: body position
Type of deviant Burial: unusual body treatment and position
Interpretation: unclear

Grave 91-92

Grave with multiple individuals
Number of individuals: 2
Burial Mode: inhumation
Orientation: northwest-southeast
Age of Ind. 91: juvenis
Age of Ind. 92: infans II-juvenis

Description of Grave and Burial: double burial of two children, Individual 92 was found in a flexed position
Deviant/Special Traits: deviating body position
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 100

Burial Mode: inhumation
Orientation: southwest-northeast
Body Position: flexed
Age Class: juvenis
Description of Grave and Burial: earth pit with remains of a wooden construction
Deviant/Special Traits: body position
Type of deviant Burial: unusual body treatment and position
Interpretation: unclear

Grave 185

Grave with multiple individuals
Burial Mode: inhumation
Number of individuals: 3
Age and Sex of Ind. 1: adult-matur, female
Age of Ind. 2: infans II-juvenis
Age of Ind. 3: perinatal
Orientation: west-east
Description of Grave and Burial: triple burial of an adult-matur female with two children, the older child was found in a flexed position
Deviant/Special Traits: deviating body position
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Libice – U cukrovaru, Středočeský kraj, Czech Republic

Site Type: inhumation cemetery
Site Date: c. 900-1200
Prevailing Orientation: west-east
Number of excavated Burials: 82
Citation: Mařík 2009

Grave 27

Burial Mode: inhumation
Orientation: north-south
Body Position: supine
Location: peripheral location
Age Class: infans II
Age: 12 years
Description of Grave and Burial: earth pit with rock settings and wooden construction
Deviant/Special Traits: orientation and peripheral location. Grave 26, which is 1.4 m next to Grave 27 was also orientated north-south

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Linz-Zizlau, Upper Austria, Austria

Site Type: inhumation cemetery

Site Date: c. 600-700

Prevailing Orientation: west-east

Number of excavated Burials: 160

Citation: Ladenbauer-Orel 1960

Grave 36

Burial Mode: inhumation

Orientation: west-east

Body Position: supine

State of Preservation: mediocre

Age Class: infans II

Gender: male

Description of Grave and Burial: burial 36 is associated with grave 40, a burial of a horse

Grave Goods: (1) iron strap-end; (2) parts of a horse bridle set including (2.1) strap-fitting from a harness made of iron with silver and brass inlays; (2.2) 1 iron fitting; (2.3) 2 silver, shield-shaped iron fittings with silver and brass inlays forming a braided pattern; (2.4) six shield-shaped iron fittings with geometric patterns; (2.5) twelve differently shaped fittings with spiral-shaped silver and brass inlays; (2.6) bridle; (2.7) star-shaped iron fitting; (2.8) iron strap-end with silver inlays; (3) iron knife; (4) bone comb

Grave Goods with apotropaic Characteristics:

Deviant/Special Traits: grave goods that are not age appropriate. the only burial with horse riding equipment on the site

Type of deviant Burial: unusual objects

Interpretation: representation of lost potential

Grave 70

Burial Mode: inhumation

Orientation: west-east

Body Position: supine

Age Class: subadult

Grave Goods: (1) metal components and wooden remains of a bucket with blueberries inside: (1.1) bronze rivets; (1.2) ribbon-shaped handle made of bronze; (1.3) fragments of the lower hoop with garland-like ornamentation; (1.4) fragment of the upper rim composed of shields with faces on them; (2) belt set (maybe seax belt): (2.1) iron fitting; (2.2) 2 undecorated iron strap-ends; (2.3) bronze strap-end; (2.4.) bronze buckle with rectangular shackle; (2.5) bronze ring; (3) small seax; (4) 3 arrowheads; (5) pointed iron pin; (6) bone comb

Deviant/Special Traits: grave goods that are not age appropriate. The only burial with the find of a bucket on the site

Type of deviant Burial: unusual objects

Interpretation: representation of lost potential

Lužice, Jihomoravský kraj, Czech Republic

Site Type: inhumation cemetery

Site Date: c. 500-700

Prevailing Orientation: west-east

Number of excavated Burials: 116

Citation: Klanica and Klanicová 2011

Grave 36 – 1981

Burial Mode: inhumation

Burial Date: c. 800-1000 (*burgwallzeitlich*)

Orientation: north-south

Body Position: supine

Location: prominent location in the center of the burial site

Age Class: juvenis

Age: 15 years

Sex: probably female

Methods of Sex Estimation: skeletal morphology

Grave Goods: (1) pottery vessel, ornamented with a wave band and horizontal lines; (2) iron fragment

Deviant/Special Traits: the only burial on the site that was interred in the 9th/10th century, placed at a prominent position in the center of the burial ground

Type of deviant Burial: combination of deviating traits

Interpretation: unclear

Markt Einersheim, Bavaria, Germany

Site Type: inhumation cemetery

Site Date: Merovingian

Prevailing Orientation: west-east

Number of excavated Burials: 33

Citation: Pütz 2019

Grave 9

Burial Mode: inhumation

Orientation: east-west

Body Position: supine

State of Preservation: poor

Age Class: juvenis

Age: 15 years

Gender: female

Sex: female

Methods of Sex Estimation: skeletal morphology

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimensions: L: 243 cm, W: 90 cm,
Description of Grave and Burial: grave pit cut into to bedrock with another intentionally placed rock (50cm length) on the southern wall of the pit. Several rocks (up to 20cm diameter) were found in the backfilling. Poorly preserved skeletal remains, the bone surface was eroded. The arms are slightly bent, the hands were placed on the pelvis, the lower legs are gone, probably due to disturbance. Lumps of charred loam were found underneath the body
Grave Goods: (1) iron buckle; (2) iron clamp; (3) iron knife with remains of a bone handle; (4) 16 glass beads
Deviant/Special Traits: deviating orientation
Type of deviant Burial: unusual body treatment or position
Interpretation: unclear

Martinsheim-Einheim, Bavaria, Germany

***Site Type:* inhumation cemetery**
***Site Date:* Merovingian**
***Prevailing Orientation:* west-east**
***Number of excavated Burials:* 58**
***Citation:* Pütz 2019**

Grave 12

Burial Mode: inhumation
Orientation: west-east
Body Position: supine
State of Preservation: poor
Age Class: infans II
Age: 10-12 years
Gender: female
Grave Dimensions: L: 223 cm, W: 80 cm
D: 117 cm
Description of Grave and Burial: wooden remains were found underneath the body which indicate a burial coffin or other wooden construction
Grave Goods: (1) pottery bead; (2) spindle whorl; (3) 2 biconical pots; (4) triangular pendant made of non-ferrous metal; (5) 2 small rings made of non-ferrous metal; (6) clasp, originally from a Roman bronze armor; (7) buckle with chape made of non-ferrous metal; (8) long-oval buckle made of non-ferrous metal; (9) rectangular iron objects; (10) square iron object; (11) 3 fragments of rectangular, long iron artifacts with hooks (probably keys); (12) iron knife; (13) 1 pair of iron scissors; (14) c. 300 glass beads: (14.1) as part of a beaded necklace, found wrapped around the neck in two rows; (14.2.) another row of beads was found as part of a belt chatelaine; (14.3) 1 berlocke pendant; (14.4.) 4 amber beads; (14.5.) 1 cowrie; (15) shells of at least 3 eggs; (16) a three-layered comb made of bone; (17) 2 pendants made of bone

Deviant/Special Traits: one of the two richest graves on the site
Type of deviant Burial: unusual objects
Interpretation: representation of lost potential

Mockersdorf, Bavaria, Germany

***Site Type:* inhumation cemetery**
***Site Date:* c. 700-900**
***Prevailing Orientation:* west-east**
***Number of excavated Burials:* 42**
***Citation:* Brundke 2013b**

Grave 19

Burial Mode: inhumation
Orientation: west-east
Body Position: prone
State of Preservation: mediocre
Age Class: juvenis
Grave Dimensions: L: 193 cm; W: 74 cm
Grave Disturbance: disturbed by quarrying works
Description of Grave and Burial: earth pit surrounded by rocks. Except for some teeth, the skull was missing due to disturbances caused by stone quarrying in 1921, the rest of the body was found in situ
Grave Goods: (1) iron knife
Deviant/Special Traits: body position
Type of deviant Burial: unusual body treatment or position
Interpretation: fear of the dead and death

Naaburg, Bavaria, Germany

***Site Type:* churchyard**
***Site Date:* c. 900-1600**
***Prevailing Orientation:* west-east**
***Number of excavated Burials:* 200**
***Citation:* Hensch 2014**

Grave 278

Grave with multiple individuals
Number of Individuals: 2
Burial Mode: inhumation
Burial Date: c. 1400-1425
Orientation: northwest-southeast
Age and Gender of Ind. 1: senile female
Age of Ind. 2: neonatus
Description of Grave and Burials: Burial of a senile woman lying on her right side in a narrow grave pit. Behind her legs were skeletal remains of a neonate. Stratigraphic observation suggested that the two individuals were buried at the same time
Type of deviant Burial: burial in an unusual location

Interpretation: parental grief response and/or afterlife concern

Neresheim, Baden-Württemberg, Germany

Site Type: inhumation cemetery
Site Date: c. 450-700
Prevailing Orientation: west-east
Number of excavated Burials: 158
Citation: Knaut 1993

Grave 129-130

Burial Mode: inhumation
Burial Date: c. 565-590/600
Orientation: west-east
Body Position: supine
State of Preservation: mediocre
Age Class: infans I
Age: 2-4 years
Gender: male
Grave Disturbance: ancient grave reopening
Grave Dimension: L: 132 cm; W: 39 cm
D: 100 cm
Description of Grave and Burial: Primary and secondary place of burial of an infant next to each other: According to the excavation report, the grave was not robbed, but the body was deliberately taken out of the tree coffin and placed immediately next to it, following the same orientation. The location, distribution and the types of grave goods suggest that the individual was reburied in the course of a multiphase burial rite. The anatomical position of the skeleton is mostly intact, which suggests that the relocation happened at a time when the tendons were still partially intact, or that care was taken to rearrange the recovered skeletal parts in their anatomical position. Both arms and one half of the pelvis are missing. Some grave goods were relocated with the skeleton, some were left inside the tree trunk coffin in their original place.
Manipulation of the Body: Relocation of the presumable only partially disintegrated body
Grave Goods: (1) two arrowheads made of iron (7cm long) next to the left knee; (2) square iron fitting found on the chest; (3) unidentifiable iron fragment found on the pelvic area; (4) another iron arrowhead (9cm long) was found in the coffin; (5) iron knife found in the coffin; (6) bronze tweezers found in the coffin; (7) belt bag containing a (7.1.) fire striker (silex and fire steel); (7.2.) hook-shaped iron tool (7.3) bag fastener: buckle and strap-end; (8) belt buckle; (9) further unidentifiable iron fragments
Type of deviant Burial: multi-phase burial

Interpretation: unclear

Niederndorf, St.Georg, Tirol, Austria

Site Type: churchyard
Site Date: Early Middle Ages – 1376
Prevailing Burial Mode: inhumation
Prevailing Orientation: west-east
Number of excavated Burials: 13
Citation: Sydow 1989

Grave 004 - Farmhouse

Burial Mode: inhumation
Burial Date: early medieval
Orientation: north-south
Body Position: supine
Age Class: subadult
Deviant/Special Traits: orientation
Type of deviant Burial: unusual body treatment or position
Interpretation: unclear

Növenthien, Lower Saxony, Germany

Site Type: inhumation cemetery
Site Date: c. 1100-1300
Prevailing Orientation: west-east
Number of excavated Burials: 50
Citation: Peters 1966

Grave 53

Burial Mode: inhumation
Orientation: west-east
Body Position: supine
Age Class: subadult
Pathologies, non-metric Variations, anatomical Anomalies: Hydrocephalus
Grave Goods: (1) 4 coins, found inside the mouth cavity
Deviant/Special Traits: coins placed inside the mouth
Type of deviant Burial: unusual objects
Interpretation: fear of the dead and death

Nowy Targ, Wrocław, Lower Silesian Voivodeship, Poland

Site Type: settlement, urban city center

Site Date: medieval
Citation: Gardela and Duma 2013

Burial mode: inhumation
Burial Date: c. 1250-1300
Location: inside a burnt-down house
Age class: neonatus
Description of Grave and Burial: a complete skeleton of a neonate deposited in a cooking pot, which was dug into the remains of a burnt-down house
Deviant/Special Traits: unusual burial container and location
Type of Deviant Burial: combination of deviating traits
Interpretation: unclear

Oberderdingen-Strümpfeläcker, Baden-Württemberg, Germany

Site Type: inhumation cemetery
Site Date: c. 600-800
Prevailing Orientation: west-east
Number of excavated Burials: 83
Citation: Banghard 2009

Grave 37
Burial Mode: inhumation
Orientation: west-east
Body Position: flexed
Age Class: infans II-juvenis
Age: 12-15 years
Sex: probably male
Methods of Sex Estimation: skeletal morphology
Grave Dimension: L: 175 cm, W: 65 cm
Description of Grave and Burial: burial in a simple earth pit, superimposing grave 38 which was destroyed in the process. Burial in flexed position turned to the right side. Straight spine, the arms are placed parallel to the body, the feet are missing
Deviant/Special Traits: body position
Type of deviant Burial: unusual body treatment or position
Interpretation: unclear

Oechlitz, Saxony-Anhalt, Germany

Site Type: inhumation cemetery

Site Date: early medieval
Prevailing Orientation: west-east
Number of excavated Burials: 72
Citation: Müller 2013, 2020

Grave 13
Grave with multiple individuals
Number of individuals: 2 (+ 3 individuals of neighboring graves and 1 horse burial)
Burial Mode: inhumation
Burial Date: c.900-1000
Orientation: west-east
Age and Sex of Ind. 1: early adult male
Age of Ind. 2: Infans I/I (1 year)
Description of Grave and Burials: burial of an early adult male in prone position. The right arm was placed above an infant (1-year-old) which was buried at the same time. His left hand was placed underneath his chin. It is the only multiple burial on this burial ground and was placed on top a burial of a horse (grave 14). The infant has been placed in a flexed position turned to the left. Its head is underneath the man's right upper arm. The infant is oriented east-west. Another infant (grave 32, infans I) was placed immediately next to the double burial in the north, orientated west-east, and remains of a neonate were found 40cm south of the male individual.
A female individual (Grave 17) in flexed position was placed approx. 1 meter west of the male's head.
Deviant/Special Traits: overall situation of these multiple burials; only multiple burial on the site
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear, maybe representing some kind of interpersonal relationship

Ornding, Lower Austria, Austria

Site Type: inhumation cemetery
Site Date: c. 800-1000
Prevailing Orientation: west-east
Number of excavated Burials: 5
Citation: Wais 1967

Grave 1953-02
Burial Mode: inhumation
Orientation: west-east
Body Position: prone
Deviant/Special Traits: body position
Type of deviant Burial: unusual body treatment or position
Interpretation: fear of the dead and death
Orosháza - Béke Tsz - Homokbánya, Com. Békés, Hungary

Site Type: inhumation cemetery
Site Date: c. 700 - 850
Prevailing Orientation: northwest-southeast
Number of excavated Burials: 152
Citation: Juhász 1995

Grave 72

Burial Mode: inhumation
Orientation: north-south
Body Position: prone
Age Class: juvenis
Sex: female
Methods of Sex Estimation: skeletal morphology
Description of Grave and Burial: burial of a child in prone position.
Deviant/Special Traits: body position and orientation
Type of deviant Burial: unusual body treatment or position
Interpretation: fear of the dead and death

Grave 152

Burial Mode: inhumation
Orientation: northwest-southeast
Body Position: prone
Age Class: juvenis
Grave Disturbance: yes – unclear mode of disturbance
Deviant/Special Traits: body position
Type of deviant Burial: unusual body treatment or position
Interpretation: fear of the dead and death

Orosháza-Bónum Téglagyár, Com. Békés, Hungary

Site Type: inhumation cemetery
Site Date: c. 675-750
Prevailing Orientation: northwest-southeast
Number of excavated Burials: 243
Citation: Juhász 1995

Grave 195

Burial Mode: inhumation
Orientation: northwest-southeast
Body Position: prone
Age Class: subadult
Sex: probably female
Methods of Sex Estimation: skeletal morphology
Description of Grave and Burial: burial of a child in prone position. upper extremities are gone - no note on grave disturbance
Manipulation of the Body: debatable
Deviant/Special Traits: body position

Type of deviant Burial: unusual body treatment or position
Interpretation: fear of the dead and death

Grave 202

Burial Mode: inhumation
Orientation: northwest-southeast
Body Position: flexed
Age Class: subadult
Sex: probably female
Methods of Sex Estimation: skeletal morphology
Grave Disturbance: partially destroyed during the excavation
Description of Grave and Burial: flexed position, lying on the right side. the lower extremities have been dislocated due to excavation works
Deviant/Special Traits: body position
Type of deviant Burial: unusual body treatment or position
Interpretation: fear of the dead and death

Peggau, Styria, Austria

Site Type: inhumation cemetery
Site Date: c. 700-950
Prevailing Orientation: northnorthwest-southsoutheast
Number of excavated Burials: 17
Citation: Gutjahr 2012

Grave 8/87

Burial Mode: inhumation
Orientation: north-south
Body Position: flexed
State of Preservation: good
Age Class: infans II
Age: 7-8 years
Description of Grave and Burial: burial in a flexed position, turned to the right. The child's head was covered with a rather large rock and 3 stone slabs
Deviant/Special Traits: deviating body position and securing the deceased in the grave by covering the body with rocks
Type of deviant Burial: unusual body treatment or position
Interpretation: fear of the dead and death

Pellendorf/Gaweinstal, Lower Austria, Austria

Site Type: settlement area

Site Date: c. 600-1000

Number of excavated Burials: 3

Citation: Novotny et al. 2006, Kührtreiber et al. 2008, Kührtreiber 2020, Kührtreiber 2022

Grave 1

Grave with multiple individuals

Number of Individuals: 2

Burial Mode: inhumation

Burial Date: C14 dates: 680-900 AD (IND 1); 770-970 AD (IND 2),

Location: in the settlement area

Orientation: southeast-northwest

Age of Ind. 1: adult (25-30 years) male

Age of Ind. 2: infans I (4-6 years)

Description of Grave and Burials: burial of an adult male in supine position, the skull is missing. Instead of his own skull, the skull of a 4-6 year-old child was placed in the grave. As there are no signs of disturbance or grave reopening, an alteration or secondary placement of the child's skull and removal of the adult's skull seems very unlikely. It can be assumed that the find situation reflects the situation of burial

Manipulation of the Bodies: both individuals show signs of intentional decapitation: Ind 1 (adult male) shows loss of bone substance on the 6th cervical vertebrae, Ind 2 (child) shows bone substance loss on both Ossa zygomatica and both occipital condyles. The traumata on both individuals show no signs of healing, which is why there are considered to be peri-mortal

Pathologies, non-metric Variations, anatomical Anomalies of Ind. 1: healed fracture on the right thumb, as well as on the 4th lumbar vertebra; unhealed fracture (peri-mortal trauma) on the shoulder and the arm. Periosteal reactions on the lower extremities which indicate Vitamin-C-deficiency; habitual skeletal stress markers on the femurs and lower legs that indicate frequent horseback riding

Pathologies, non-metric Variations, anatomical Anomalies of Ind. 2: Cribra orbitalia and porosities on the hard palate that indicate a general vitamin C and iron deficiency. The Os frontale is bulged and lateral deformations of the calvarium. On both sides, the external auditory canals were not ossified due to a developmental ossification disorder

Deviant/Special Traits: double burial of two individuals that have been most likely decapitated and buried within the settlement area during the time of active habitation of the settlement

Type of deviant Burial: combination of deviating traits

Interpretation: unclear

Pieścidła, Masovian Voivodeship, Poland

Site Type: inhumation cemetery

Site Date: medieval

Citation: Gardela and Duma 2013

Burial mode: inhumation

Burial Date: c. 1300-1500

Age class: subadult (most likely neonatus-infans I)

Description of Grave and Burial: burial in a pottery vessel

Deviant/Special Traits: unusual burial container

Type of Deviant Burial: unusual burial mode

Interpretation: unclear

Pilsting, Bavaria, Germany

Site Type: settlement area

Site Date: c. 700-1100

Number of excavated Burials: 20

Citation: Ganslmeier 1988, Kreiner 1989

Number of individuals: 20

Burial Mode: inhumation

Age Classes: fetus – neonatus – infans I/I

Description of Burials: 20 individuals found in post-holes and other pits within the settlement context. 15 were excavated and documented in situ, 13 of which were buried in west-east orientation. The oldest individual was 6 years, the youngest were fetuses. Initial interpretation of Kreiner, Ganslmeier: Depositing of unwanted children. No further information or interpretation published

Deviant/Special Traits: burials/depositions within the settlement area

Type of Deviant Burial: unusual burial place

Interpretation: unclear

Pitten, Lower Austria, Austria

Site Type: inhumation cemetery

Site Date: c. 750-850

Prevailing Orientation: west-east

Number of excavated Burials: 132

Citation: Friesinger 1975-77

Grave 49

Burial Mode: cremation

Age Class: neonatus-infans I/I

Age: c. 6 months

Grave Dimension: diameter 50 cm

Description of Grave and Burial: cremated remains of a 6-months-old infant in an urn, deposited in a round pit

Urn: Wide, low pot made of yellowish, stone-tempered clay. Wide, concave base with central depression and wave band decoration.

Grave Goods: (1) Small, cup-shaped pot made of yellowish-brown clay with limestone and quartz tempering. Slightly concave base, almost cylindrical body. Wave band decoration.

Deviant/Special Traits: only cremation burial on the site

Type of deviant Burial: unusual burial mode

Interpretation: fear of the dead and death

Grave 67

Burial Mode: inhumation

Orientation: south-north

Body Position: supine

Age Class: infans I

Age: c. 4 years

Grave Disturbance: ancient grave disturbance

Grave Dimension: L: 90 cm W: 40 cm

D: 122 cm

Description of Grave and Burial: the grave appears to have been disturbed during the construction of grave 066; the cranium and parts of the upper body were moved and deposited in the area of the right leg

Grave Goods: (1) small pot of reddish-brown clay with quartz and mica components in the tempering. Slightly concave base with central depression and bucket-shaped body. An irregular, four-line wave band is incised below the shoulder of the vessel; (2) eggshells

Grave Goods with apotropaic Characteristics: eggshells

Deviant/Special Traits: orientation

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Pleidelsheim, Baden-Württemberg, Germany

Site Type: inhumation cemetery

Site Date: c. 400-700

Prevailing Orientation: west-east

Number of excavated Burials: 264

Citation: Koch 2001

Grave 132

Burial Mode: inhumation

Burial Date: c. 575-600

Orientation: west-east

Body Position: prone

State of Preservation: good

Age Class: infans II

Gender: female

Sex: probably male

Methods of Sex Estimation: skeletal morphology

Grave Disturbance: modern disturbance

Grave Dimension: L: 175 cm, W: 90 cm

D: 95 cm

Description of Grave and Burial: burial in prone position. The left thigh was dislocated due to modern disturbance of the grave, the rest of the skeleton remained in situ.

Pathologies, non-metric Variations, anatomical Anomalies: pathological deformation of the spine

Grave Goods: (1) bullet-shaped object made of clay (1.7 cm diameter); (2) iron buckle; (3) 8 glass beads;

(4) 2 amber beads; (5) fragment of a bone comb

Grave Goods with apotropaic Characteristics: amber beads

Deviant/Special Traits: body position

Type of deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Pliening, Bavaria Germany

Site Type: inhumation cemetery

Site Date: c. 450-700

Prevailing Orientation: west-east

Number of excavated Burials: 260

Citation: Codreanu-Windauer 1996

Grave 26

Burial Mode: inhumation

Orientation: east-west

Body Position: supine

State of Preservation: poor

Age Class: subadult

Grave Dimension: L: 150 cm; W: 70 cm

Deviant/Special Traits: orientation

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Podersdorf am See, Burgenland, Austria

Site Type: settlement area

Site Date: c. 600-900

Number of excavated Burials: 5

Citation: Tobias et al. 2020

Flexed Burial 2

Burial Mode: inhumation

Burial Date: 650-700 (C14-date)

Location: burial in a pit house

Orientation: northwest-southeast

Body Position: flexed

State of Preservation: very good

Age Class: infans II
Age: 10-13 years
Deviant/Special Traits: burial in a settlement context in deviating body position
Type of deviant Burial: combination of deviating traits
Comment: Based on analysis of mitochondrial DNA (mtDNA), the buried child (flexed burial 2) and the adult male buried directly next to it (grave 42) are closely related

Pottschach, Lower Austria, Austria

Site Type: inhumation cemetery
Site Date: c. 700-950
Prevailing Orientation: southwest-northeast
Number of excavated Burials: 16
Citation: Friesinger 1971-74

Grave 12
Burial Mode: inhumation
Location: peripheral location
Orientation: southwest-northeast
State of Preservation: poor
Age Class: subadult
Grave Dimensions: L: 60 cm, W: 30 cm
D: 50 cm
Description of Grave and Burial: minor remains of the burial of a child. A layer of ash was found in the grave
Deviant/Special Traits: possible fire exposure (Totenfeuer?)
Type of deviant Burial: unusual burial mode
Interpretation: fear of the dead and death

Poznań-Śródka, Greater Poland Voivodeship, Poland

Site Type: inhumation cemetery
Site Date: Early to High Middle Ages
Prevailing Orientation: west-east
Number of excavated Burials: 400
Citation: Pawlak and Pawlak 2015, Gardela and Duma 2013

Grave 1
Burial Mode: inhumation
Burial Date: c.1000-1100
Body Position: supine
Age Class: infans II
Age: 12-13 years
Description of Grave and Burial: the body was covered by a layer of 35-40 rocks; high content of charcoal in the grave

Grave Goods: (1) 193 fragments of pottery; (2) fragment of an iron pin; (3) piece of silver foil; (4) fragmented iron knife; (5) 14 pieces of animal remains (10 unidentified, 2 fish bones, 1 sheep/goat bone, 1 poultry bone)
Deviant/Special Traits: securing the deceased with a layer of rocks, possible fire exposure
Type of deviant Burial: unusual body treatment or position
Interpretation: fear of the dead and death

Grave 285

Burial Mode: inhumation
Location: Peripheral location, in an area where other atypical burials were clustered
Orientation: west-east
Body Position: prone
Age Class: juvenis
Sex: probably male
Deviant/Special Traits: body position
Type of deviant Burial: unusual body treatment or position
Interpretation: fear of the dead and death

Prague - Vinoř, Czech Republic

Site Type: fortification, inhumation cemetery, sacred space
Site Date: c. 900-1200
Prevailing Orientation: west-east
Number of excavated Burials: 117
Citation: Štefan et al in print

Grave 2
Burial Mode: inhumation
Burial Date: before 900
Location: inside a large hall building
Orientation: northwest-southeast
Body Position: supine
Age Class: infans II-juvenis
Age: 12-15 years
Gender: female
Sex: female
Methods of Sex Estimation: DNA analysis
Description of Grave and Burial: Isolated burial in supine position. The burial is located in the southwestern corner of a building with a length of 40 m and a width of 9 m and follows its orientation.
Pathologies, non-metric Variations, anatomical Anomalies: the right femur was deformed and significantly shorter than the left due to poor healing following a fracture in early childhood, which might have caused troubles with walking; enamel hypoplasia and other lesions that indicate physical stress

Grave Goods: (1) 10 earrings; (2) 4 gombecki; (3) iron knife

Deviant/Special Traits: isolated grave, about 100 years older than other graves in Vinoř. The grave pit has a different orientation - following the orientation of the hall building

The type and size of the building also represent a unique finding in Bohemia.

The rich adornment is interpreted as a complete Great Moravian wedding garment. Although the grave furnishings are very rich, deficiency and isotope analyses (compared with elite graves with the same/similar grave goods from Prague Castle) show that the girl suffered malnutrition.

Type of deviant Burial: combination of deviating traits

Interpretation: representation of lost potential

Puppitsch Obermühlbach, Carinthia, Austria

***Site Type:* inhumation cemetery**

***Site Date:* c. 740-830**

***Prevailing Orientation:* west-east**

***Number of excavated Burials:* 8**

***Citation:* Eichert 2010a**

Grave 1968/2

Grave with multiple individuals

Number of Individuals: 2

Burial Mode: inhumation

Orientation: north-south

Age of Ind. 1: adult female

Age of Ind. 2: infans II

Grave Disturbance: yes - unclear mode of disturbance

Description of Grave and Burials: burial of an adult, female individual. Secondary burial of a child, approx. 10 years old placed at the left arm of the female individual. According to excavation documentation: "Mother is holding the child on her left chest".

Deviant/Special Traits: orientation, affectionate double burial

Type of deviant Burial: unusual body treatment or position

Interpretation: parental grief response and/or afterlife concern

Radol'a, Kysucké Nové Mesto district, Slovakia

***Site Type:* inhumation cemetery**

***Site Date:* medieval**

***Citation:* Gardela and Duma 2013**

Burial mode: inhumation

Burial Date: c. 1400-1500

Age class: subadult (neonatus-infans I)

Description of Grave and Burial: burial in a pottery vessel

Deviant/Special Traits: unusual burial container

Type of Deviant Burial: unusual burial mode

Interpretation: unclear

Romont, Couvent Fille-Deiu Canton Freiburg, Switzerland

***Site Type:* monastery, churchyard**

***Site Date:* Early to High Middle Ages**

***Prevailing Orientation:* west-east**

***Citation:* Bujard 2018 Alterauge et al. 2020**

Grave 113

Grave with multiple individuals

Number of individuals: 3

Burial mode: inhumation

Location: prominent location inside the church

Orientation: west-east

Age of Ind. 1: subadult

Age of Ind. 2: adult

Age of Ind. 3: adult

Body Position of the Child: prone

Deviant/Special Traits: body position, triple burial inside the church

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of dead and death

Saffig-Wannenköpfen, Rhineland-Palatinate, Germany

***Site Type:* inhumation cemetery**

***Site Date:* c. 550-650**

***Prevailing Orientation:* west-east**

***Number of excavated Burials:* 248**

***Citation:* Melzer 1993, Tobias 2021**

Grave 110

Burial Mode: inhumation

Orientation: southwest-northeast

State of Preservation: poor

Age Class: infans I

Age: c. 1 year

Gender: male

Grave Dimension: L: 165 cm, W: 70 cm

Description of Grave and Burial: burial in a wooden coffin.

Grave Goods: (1) pottery jug; (2) pottery bowl; (3) wooden box, placed inside the coffin containing smithing tools: (3.1) hammer; (3.2) iron awl with remains of a wooden handle; (3.3) iron knife with remains of a wooden handle; (3.4.) iron awl with eyelet and rectangular cross-section; (3.5) bronze needle; (3.6) unidentifiable iron tools; (3.7) lump of white substance, probably lead oxide; (3.8) corroded piece of lead, maybe a weight; (4) semi-finished bronze disc brooch; (5) 5 Late Antique Roman coins made of bronze, perforated at the rim; (6) round piece of sheet bronze with zig-zag rim; (7) fragments of blue and green glass, some with a sticky material adhesive; (8) disc-shaped token made of green quartz; (9) flint

Deviant/Special Traits: burial of an infant with full smithing equipment

Type of deviant Burial: unusual objects

Interpretation: representation of lost potential

Grave 199

Burial Mode: inhumation

Orientation: southwest-northeast

State of Preservation: very poor

Age Class: infans II

Grave Dimension: L: 155 cm, W: 90 cm

Description of Grave and Burial: a layer of rocks was found 80cm below the top surface in the western part of the grave pit, among the rocks was fragment of a gravestone (presumably not belonging to this grave but older). The burial was found approx. 40 cm below this layer of rocks and was entirely undisturbed. The primordial presence of a coffin was not clearly evident, but there was a rectangular, dark discoloration on the floor of the grave.

Grave Goods: (1) 2 pottery jugs; (2) fragmented iron knife; (3) beaker made of green glass; (4) eggshells

Grave Goods with apotropaic Characteristics: eggshells

Deviant/Special Traits: grave was covered with rocks

Type of deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Sankt Georgen bei Neumarkt, Styria, Austria

Site Type: churchyard, church

Site Date: 1146-1845 existence of the church, 1200-1600 occupation of the churchyard

Prevailing Burial Mode: inhumation

Prevailing Orientation: west-east

Number of excavated Burials: 46

Citation: Steinegger 2020

Grave 30

Burial Mode: inhumation

Burial Date: late medieval

Orientation: north-south

Location: peripheral location

Body Position: supine

State of Preservation: good

Age Class: infans I/II

Age: 6-12 months

Grave Disturbance: disturbed in the course of construction works

Description of Grave and Burial: the skull was tilted to the right, arms upon the chest

Deviant/Special Traits: orientation

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Sankt Pantaleon-Erla, Lower Austria, Austria

Site Type: inhumation cemetery

Site Date: c. 700 – 950

Prevailing Orientation: west-east

Number of excavated Burials: 5

Citation: Friesinger 1971-74

Grave 1

Burial Mode: inhumation

Orientation: west-east

Location: peripheral location

Body Position: supine

State of Preservation: good

Age Class: subadult

Grave Depth: 146 cm

Grave Disturbance: ancient grave reopening

Description of Grave and Burial: burial of a child, partially dislocated. According to the original report, the grave was reopened, and moved at a time where the anatomical tendons were not completely dissolved; some burned bones were found in the grave pit; the pelvic bones of the child also show signs of burning

Deviant/Special Traits: grave reopening and maybe intentional exposure to fire

Type of deviant Burial: multi-phase burial

Interpretation: unclear

Schöningen, Lower-Saxony, Germany

Site Type: churchyard

Site Date: medieval

Prevailing Burial Mode: inhumation

Citation: Gardela and Duma 2013

Burial mode: inhumation

Burial Date: c. 1200-1400

Age class: subadult (neonatus-infans I)

Description of Grave and Burial: burial in a pottery vessel

Deviant/Special Traits: unusual burial container

Type of Deviant Burial: unusual burial mode

Interpretation: unclear

Schrenz, Lower-Saxony, Germany

Site Type: inhumation cemetery, fortified settlement

Site Date: c. 800-1100

Prevailing Orientation: west-east

Number of excavated Burials: 20

Citation: Schiefer 2011

Grave 8

Burial Mode: inhumation

Orientation: west-east

Body Position: supine

State of Preservation: good

Age Class: infans I

Description of Grave and Burial: earth pit surrounded by rocks, one large rock (approx. 40cm) was placed above the child

Deviant/Special Traits: large rock placed on top of the child

Type of deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Schretzheim, Bavaria, Germany

Site Type: bi-ritual cemetery

Site Date: c. 525/530-680

Prevailing Burial Mode: inhumation

Prevailing Orientation: west-east

Number of excavated Burials: 632

Citation: Koch 1977

Grave 239

Burial Mode: inhumation

Orientation: west-east

Body Position: supine

Age Class: subadult

Grave Dimension: L: 140 cm; W: 75 cm

D: 120 cm

Grave Goods: (1) small, hand-formed pot; (2) small spoon made of silver-coated bronze, found inside the pot; (3) vertebra of an animal which was pierced with a bronze needle

Deviant/Special Traits: pierced animal vertebra

Type of deviant Burial: unusual objects

Interpretation: unclear

Schwanenstadt, Upper Austria, Austria

Site Type: inhumation cemetery

Site Date: c. 400-800

Prevailing Orientation: west-east

Number of excavated Burials: 100

Citation: Tovornik 2002

Grave 50/55-1979

Grave with multiple individuals

Number of Individuals: 4

Burial Mode: inhumation

Orientation: southwest-northeast

Age and Sex of Ind. 50: adult (35-40 years) male

Age and Sex of Ind. 55A: early adult (21-25 years) male

Age of Ind 55B: infans I (3-4 years)

Age of Ind 55C: juvenis (13-14 years)

Grave Disturbance: ancient grave robbery

Grave Dimension: L: 220 cm, W: 100 cm

D: 170 cm

Description of Grave and Burials: earth pit with rock placements; a total of four individuals were buried at different height levels (between 100 and 80cm); the primary burial of Ind. 50, was most likely disturbed and maybe robbed before or in the course of the construction of grave 55; the uppermost burial is that of a 13–14-year-old juvenile (55C), presumably deposited on a board above a layer of stones; below that was a headless skeleton of a 20–25-year-old man (55A) and next to it, aligned parallel, was a child of about 5 years (55B); in the original publication, it is assumed that the man was intentionally decapitated; all three bodies were covered with a dense stone weighting of rubble and Roman mortar fragments from a nearby Roman ruin. The same material was used to fill the robbery pit that led to the primary burial. Obviously, the decapitated adult and the two children were buried at the same time on top of the robbery shaft.

Manipulation of the Bodies: decapitation of Ind. 55A

Grave Goods: Ind 50: (1) 3 iron buckles; (2) iron spur; (2) wooden and leather remains of the scabbard of the seax

Deviant/Special Traits: striking burial of multiple individuals; decapitation; secondary burial after contemporary looting

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 75/1978

Burial Mode: inhumation

Orientation: west-east

Body Position: flexed

Age Class: infans I/I

Age: 1.5 years

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimension: L: 125 cm, W: 100 cm

D: 115 cm

Description of Grave and Burial: gravel pit cut into gravel with charcoal particles, probably from a wooden construction; burial of an infant in slightly flexed position, turned to the left

Deviant/Special Traits: body position

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 79/1978

Burial Mode: inhumation

Orientation: west-east

Body Position: prone

Age Class: juvenis

Age: 15-18 years

Sex: probably female

Grave Dimension: L: 215 cm, W: 115 cm

D: 180 cm

Description of Grave and Burial: grave pit with rock placement and remains of a wooden coffin; burial of a juvenile individual in prone position. The head is lying on the left cheek

Grave Goods: (1) spindle whorl; (2) ornamented earring with a spherical pendant made of sheet metal; (3) strap-end; (4) belt buckle; (5) 4 hollow beads made of sheet silver, part of a necklace; (6) 9 glass beads (necklace);

Deviant/Special Traits: body position

Type of deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Number of excavated Burials: 51

Citation: Pütz 2019

Grave 17

Burial Mode: inhumation

Orientation: north-south

Body Position: supine

State of Preservation: poor

Age Class: infans I

Age: 2-3 years

Grave Dimension: L: 140 cm, W: 110 cm

D: 180 cm

Description of Grave and Burial: almost square grave pit within a circular ditch; burial in a wooden coffin

Grave Goods: (1) pot; (2) fragmented iron knife; (3) 1 strap-end made of non-ferrous metal; (4) necklace made of 12 glass beads; (5) 2 fragments of a three-layered comb made of bone

Deviant/Special Traits: orientation

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Serock, Masovian Voivodeship, Poland

Site Type: churchyard

Site Date: late medieval – Early Modern Period

Prevailing Burial Mode: inhumation

Citation: Gardela and Duma 2013

Burial mode: inhumation

Burial Date: c. 1400-1600

Age class: subadult (most likely neonatus-infans I)

Description of Grave and Burial: burial in a pottery vessel

Deviant/Special Traits: unusual burial container

Type of Deviant Burial: unusual burial mode

Interpretation: unclear

Segnitz, Bavaria, Germany

Site Type: inhumation cemetery

Site Date: Merovingian

Prevailing Orientation: southwest-northeast

Sierninghofen, Upper Austria, Austria

Site Type: inhumation cemetery

Site Date: c. 775-850

Prevailing Orientation: west-east

Number of excavated Burials: 13

Citation: Tovornik 1978, Pertlwieser and Tovornik 1978

Grave 17

Burial Mode: inhumation
Orientation: north-south
Body Position: supine
State of Preservation: poor
Age Class: neonatus-infans I/I
Age: c. 4 months
Grave Disturbance: disturbed in the course of construction works
Deviant/Special Traits: orientation
Type of deviant Burial: unusual body treatment or position
Interpretation: unclear

Stará Kouřim, Středočeský kraj, Czech Republic

Site Type: inhumation cemetery

Site Date: c. 830-930

Prevailing Orientation: west-east

Number of excavated Burials: 156

Citation: Šolle 1966

Grave 33

Burial Mode: inhumation
Orientation: north-south
Body Position: supine
State of Preservation: poor
Age Class: subadult
Grave Dimensions: L: 127 cm, W: 60 cm
D: 67 cm
Description of Grave and Burial: oval grave pit with dark gray backfilling, containing small stones
Grave Goods: (1) s-shaped headdress ring
Deviant/Special Traits: orientation
Type of deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 47

Burial Mode: inhumation
Orientation: north-south
Body Position: supine
State of Preservation: poor
Age Class: subadult
Grave Dimensions: L: 150 cm; D: 43 cm
Description of Grave and Burial: partial stone lining around the feet area
Deviant/Special Traits: orientation
Type of deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 99

Burial Mode: inhumation
Orientation: north-south
Body Position: supine
State of Preservation: poor
Age Class: subadult
Grave Dimensions: L: 165 cm; W: 65 cm
D: 43 cm
Description of Grave and Burial: rectangular grave pit, partially cut into the bedrock
Deviant/Special Traits: orientation
Type of deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 100

Burial Mode: inhumation
Orientation: north-south
Body Position: supine
State of Preservation: poor
Age Class: subadult
Grave Dimensions: L: 165 cm; W: 65 cm
D: 43 cm
Description of Grave and Burial: partial stone lining of the grave pit
Deviant/Special Traits: orientation
Type of deviant Burial: unusual body treatment or position
Interpretation: unclear

Starigrad-Oldenburg (Oldenburger Wall), Schleswig-Holstein, Germany

Site Type: settlement area, church, churchyard

Site Date: c. 630-1300

Number of excavated Burials: 185

Citation: Gabriel and Kemke 2011

Number of individuals: 15

Burial Mode: inhumation

Age Classes: fetus – neonatus – infans I/I

Description of Burials: 15 burials of fetuses, neonates and infants up to a few months of age within the settlement context. Burials of individuals of the same age categories have been found in the pre-Christian burial grounds, the churchyard and even within the church of this central place, which suggest a special burial rite for only some children.

Deviant/Special Traits: burials/depositions within the settlement area

Type of Deviant Burial: unusual burial place

Interpretation: unclear

Stein, Flur Altenburg, Lower Austria

Site Type: settlement area

Site Date: c. 800-900

Number of excavated Burials: 4

Citation: Kreitner 1994, Kührtreiber and Obenaus 2017

Grave 3

Burial Mode: inhumation

Location: settlement area

Orientation: west-east

Body Position: flexed

State of Preservation: mediocre

Age Class: infans II-juvenis

Description of Grave and Burial: flexed burial, turned to the left, the head is tilted backwards

Grave Goods: (1) jackknife

Deviant/Special Traits: body position; unclear whether these burials belong to a larger burial ground that has not yet been found or if they were deposited within the area of a castle dating to the 9th - 11th century on this plot

Type of deviant Burial: combination of deviating factors

Interpretation: unclear

Grave 4

Burial Mode: inhumation

Location: settlement area

Orientation: west-east

Body Position: flexed

State of Preservation: good

Age Class: infans I

Description of Grave and Burial: extremely flexed burial, turned to the left

Deviant/Special Traits: body position; unclear whether these burials belong to a larger burial ground that has not yet been found or if they were deposited within the area of a castle dating to the 9th - 11th century on this plot

Type of deviant Burial: combination of deviating factors

Interpretation: unclear

Steinabrunn, Lower Austria, Austria

Site Type: inhumation cemetery

Site Date: early medieval

Prevailing Orientation: not recognizable

Number of excavated Burials: 61

Citation: Friesinger 1971-74

Grave 37

Burial Mode: inhumation

Orientation: southeast-northwest

Body Position: flexed

Age Class: juvenis

Description of Grave and Burial: burial in a very tight flexed position, lying on the right side. Skull is bent backwards. The right arm is stretched behind the back, lying underneath the body, the hand under the pelvis. The left arm is resting against the chest

Deviant/Special Traits: body position, orientation

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Stetten an der Donau, Baden-Württemberg, Germany

Site Type: inhumation cemetery

Site Date: c. 630-720

Prevailing Orientation: west-east

Number of excavated Burials: 209

Citation: Weiss 1999

Grave 180

Burial Mode: inhumation

Orientation: southwest-northeast

Body Position: flexed

State of Preservation: good

Age Class: juvenis

Age: 15-17 years

Sex: probably female

Methods of Sex Estimation: skeletal morphology

Description of Grave and Burial: burial of a juvenile, probably female individual in an extremely flexed position, turned to the right; the knees are placed at the chin, the spine is extremely bent; the skull is facing south

Manipulation of the Body: the posture of the body suggests tying up or another form of fixation

Deviant/Special Traits: body position, probable shackling of the body

Type of deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Stradów, Świętokrzyskie Voivodeship, Poland

Site Type: inhumation cemetery

Site Date: c. 1000-1200

Citation: Falis 2008, Gardęła and Duma 2013

Grave 7/222A

Burial Mode: inhumation

Body Position: flexed

Age Class: subadult

Description of Grave and Burial: burial of a child in flexed position; the head appears to have been cut off

Manipulation of the Body: possible decapitation

Grave Goods: (1) iron knife; (2) glass bead

Deviant/Special Traits: body position, possible manipulation of the body

Type of deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Szekszárd, Bogoyiszlói út, Com. Tolna, Hungary

***Site Type:* inhumation cemetery**

***Site Date:* Avar**

***Prevailing Orientation:* west-east**

***Number of excavated Burials:* 786**

***Citation:* Rosner 1999**

Grave 386

Burial Mode: inhumation

Orientation: east- west

Body Position: supine

Age Class: subadult

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimensions: L: 145 cm, W: 75 cm

D: 138 cm

Description of Grave and Burial: parts of the thorax were destroyed due to disturbance

Grave Goods: (1) pottery vessel; (2) iron buckle; (3) iron knife

Deviant/Special Traits: orientation

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 409

Burial Mode: inhumation

Orientation: east- west

Body Position: supine

Age Class: subadult

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimensions: L: 120 cm, W: 50 cm

D: 98 cm

Grave Goods: (1) headdress ring made of bronze wire, found underneath the skull

Deviant/Special Traits: orientation

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 636

Grave with multiple individuals

Number of Individuals: 2

Orientation: Ind. 1 was orientated west-east, Ind. 2 east-west

Age and Sex of Ind. 1: adult male

Age of Ind. 2: subadult

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimension: L: 240 cm; W: 80 cm

D: 119 cm

Description of Grave and Burials: burial of an adult male in supine position with head in the west, a child was buried next to the man with the head in the east

Grave Goods: (1) 3 arrow heads; (2) 15 fittings of a belt set made of sheet silver; (3) 3 side strap-ends made of sheet silver; (4) 2 iron buckles; (5) 1 main strap-end made of sheet silver; (6) two iron knives; (7) 1 Roman glass beaker; (8) 2 pieces of bow equipment made of bone; (9) 2 pieces of flint

Deviant/Special Traits: buried in opposite orientation, deviating orientation of the buried child

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Templin, St. Maria Magdalenenkirche Brandenburg, Germany

***Site Type:* churchyard**

***Site Date:* c. 1200-1800**

***Prevailing Burial Mode:* inhumation**

***Prevailing Orientation:* west-east**

***Number of excavated Burials:* 276**

***Citation:* Jungklaus 2007, Alterauge et al. 2020**

Grave 101

Grave with multiple individuals

Number of Individuals: 3

Burial Mode: inhumation

Orientation: west-east

Age of Ind. 1: infans I (2-3 years)

Age of Ind. 2: adult-matur female

Age of Ind. 3: adult-matur female

Body Position of the subadult Ind.: prone

Grave Disturbance: disturbed in the course of construction works

Deviant/Special Traits: body position, multiple burial

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Thunau, Obere Holzwiese, Lower Austria, Austria

Site Type: inhumation cemetery

Site Date: c. 750-950

Prevailing Orientation: west-east

Number of excavated Burials: 207

Citation: Nowotny 2018

Grave 4

Burial Mode: inhumation

Orientation: southeast-northwest

Body Position: supine

State of Preservation: poor

Age Class: infans I/I

Age: 12-18 months

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimensions: L: 99 cm, W: 53 cm

D: 16 cm

Description of Grave and Burial: rectangular shaped grave pit, slightly cut into the bedrock, surrounded by additional rocks; burial in supine position. partially disintegrated

Grave Goods: (1) pot with wave band decoration and incised sign in the shape of a half, imprint of an irregularly shaped star on the vessel bottom; (2) bronze wire ring

Deviant/Special Traits: orientation

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 34

Burial Mode: inhumation

Orientation: southeast-northwest

Body Position: supine

State of Preservation: poor

Age Class: infans I/I

Age: 1-2 years

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimensions: L: 99 cm; W: 53 cm

D: 16 cm

Description of Grave and Burial: No grave pit visible, burial was placed on the bedrock

Deviant/Special Traits: orientation

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Thunau, Talsiedlung, Lower Austria, Austria

Site Type: settlement

Site Date: c. 800-1100

Citation: Obenaus 2018; pers. comm. with M. Obenaus

SE 783

Burial Mode: inhumation

Orientation: northwest-southeast

Location: next to a pit house

Body Position: supine

State of Preservation: mediocre

Age Class: subadult (infans I ?)

Description of Grave and Burial: burial of a child in supine position

Deviant/Special Traits: burial in the settlement context

Type of deviant Burial: burial in an unusual place

Interpretation: unclear

SE 1799

Burial Mode: inhumation

Orientation: south-north

Location: next to a pit house

Body Position: supine

State of Preservation: good

Age Class: subadult (infans II-juvenis ?)

Grave Disturbance: yes – unclear mode of disturbance

Description of Grave and Burial: burial of a subadult individual deposited in a settlement feature. The body was found in supine position, yet the head is extremely bent to the right side; the arms are bent to the right; the left leg is missing due to disturbance of the pit. the right leg is bent and the lower leg is on a deeper level than the femur. According to M. Obenaus there was no grave pit visible - it is rather a deposition on the edge of a larger pit than an intentional burial

Deviant/Special Traits: burial in the settlement context

Type of deviant Burial: burial in an unusual place

Interpretation: unclear

SE 2911

Burial Mode: inhumation

Orientation: west-east

Location: inside a pit house

Body Position: flexed

State of Preservation: very good

Age Class: subadult (juvenis ?)

Description of Grave and Burial: burial of a juvenile individual in extremely tight flexed position, lying on the right side. The hands are placed in front of the chin

Deviant/Special Traits: burial in the settlement context, body position

Type of deviant Burial: combination of deviating factors

Interpretation: unclear

Tofting bei Tönning, Schleswig-Holstein, Germany

Site Type: settlement

Site Date: c. 100-200

Citation: Bantelmann 1955, Teegen and Schultz 1999, Beilke-Voigt 2007

Burial Mode: inhumation

Location: underneath the threshold of a byre-dwelling

Body Position: flexed

State of Preservation: very good

Age Class: neonatus-infans I

Age: 4-6 months

Description of Grave and Burial: burial of a 4-6-month-old infant in flexed position placed in a cradle underneath the threshold of a building

Manipulation of the Body: the cervical vertebrae were detached from the skull, it is not entirely clear whether this happened due to taphonomical processes or indicates manipulation of the corpse

Grave Goods: (1) small pot

Deviant/Special Traits: burial in a cradle underneath the threshold of a building. considered to be foundation sacrifice, possible additional manipulation of the body

Type of deviant Burial: combination of deviating factors

Interpretation: unclear; possible foundation sacrifice (?)

Trofaiaach, Styria, Austria

Site Type: inhumation cemetery

Site Date: c. 900-1000

Prevailing Orientation: west-east

Number of excavated Burials: 4

Citation: Gutjahr 2000

Grave 2

Burial Mode: inhumation

Orientation: west-east

Body Position: flexed

State of Preservation: good

Age Class: infans II

Depth of Grave: 70 cm

Description of Grave and Burial: burial in flexed position, the arms were bent towards the head, the hands were placed next to the neck

Manipulation of the Body: C. Gutjahr considers some kind of constriction or shackling of the dead individual

Deviant/Special Traits: body position, probable shackling of the body

Type of deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Tunel Wielki Cave, Lesser Poland Voivodeship, Poland

Site Type: cave

Site Date: 1655-1657

Citation: Wojenka et al. 2021

Burial Mode: inhumation

Location: buried in a cave

Orientation: northwest-southeast

Body Position: supine

State of Preservation: very good

Age Class: infans II

Age: 10-12 years

Method of Age Estimation: skeletal morphology

Gender: female

Sex: female

Method of Sex Estimation: DNA analysis

Description of Grave and Burial: burial of a girl in supine position. The leg bones are dislocated; the head was slightly rotated to the left. Inside the mouth cavity was the skull of a finch, another one was found next to the mouth of the deceased. according to the publication, it is likely that originally both finches were placed in the mouth of the girl, and one fell out due to post-depositional rotation of the girl's skull

Deviant/Special Traits: place of burial, bird's heads in the mouth of girl

Type of deviant Burial: combination of deviating traits

Interpretation: unclear

Unterthürheim, Bavaria, Germany

Site Type: inhumation cemetery

Site Date: c. 500-700

Prevailing Orientation: west-east

Number of excavated Burials: 256

Citation: Grunwald 1988

Grave 35

Burial Mode: inhumation
Burial Date: 590 - 620/630
Orientation: west-east
Body Position: supine
State of Preservation: good
Age Class: subadult
Gender: probably female
Grave Disturbance: yes – unclear mode of disturbance
Grave Dimension: L: 195 cm, W: 92 cm
 D: 121 cm
Description of Grave and Burial: burial of a child in supine position; the grave pit contained a few dislocated remains of a second individual (assigned as Grave 34)
Grave Goods: (1) pottery vessel with stamped decoration; (2) finger ring made of silver; (3) iron buckle; (4) fossilized reindeer antlers
Deviant/Special Traits: fossilized reindeer antlers (ice aged)
Type of deviant Burial: unusual objects
Interpretation: unclear

Grave 196

Burial Mode: inhumation
Orientation: northeast-southwest
Body Position: supine
Age Class: subadult
Grave Depth: 58 cm
Deviant/Special Traits: orientation
Type of deviant Burial: unusual body treatment or position
Interpretation: unclear

Usedom – Am Hain, Mecklenburg-Vorpommern, Germany

***Site Type:* bi-ritual cemetery**

***Site Date:* c. 950 – 1150**

***Prevailing Orientation:* no uniform grave Orientation**

***Number of excavated Burials:* 197**

***Citation:* Biermann and Freder 2009**

Grave 119

Burial Mode: inhumation
Orientation: southwest-northeast
State of Preservation: very poor
Body Position: flexed
Age Class: subadult
Deviant/Special Traits: position of the body
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 141

Burial Mode: inhumation
Orientation: northwest-southeast
State of Preservation: very poor
Body Position: flexed
Age Class: subadult
Deviant/Special Traits: position of the body
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 147

Burial Mode: inhumation
Orientation: northwest-southeast
State of Preservation: very poor
Body Position: flexed
Age Class: subadult
Deviant/Special Traits: position of the body
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 162

Burial Mode: inhumation
Orientation: southwest-northeast
State of Preservation: very poor
Body Position: flexed
Age Class: subadult
Deviant/Special Traits: position of the body
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 163

Burial Mode: inhumation
Orientation: southwest-northeast
State of Preservation: very poor
Body Position: flexed
Age Class: subadult
Deviant/Special Traits: position of the body
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 173

Burial Mode: inhumation
Orientation: northwest-southeast
State of Preservation: poor
Body Position: flexed
Age Class: juvenis
Deviant/Special Traits: position of the body
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Usedom – Priesterstraße, Mecklenburg-Vorpommern, Germany

Site Type: inhumation cemetery

Site Date: c. 1100-1300

Prevailing Orientation: northwest-southeast

Number of excavated Burials: 196

Citation: Biermann and Freder 2009

Grave 117

Burial Mode: inhumation

Orientation: northwest-southeast

State of Preservation: good

Body Position: flexed

Age Class: infans I

Deviant/Special Traits: position of the body

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 180

Burial Mode: inhumation

Orientation: northwest-southeast

State of Preservation: good

Body Position: flexed

Age Class: infans I

Deviant/Special Traits: position of the body

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 191

Burial Mode: inhumation

Orientation: northwest-southeast

State of Preservation: good

Body Position: flexed

Age Class: infans I

Deviant/Special Traits: position of the body

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 126

Burial Mode: inhumation

Orientation: west-east

State of Preservation: good

Body Position: supine

Age Class: juvenis

Grave Disturbance: yes – unclear mode of disturbance

Description of Grave and Burial: remains of a wooden board were found underneath the skeleton; the skull was slightly moved and turned backwards due to grave reopening.

9 eggs were placed around the body: two on the right arm, two on the left humerus, one on the left lower arm, one next to the right femur, one next to the right lower leg, one between the thighs, one next to the left knee

Large lumps of charcoal between the lower legs

Grave Goods: (1) 9 eggs; (2) bones of a recently hatched chick; (3) iron buckles

Grave Goods with apotropaic Characteristics: eggs; chick bones

Deviant/Special Traits: grave goods with apotropaic characteristics, representation of reproduction and fertility

Type of Deviant Burial: unusual objects

Interpretation: representation of lost potential

Grave 151

Burial Mode: inhumation

Orientation: west-east

State of Preservation: good

Body Position: flexed

Age Class: juvenis

Description of Grave and Burial: burial in flexed position, lying on the right side; the hands were placed at the chin

Deviant/Special Traits: body position

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Vác-Kaviscbánya, Com. Pest, Hungary

Site Type: inhumation cemetery

Site Date: c. 600-800

Prevailing Orientation: west-east

Number of excavated Burials: 515

Citation: Tettamanti 2000

Wawrzeńczyce Lesser Poland Voivodeship, Poland

Site Type: inhumation cemetery

Site Date: early medieval

Prevailing Orientation: west-east

Citation: Mazur and Mazur 2011, Gardela 2017

Grave 157

Burial Mode: inhumation

Orientation: northwest-southeast

Body Position: prone

Age Class: infans II

Age: 10-12 years

Description of Grave and Burial: burial in prone position, with bent legs – the heels touch the back of the pelvis, which might indicate that the body was tied up

Manipulation of the body: possibly tied up

Deviant/Special Traits: body position and possible manipulation

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Weismain, Bavaria Germany

Site Type: inhumation cemetery

Site Date: c. 725-900

Prevailing Orientation: west-east

Number of excavated Burials: 251

Citation: Pöllath 2002

Grave 31

Burial Mode: inhumation

Orientation: north-south

State of Preservation: poor

Body Position: supine

Age Class: infans I/I

Age: 9 months

Sex: female

Methods of Sex Estimation: skeletal morphology

Grave Dimensions: L: 80 cm, W: 40 cm

Description of Grave and Burial: earth pit with rocks placed at the feet; burial of an infant in supine position, the head was lying on the chest

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 101

Burial Mode: inhumation

Orientation: north-south

State of Preservation: poor

Body Position: supine

Age Class: infans I/I

Age: c. 16 months

Sex: female

Methods of Sex Estimation: skeletal morphology

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimensions: L: 100 cm, W: 60 cm

D: 20 cm

Description of Grave and Burial: earth pit with rocks placed near the head and on the right side of the body; a large bolder was placed at the feet; burial of an infant in supine position, the head was turned to the right; the long bones were slightly dislocated

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 140

Burial Mode: inhumation

Orientation: north-south

Body Position: flexed

Age Class: infans I/I

Age: 2 years

Sex: female

Methods of Sex Estimation: skeletal morphology

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimensions: L: 70 cm, W: 30 cm

D: 20 cm

Description of Grave and Burial: burial of an infant in flexed position, turned to the right side

Grave Goods: (1) 1 head dress ring made of copper with 2 attached beads filled with clay

Deviant/Special Traits: orientation, body position

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 205

Burial Mode: inhumation

Orientation: north-south

State of Preservation: poor

Body Position: supine

Age Class: infans I

Age: 2-3 years

Grave Dimensions: L: 130 cm, W: 45 cm

D: 20 cm

Description of Grave and Burial: earth pit with rocks placed on the right side of the body

Grave Goods: long bones of a chicken

Deviant/Special Traits: orientation

Type of Deviant Burial: unusual body treatment or position

Interpretation: unclear

Grave 208

Burial Mode: inhumation

Orientation: north-south

State of Preservation: poor

Body Position: supine

Age Class: infans II

Age: 12 years

Sex: female

Grave Depth: 10 cm

Description of Grave and Burial: earth pit with rocks placed on the right side of the body
Grave Goods: long bones of a chicken
Deviant/Special Traits: orientation
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Wernswig, Hesse, Germany

Site Type: n.k
Site Date: medieval
Citation: Gardela and Duma 2013

Grave 01

Burial mode: inhumation
Burial Date: c. 1400--1430
Age class: neonatus
Description of Grave and Burial: burial in a pottery vessel
Deviant/Special Traits: unusual burial container
Type of Deviant Burial: unusual burial mode
Interpretation: unclear

Grave 02

Burial mode: inhumation
Burial Date: c. 1400--1430
Age class: neonatus
Description of Grave and Burial: burial in a pottery vessel
Deviant/Special Traits: unusual burial container
Type of Deviant Burial: unusual burial mode
Interpretation: unclear

Wien-Heiligenstadt, St. Jakob, Vienna, Austria

Site Type: church
Site Date: c. 1200 - 1700
Number of excavated Burials: c. 400
Citation: Lindenhofer 2012, Müllan 2006

Eaves-drip burials

Number of individuals: c. 400
Age Class: stillbirth – neonates – infans I/I
Deviant/Special Traits: clustered location along the church wall; the church of St. Jakob had no burial privileges
Type of Deviant Burial: unusual burial place
Interpretation: parental grief response and/or afterlife concern

Wien-Liesing, Kernstockgasse, Austria

Site Type: inhumation cemetery
Site Date: c. 650-850
Prevailing Orientation: west-east
Number of excavated Burials: 27
Citation: Daim 1977

Grave 13 (1947)

Burial Mode: inhumation
Orientation: east-west
State of Preservation: poor
Body Position: supine
Age Class: infans I/I
Age: c. 1 year
Deviant/Special Traits: orientation
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Zamárdi-Rétiföldek, Com. Somogy, Hungary

Site Type: inhumation cemetery
Site Date: Avar
Prevailing Orientation: west-east
Number of excavated Burials: 1497
Citation: Bárdos and Garam 2009

Grave 205

Burial Mode: inhumation
Orientation: east-west
Body Position: supine
Age Class: juvenis
Gender: female
Sex: female
Grave Disturbance: yes – unclear mode of disturbance
Grave Dimensions: L: 243 cm, W: 82 cm
D: 38 cm
Grave Goods: (1) buckle made of cast bronze; (2) round bronze mirror with short handle; (3) horseshoe-shaped bronze fitting; (4) necklace made of eye beads and ribbed, prism-shaped green bead
Deviant/Special Traits: orientation
Type of Deviant Burial: unusual body treatment or position
Interpretation: unclear

Grave 711

Burial Mode: inhumation
Orientation: southeast-northwest
Body Position: supine
Age Class: infans II

Grave Disturbance: yes – unclear mode of disturbance

Grave Dimensions: L: 170 cm, W: 71 cm

D: 33-43 cm

Description of Grave and Burial: earth pit with wooden coffin; the pit is about 10 cm deeper at the head and foot end; only the lower body half was found in an anatomical in situ position

Grave Goods: (1) fragments of a bronze earring; (2) iron buckle; (3) fragments of an iron key; (4) iron clamps from the coffin

Grave Goods with apotropaic Characteristics: key

Deviant/Special Traits: orientation, grave goods with apotropaic characteristics

Type of Deviant Burial: combination of deviating traits

Interpretation: unclear

Grave 752

Burial Mode: inhumation

Orientation: west-east

Body Position: supine

Age Class: juvenis

Gender: female

Sex: female

Methods of Sex Estimation: skeletal morphology

Grave Disturbance: yes – ancient reopening

Grave Dimensions: L: 196 cm; W: 76 cm

D: 50 cm

Description of Grave and Burial: the skull was found on top of the knees

Manipulation of the Body: possibly intentional reopening of the grave and dislocation of the skull

Grave Goods: (1) spindle whorl; (2) bronze earring with bead pendant; (3) fragmented pair of iron keys; (4) iron buckle; (5) iron ring; (6) iron knife; (7) eggshells, placed between the legs

Grave Goods with apotropaic Characteristics: keys, eggshells

Deviant/Special Traits: grave goods with apotropaic character; secondary, intentional dislocation of the skull

Type of Deviant Burial: multi-phase burial

Interpretation: unclear

Grave 798

Burial Mode: inhumation

Orientation: west-east

Body Position: supine

Age Class: subadult

Gender: female

Sex: female

Methods of Sex Estimation: skeletal morphology

Grave Disturbance: yes – ancient reopening

Grave Dimensions: L: 140 cm; W: 67 cm

D: 16-27 cm

Description of Grave and Burial: earth pit, the pit is a bit deeper at the head and foot end; the skull was found on top of the thorax

Manipulation of the Body: possibly intentional reopening of the grave and dislocation of the skull

Grave Goods: (1) fragmented iron buckle, found on top of the dislocated skull; (2) iron key with twisted shaft and fork-like end

Grave Goods with apotropaic Characteristics: keys, particular placement of the buckle

Deviant/Special Traits: grave goods with apotropaic character; secondary, intentional dislocation of the skull

Type of Deviant Burial: multi-phase burial

Interpretation: unclear

Złota Pińczowska, Świętokrzyskie Voivodeship, Poland

Site Type: inhumation cemetery

Site Date: c. 1000-1300

Prevailing Orientation: west-east

Citation: Miśkiewicz 2010, Gardeła and Duma 2013, Gardeła 2020

Grave 107

Grave with multiple individuals

Number of Individuals: 2

Burial Mode: inhumation

Burial Date: c. 1175-1225

Orientation: west-east

Age of Ind. 1: infans II (12 years)

Age and Sex of Ind. 2: adult male

Description of Grave and Burials: burial of a 12-year-old child in supine position buried in a relatively long coffin; at the foot end of the coffin were remains of an adult man. These remains were not found in an anatomical in situ position and showed traces of dismembering, i.e. cut marks.

Manipulation of the Bodies: dismembering of the adult male individual

Grave Goods: (1) 12 headdress rings made of bronze; (2) iron knife; (3) one glass bead

Deviant/Special Traits: dismembering of the body within a multiple burial

Type of deviant Burial: unusual body treatment or position

Interpretation: unclear

Żukowo, Masovian Voivodeship, Poland

Site Type: inhumation cemetery

Site Date: c. 1000-1200

Prevailing Orientation: west-east

Citation: Dzik 2006, Gardęła and Duma 2013

Grave 13

Burial Mode: inhumation

Body Position: supine

Age Class: neonatus

Description of Grave and Burial: grave pit surrounded by stones; the burial was further covered with a layer of stones (average diameter 30cm)

Deviant/Special Traits: covered with rocks

Type of Deviant Burial: unusual body treatment or position

Interpretation: fear of the dead and death

Appendix B: Table of Investigated Sites

Site	County/Area, Country	Type of Site	Site Date - Period	Number of excavated Burials in total	Deviant Child Burials	Number of Deviant Child Burials	Index ¹¹	Citation	Comment
Absdorf Statzendorf	Lower Austria, Austria	inhumation cemetery	c. 700-950	3	no			Friesinger 1971- 1974	
Absdorf-Hippersdorf	Lower Austria, Austria	inhumation cemetery	c. 700-950	11	no			Friesinger 1971- 1974	
Adnet	Salzburg, Austria	inhumation cemetery	c. 500-700	4	no			Reiterer 1989	
Aegerten	Canton Bern, Switzerland	churchyard	c. 1100 – 1900	181	yes	115	191	Bacher et al. 1990	the eaves-drip burials of Aegerten were grouped in the catalog
Alkersleben	Thuringia, Germany	execution site	medieval – early modern period	81	no			Genesis 2014	
Alt Käbelich	Mecklenburg- Vorpommern, Germany	bi-ritual cemetery	c. 800 - 1100	n.k.	yes	1	94, 191	Schmidt 1985	
Altenberg bei Linz	Upper Austria, Austria	church, churchyard	c. 1200 - 1600	13	yes	13	191	Wimmer 2016	
Altenerding	Bavaria, Germany	inhumation cemetery	c. 400 – 800	1360	yes	7	46, 84, 191-192	Losert and Pleterski 2003	
Altenkunstadt	Bavaria, Germany	inhumation cemetery	Carolingian	23	no			Pöllath 2002	
Altentreptow, Nonnenkonvent	Mecklenburg- Vorpommern, Germany	churchyard	c. 1200 – 1600	27	no			Biermann 2012	

¹¹ Index refers to the pages that the site is mentioned on within this thesis

Site	Couny/Area, Country	Type of Site	Site Date - Period	Number of excavated Burials in total	Deviant Child Burials	Number of Deviant Child Burials	Index	Citation	Comment
Althofen Treibach	Carinthia, Austria	inhumation cemetery	c. 740-830	3	no			Eichert 2010a	
Alt-Lübeck	Schleswig-Holstein, Germany	settlement area	late Slavic	0	no			Fehring 1991	
Amstetten Hauptplatz	Lower Austria, Austria	inhumation cemetery	c. 700-950	6	no			Friesinger 1971- 1974	
Andau	Burgenland, Austria	inhumation cemetery	c. 950 – 1050	2	no			Obenaus 2010	
Anif, Hellbrunner Straße	Salzburg, Austria	inhumation cemetery	early medieval	4	no			Reiterer 1983	
Aschheim, Am Wasserturm	Bavaria, Germany	inhumation cemetery	c. 500 - 600	25	no			Gutsmiedl- Schümann 2010	
Aschheim- Bajuwarenring	Bavaria, Germany	inhumation cemetery	510-680	456	no	46		Gutsmiedl- Schümann 2010	
Asten	Upper Austria, Austria	inhumation cemetery	early medieval	7	no			Pertlwieser and Tovornik 1993	
Asten Raffelstettnerstraße	Upper Austria, Austria	single burial site	early medieval	1	no			Pertlwieser 1984	
Atschalas	Carinthia, Austria	inhumation cemetery	c. 740 – 830	2	no			Eichert 2010a	
Au am Leithagebirge	Lower Austria, Austria	single burial site	c. 700 –950	1	no			Friesinger 1975- 1977	
Augsdorf	Carinthia, Austria	inhumation cemetery	c. 780 - 830	3	no			Eichert 2010a	
Auhof bei Perg	Upper Austria, Austria	inhumation cemetery	c. 700-900	98	yes	1	96, 192	Tovornik 1986	
Baardorf	Carinthia, Austria	inhumation cemetery	c. 660 - 780	9	no			Eichert 2010a	
Bad Deutsch- Altenburg	Lower Austria, Austria	inhumation cemetery	c. 975 - 1050	69	yes	1	192	Obenaus 2010	

Site	Couny/Area, Country	Type of Site	Site Date - Period	Number of excavated Burials in total	Deviant Child Burials	Number of Deviant Child Burials	Index	Citation	Comment
Bad Mingolsheim	Baden- Württemberg, Germany	inhumation cemetery	580–670	66	no			Schäfer 2005, Hausmair 2015	
Bad Nauheim	Hesse, Germany	inhumation cemetery	Merovingian	5	no			Thiedmann 2008	
Bad Reichenhall	Bavaria, Germany	inhumation cemetery	c. 500 - 800	525	yes	10	192-193	Bertram 2002	
Bad Vilbel	Hesse, Germany	inhumation cemetery	Merovingian	6	no			Thiedmann 2008	
Baldramsdorf- Rosenheim	Carinthia, Austria	inhumation cemetery	c. 740 - 830	35	no			Eichert 2010a	
Bánov	Nitriansky kraj, Slovakia	inhumation cemetery	c. 900 – 1000	23	no			Točík 1968	
Barbaraberg	Bavaria, Germany	inhumation cemetery, churchyard	c. 800 -1100	297	no			Heidenreich 1998	
Bargen im Kraichgau	Baden- Württemberg, Germany	inhumation cemetery	Franconian	47	no			Koch 1982	
Bassenheim	Rhineland- Palatinate, Germany	single burial site	Merovingian	1	no			Neumayer 1993	
Baumgarten an der March	Lower Austria, Austria	bi-ritual cemetery	c. 500 - 1100	2	no			Friesinger 1975- 1977	
Bayreuth, Stadtkirche	Bavaria, Germany	churchyard, church	High Middle Ages - Modern Period	n.k.	yes	1	194	Wintergerst 2013	
Beelen	North Rhine- Westphalia, Germany	bi-ritual cemetery	c. 300 - 650	32	no			Menke 2014	
Bendorf	Rhineland- Palatinate, Germany	inhumation cemetery	early medieval	50	no			Grunwald 1998	

Site	Couny/Area, Country	Type of Site	Site Date - Period	Number of excavated Burials in total	Deviant Child Burials	Number of Deviant Child Burials	Index	Citation	Comment
Berghausen im Pfinzgau	Baden- Württemberg, Germany	inhumation cemetery	Franconian	106	no			Koch 1982	
Berlin Petriplatz	Germany	churchyard	c. 1250 - 1600	3785	yes	1	194	Rothe and Melisch 2021	
Berlin-Spandau	Germany	inhumation cemetery, fortified settlement	c. 1000 - 1200	n.k.	yes	1	136, 194	von Müller 1999	
Bernhardsthal Föhrenwald	Lower Austria, Austria	cremation cemetery	c. 600 - 800	39	no		50	Macháček et al. 2019	
Berstadt	Hesse, Germany	inhumation cemetery	Merovingian	3	no			Thiedmann 2008	
Biengen	Baden- Württemberg, Germany	inhumation cemetery	c. 650-750	148	no			Ortolf et al. 2015	
Boppard	Rhineland- Palatinate, Germany	bi-ritual cemetery	Merovingian	4	no			Neumayer 1993	
Boppard, Im Proffen	Rhineland- Palatinate, Germany	inhumation cemetery	Merovingian	40	no			Neumayer 1993	
Borotice	Jihomoravský kraj, Czech Republic	inhumation cemetery	c. 500 – 600	32	no			Stuchlík 2011	
Břeclav Pohansko	Jihomoravský kraj, Czech Republic	Central place	c. 800 – 1000	1056	yes	9	103-104, 184, 194.195	Kalousek 1971 Macháček 1994 Přichystalová 2011 Macháček 2019	All burial sites, settlement burials and strayfinds of human remains have been collected here. Yet, not all burials could have been exhaustively investigated as not all graves have been accessible in a detailed form

Site	Couny/Area, Country	Type of Site	Site Date - Period	Number of excavated Burials in total	Deviant Child Burials	Number of Deviant Child Burials	Index	Citation	Comment
Breitenschützing-Schlatt	Upper Austria, Austria	inhumation cemetery	c. 600 – 750	33	no			Pesseg 2016	
Breunsdorf	Saxony, Germany	churchyard	c. 1100 - 1970	1300	no			Kenzler 2002	
Bruchenbrücken	Hesse, Germany	inhumation cemetery	Merovingian	24	no			Thiedmann 2008	
Bruck an der Leitha	Lower Austria, Austria	inhumation cemetery	c. 900 – 1000	24	no			Kreitner 2001	
Bruckendorf	Carinthia, Austria	single burial site	early medieval	1	no			Eichert 2010a	
Brückl	Carinthia, Austria	inhumation cemetery	c. 660 - 830	2	no			Eichert 2010a	
Büraburg	Hesse, Germany	stronghold/ fortificated settlement, churchyard	Carolingian	0	no			Wand 1974	
Burglengenfeld-Wieden	Bavaria, Germany	inhumation cemetery	Carolingian	56	no			Pöllath 2002	
Cadolzburg-Rossendorf-Schwadermühle	Bavaria, Germany	inhumation cemetery	Carolingian	8	no			Pöllath 2002	
Čakajovce	Nitriansky kraj, Slovakia	bi-ritual cemetery	c. 800-1100	894	no			Rejholcová 1995	
Červeník	Trnavský kraj, Slovakia	inhumation cemetery	c. 900 -1000	10	no			Točík 1968	
Chotěbuz-Podobora	Moravskoslezský kraj, Czech Republic	stronghold/ fortificated settlement	c. 700 – 1000	0	no			Kouřil and Gryc 2011	
Chotín	Nitriansky kraj, Slovakia	inhumation cemetery	c. 900 -1000	31	yes	1	196	Točík 1968	
Cielmice	Silesian Voivodeship	inhumation cemetery	Early to High Middle Ages	n.k.	yes	1	136, 196	Szydłowska 1967	

Site	Couny/Area, Country	Type of Site	Site Date - Period	Number of excavated Burials in total	Deviant Child Burials	Number of Deviant Child Burials	Index	Citation	Comment
Csákkerény- Orondpuszta	Com. Fejér, Hungary	inhumation cemetery	Avar	452	yes	3	196	Lászlo 2015	
Czarnówko	Pomeranian Voivodeship, Poland	bi-ritual cemetery	c. 1050 – 1100	33	no			Wadyl 2015	
Dahlem	Lower Saxony, Germany	settlement area	Early to High Middle Ages	0	no			Zimmermann 1991	
Dahlheim	Rhineland- Palatinate, Germany	inhumation cemetery	Merovingian	3	no			Neumayer 1993	
Dahme-Mittenwald	Schleswig-Holstein, Germany	inhumation cemetery	c. 900 – 1200	25	no			Biermann and Jungklaus 2006	
Deutschkreutz	Burgenland, Austria	inhumation cemetery	c. 975 – 1075	12	no			Obenaus 2006	
Diemlach	Styria, Austria	inhumation cemetery	c. 780 - 1050	11	no			Dinklage 1963	
Diepensee	Brandenburg, Germany	Churchyard	c. 900 - 1375	489	yes	1	196	Jungklaus et al. 2015	
Dirlewang	Bavaria, Germany	inhumation cemetery	c. 500 – 700	46	no			Christlein 1971	
Dirmstein	Rhineland- Palatinate, Germany	inhumation cemetery	c. 530-800	290	yes	4	112, 128- 129, 197- 198	Leithäuser 2011	
Dittenheim	Bavaria, Germany	bi-ritual cemetery	c. 500 – 700	244	no		93	Haas-Gebhard 1998	
Dobermannshof	Lower Austria, Austria	single burial site	c. 700 - 950	1	no			Friesinger 1975-77	
Domažlice, St. Jakobus	Plzeňský kraj, Czech Republic	church	c. 1100 - 1900	9	no			Bricháček and Čechura 2010	
Donaueschingen, Am Tafelkreuz	Bavaria, Germany	inhumation cemetery	c. 600 – 800	163	no			Buchta-Hohm 1996	
Donnerskirchen	Burgenland, Austria	inhumation cemetery	early medieval	4	no			Ohrenberger 1969	

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Donzdorf	Baden- Württemberg, Germany	inhumation cemetery	early medieval	n.k.	no			Neuffer 1972	
Dörnigheim	Hesse, Germany	inhumation cemetery	Merovingian	2	no			Thiedmann 2008	
Dortelweil	Hesse, Germany	inhumation cemetery	Merovingian	10	no			Thiedmann 2008	
Drasenhofen	Lower Austria, Austria	single burial site	early medieval	1	no			Friesinger 1975- 1977	
Duggendorf- Heitzenhofen	Bavaria, Germany	inhumation cemetery	Carolingian	11	yes	1	1998	Pöllath 2002	
Dürnkrot	Lower Austria, Austria	inhumation cemetery	c. 750 – 950	2	no			Friesinger 1975-77	
Dvorníky	Trnavský kraj, Slovakia	inhumation cemetery	c. 900 – 1000	13	no			Točík 1968	
Dzieskanowice	Lesser Poland Voivodeship	inhumation cemetery	early medieval	n.k.	yes	1	135, 198	Wrzesińska and Wrzesiński 1993; Gardeła and Duma 2013.	
Eberstadt	Hesse, Germany	inhumation cemetery	Merovingian	1	no			Thiedmann 2008	
Ebringen	Baden- Württemberg, Germany	inhumation cemetery	c. 650-750	141	no			Ortolf et al. 2015	
Echenbrunn, Mühlweg	Bavaria, Germany	churchyard	c. 1200 – 1600	n.k.	yes	1	199	Bohnet and Seidel 2017	
Eggendorf am Wagram	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	27	no			Friesinger 1971- 1974	
Eggolsheim	Bavaria, Germany	inhumation cemetery	Carolingian	119	no			Pöllath 2002	
Eggolsheim-Neuses	Bavaria, Germany	inhumation cemetery	Carolingian	5	no			Pöllath 2002	

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Eichen	Hesse, Germany	inhumation cemetery	Merovingian	2	no			Thiedmann 2008	
Eichstetten	Baden- Württemberg, Germany	inhumation cemetery	c. 400 – 800	272	no			Sasse 2001	
Elisenhof bei Tönning	Schleswig-Holstein, Germany	settlement area	c. 700 - 800	n.k.	yes	7	70, 74, 145, 199- 200	Teegen and Schultz 1999; Beilke-Voigt 2007: 398	
Engers - Neuwied	Rhineland- Palatinate, Germany	inhumation cemetery	Merovingian	31	no			Grunwald 1998	
Eperjes	Com. Csongrád- Csanád, Hungary	settlement area	Late Avar	5	yes	2	57, 200	Bálint 1991	
Eppstein	Rhineland- Palatinate, Germany	inhumation cemetery	c. 500 - 750	477	no			Engels 2012	
Ergolding	Bavaria, Germany	inhumation cemetery	c. 600 - 800	446	yes	1	200	Koch and Stelzle- Hüglin 2001; Koch and Alt 2014	
Erlach	Canton Bern, Switzerland	inhumation cemetery	c. 500 – 600	49	no			Marti et al. 1992	
Eschborn	Hesse, Germany	inhumation cemetery	c. 500 – 700	50	yes	1	201	Ament 1992	
Etsdorf	Lower Austria, Austria	inhumation cemetery	c. 700 - 950	3	no			Friesinger 1971- 1974	
Fauerbach	Hesse, Germany	inhumation cemetery	Merovingian	3	no			Thiedmann 2008	
Flintsbach am Inn, St. Peter am Madron	Bavaria, Germany	churchyard	High to Late Middle Ages	n.k.	yes	1	201	Alterauge et al. 2020	
Fonyód	Kom. Somogy, Hungary	inhumation cemetery	Hun	19	no			Straub 2014	

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Förk	Carinthia, Austria	inhumation cemetery	c. 770 – 1000	22	no			Eichert 2010a	
Frankfurt am Main, Bartolomäuskirche (Kaiserdom)	Hesse, Germany	church, churchyard	Predecessor building from the 7th century, cathedral High medieval	35	yes	2	94-95, 125, 201	Wamers 2012, Cemper-Kiesslich et al. 2021	only graves of the earliest phase of occupation have been examined
Frankfurt am Main- Harheim	Hesse, Germany	inhumation cemetery	c. 450 - 750	141	yes	1	202	von Freeden 2020.	
Franzhausen	Lower Austria, Austria	inhumation cemetery	c. 700 – 1000	6	no			Aspetsberger et al. 2016	
Fridingen an der Donau	Baden- Württemberg, Germany	inhumation cemetery	c. 500 – 700	306	no			von Schnurbein 1987	
Friedberg	Hesse, Germany	inhumation cemetery	Merovingian	51	no			Thiedmann 2008	
Friedlach	Carinthia, Austria	single burial site	early medieval	1	no			Fuchs and Viertler 1983	
Friesach Olsa	Carinthia, Austria	inhumation cemetery	early medieval	7	no			Eichert 2010a	
Gaukönigshofen	Bavaria, Germany	inhumation cemetery	Merovingian	7	no			Pütz 2019	
Georgenberg	Upper Austria, Austria	churchyard	c. 850 – 1000	64	yes	1	90, 202	Tovornik 1980	
Gesess	Bavaria, Germany	inhumation cemetery	Carolingian	32	no			Pöllath 2002	
Giengen an der Brenz	Baden- Württemberg, Germany	inhumation cemetery	early medieval	50	no			Paulsen and Schach-Döriges 1978	only one child out of 50 burials (female gender, 2-4 years)
Glauberg	Hesse, Germany	inhumation cemetery	Merovingian	5	no			Thiedmann 2008	

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Gleink-Steyr	Upper Austria, Austria	inhumation cemetery	c. 700 – 800	46	yes	1	202	Russ 2016, Weberstorfer 2013	
Glienke	Mecklenburg-Vorpommern, Germany	settlement area, fortification	c. 800 – 1100	0	no			Messal 2015	
Globasnitz	Carinthia, Austria	inhumation cemetery	c. 400 – 590	422	no			"Globasnitz". From: THANADOS: https://thanados.net/entity/45803 [Accessed: 2022/05/04]	
Gnadendorf	Lower Austria, Austria	single burial site	1039 ± 34 AD (cal)	1	yes	1	125, 144, 203	Daim and Lauermaun 2006.	
Gödersdorf	Carinthia, Austria	inhumation cemetery	c. 740 - 830	3	no			Eichert 2010a	
Gondorf-Koborn (Gondorf II)	Rhineland-Palatinate, Germany	bi-ritual cemetery	c. 300 - 700	n.k.	no			Schulze-Dörrlamm 1990	
Gondorf- Niederburg (Gondorf I)	Rhineland-Palatinate, Germany	bi-ritual cemetery	c. 300 – 700	1500	no			Schulze-Dörrlamm 1990	
Goritschach Brodnickkreuz	Carinthia, Austria	inhumation cemetery	c. 740 - 830	3	no			Eichert 2010a	
Gossam, Burgkirche	Lower Austria, Austria	Church	c. 1100 – 1600	31	yes	31	75, 124, 149, 190, 204	Lindnerhofer 2012, Großschmidt und Winkler 1994	
Gottsdorf	Lower Austria, Austria	inhumation cemetery	early medieval	4	no			Friesinger 1971-74	
Göttweig, St. Georg	Lower Austria, Austria	church	c. 1200 – 1600	38	yes	38	75, 116, 124-125, 148-149, 190, 203	Hausmair 2018, Hausmair 2020, Wimmer 2016	

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Grabelsdorf	Carinthia, Austria	inhumation cemetery	c. 660 - 780	11	no		49, 50	Eichert 2010a	
Graz Alte Universität	Styria, Austria	inhumation cemetery	c. 750 – 850	18	no			Gutjahr 2008	
Grodowice	Świętokrzyskie Voivodeship, Poland	inhumation cemetery	c. 900 – 1300	35	no			Kubica-Grygiel 2019	
Greifswald, St. Jakob	Mecklenburg- Vorpommern, Germany	churchyard	c. 1200 – 1900	299	no		133	Ansorge 2003	
Groß Raden	Mecklenburg- Vorpommern, Germany	settlement area, sacred space	c. 800 – 1000		no			Schuldt 1995	
Groß Strömkendorf	Mecklenburg- Vorpommern, Germany	bi-ritual cemetery	c. 700 – 900	252	no			Gerds and Wolf 2015	all funerary traits (burial mode, orientation, body position, grave construction and grave goods) are highly variable on this site which is why it did not seem plausible to determine a norm or deviations from it
Gross-Karben	Hesse, Germany	inhumation cemetery	Merovingian	17	no			Thiedmann 2008	
Großweikersdorf	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	4	no			Friesinger 1971-74	
Grzybów	Podkarpackie voivodeship	churchyard	medieval	n.k.	yes	1	204	Gardela and Duma 2013	
Guntramsdorf	Lower Austria, Austria	inhumation cemetery	early medieval	4	no			Friesinger 1975-77	

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Gusen	Upper Austria, Austria	inhumation cemetery	c. 700 – 900	125	no			Tovornik 1983	
Hahnstätten	Rhineland- Palatinate, Germany	inhumation cemetery	Merovingian	4	no			Neumayer 1993	
Hainbuch	Upper Austria, Austria	inhumation cemetery	c. 700 – 850	57	no			Eckkrammer 2009	
Haithabu	Schleswig-Holstein, Germany	bi-ritual cemetery	c. 700 – 1100	1348	no		74	Arents and Eisenschmidt 2010	In the case of Haithabu, graves with a divergent orientation were not considered as deviant burials, because they were oriented towards burial mounds or points of interest.
Halimba	Com.Veszprém, Hungary	inhumation cemetery	c. 1000 – 1200	932	no			Török 1962	
Harheim	Hesse, Germany	inhumation cemetery	Merovingian	5	no			Thiedmann 2008	
Haundorf-Brombach	Bavaria, Germany	inhumation cemetery	Carolingian	39	no			Pöllath 2002	
Haus Lützeler	North Rhine- Westphalia, Germany	settlement area, Hofgrablege	c. 700 – 800	3	no			Unsel 2021	
Haus Lützeler A	North Rhine- Westphalia, Germany	inhumation cemetery	c. 700 – 800	22	no			Unsel 2021	
Haus Lützeler B	North Rhine- Westphalia, Germany	settlement area, Hofgrablege	c. 700 – 800	3	no			Unsel 2021	
Hausmening	Lower Austria, Austria	inhumation cemetery	c. 700 - 1000	21	no			Breibert and Szameit 2011	

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Hegykő, Mező utca	Com. Győr-Moson-Sopron	inhumation cemetery	c. 490 – 570	82	no			Bóna and Horváth 2009	
Heiligenblut	Carinthia, Austria	inhumation cemetery	early medieval	3	no			Eichert 2010a	
Heimbach, Neuwied	Rhineland-Palatinate, Germany	inhumation cemetery	Franconian	14	no			Grunwald 1998	
Hellmitzheim	Bavaria, Germany	inhumation cemetery	Merovingian	34	no			Pütz 2019	
Hemmaberg	Carinthia, Austria	churchyard	c. 700 – 1700	29	yes	2	38, 204	Eitler and Seidel 2022; https://thanados.net/entity/175496	
Hemmingen	Baden-Württemberg, Germany	inhumation cemetery	early medieval	59	no			Müller 1976	
Henndorf, St. Veit	Salzburg, Austria	churchyard	c. 700 – 900	3	no			Winkler and Heinrich 1982	
Herzebrock-Clarholz	North Rhine-Westphalia, Germany	bi-ritual cemetery	c. 250 – 700	22	no			Menke 2014	
Herzogenburg, Kremser Straße	Lower Austria, Austria	inhumation cemetery	c. 800 – 1000	3	no			Friesinger 1971-1974	
Hessens in Wilhelmshaven	Lower Saxony, Germany	settlement area	early medieval	1	yes	1	70, 205	Siegmüller 2010	
Höbenbach	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	2	no			Friesinger 1971-1974	
Hochstadt	Hesse, Germany	inhumation cemetery	Merovingian	1	no			Thiedmann 2008	
Hodonice - Pískovna	Okres Znojmo	inhumation cemetery	c. 850 – 950	2	no			Dostál 1961	
Höflein	Carinthia, Austria	inhumation cemetery	early medieval	19	no			Eichert 2010a	

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Hohenau an der March	Lower Austria, Austria	inhumation cemetery	early medieval	9	no			Friesinger 1974	
Hohenberg	Styria, Austria	inhumation cemetery	c. 750 – 900	46	no			Nowotny 2008	
Hohenfels-Dietldorf- Matzhausen	Bavaria, Germany	inhumation cemetery	Carolingian	44	no			Pöllath 2002	
Hollabrunn, Hinter den Krautäckern	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	3	no			Patschka et al. 1989	
Hollen	Lower Saxony, Germany	settlement area	c. 800 – 1400	9	no			Schäfer 2018	
Holubice	Jihomoravský kraj, Czech Republic	inhumation cemetery	c. 500 – 600	105	yes	1	95, 205	Čížmář 2011	
Holzheim	Hesse, Germany	inhumation cemetery	Merovingian	12	no			Thiedmann 2008	
Holzheim	Hesse, Germany	settlement area	c. 1000 – 1200	0	no			Wand 1991	
Holzheim, St. Thomas	Hesse, Germany	churchyard	c. 1000 – 1100	n.k.	yes	1	136, 205	Wand 1989	
Horb-Altheim	Baden- Württemberg, Germany	inhumation cemetery	c. 400 – 600	77	no			Beilharz 2011	
Hornbach	Rhineland- Palatinate, Germany	Monastery, churchyard	c. 600 – 1600	75	no			Heberer 2010	

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Hrušky	Jihomoravský kraj, Czech Republic	inhumation cemetery	c. 800 – 900	9	no			Meduna 1958	
Hundsorf Rosental	Carinthia, Austria	inhumation cemetery	c. 740 – 830	16	no			Eichert 2010a	
Iffelsdorf	Bavaria, Germany	inhumation cemetery	c. 700 – 950	145	no		38, 50, 83	Lampl et al. 2014 Losert 2014 Losert 2017 Losert 2020	
Iffezheim	Baden- Württemberg, Germany	inhumation cemetery	c. 575 – 725	34	no			Pape 1996	
Ilbenstadt	Hesse, Germany	inhumation cemetery	Merovingian	2	no			Thiedmann 2008	
Inden-Pier	North Rhine- Westphalia, Germany	inhumation cemetery, churchyard	c. 460/480 – 775	432	no			Reichert 2012	
Itzling	Bavaria, Germany	inhumation cemetery, churchyard, crypt	c. 700 – 1000	33	no			Later 2020	
Jellenbek, St. Catharinenkirche,	Schlewsig-Holstein, Germany	churchyard, church	c. 1200 – 1800	70	yes	1	136, 145, 205	Wehner and Grüneberg- Wehner 2014	
Kallmünz 'Kinderheim'	Bavaria, Germany	inhumation cemetery	Carolingian	28	no			Pöllath 2002	
Kallmünz-Fischbach- Schirndorf - Krachenhausen	Bavaria, Germany	inhumation cemetery	Carolingian	86	no			Pöllath 2002	
Kána, Budapest XI	Com. Budapest, Hungary	settlement area, church, churchyard	c. 1150 – 1300	1100	Yes	2	66, 89, 206	Terei 2005 Vargha 2017	
Kappel am Krappfeld	Carinthia, Austria	inhumation cemetery	early medieval	3	no			Eichert 2010a	

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Kasendorf-Zultenberg	Bavaria, Germany	inhumation cemetery	Carolingian	28	no			Pöllath 2002	
Keutschach	Carinthia, Austria	inhumation cemetery	c. 780 – 830	3	no			Eichert 2010a	
Kirchheim am Ries	Baden- Württemberg, Germany	inhumation cemetery	c. 525 – 725	518	no			Neuffer-Müller 1983	
Kleinlangheim	Bavaria, Germany	bi-ritual cemetery	c. 500 - 700	289	yes	1	206	Pescheck 1996	
Klosterneuburg, St. Martin	Lower Austria, Austria	churchyard	c. 800 – 1100	15	no			Neugebauer and Neugebauer- Maresch 1983	
Klepsau	Baden- Württemberg, Germany	inhumation cemetery	c. 500 -700	66	no			Koch 1990	
Köniz, Oberwangen	Canton Bern, Switzerland	inhumation cemetery	c. 500 – 900	54	no			Kissling 2015	
Kosasmojach	Carinthia, Austria	inhumation cemetery	c. 740 – 830	9	no			Eichert 2010a	
Kösing	Baden- Württemberg, Germany	inhumation cemetery	c. 525 – 700	82	yes	2	207	Knaut 1993	
Köttmannsdorf	Carinthia, Austria	inhumation cemetery	early medieval	9	no			Eichert 2010a	
Krems, Schmidgasse 3	Lower Austria, Austria	inhumation cemetery	c. 750 – 950	19	no			Kreitner 1997	
Kremsdorf/Micheldorf	Upper Austria, Austria	inhumation cemetery	c. 700 – 875	97	yes	2	96, 207	Hausmair 2016	According to B. Hausmair, the grave orientations shown in the site map are not reliable. Therefore, no burials with a supposedly deviating orientation were included in the catalog

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Krummensee	Berlin, Germany	settlement area	c. 1200 – 1700	0	no			Gehrmann 2018	
Krunzl	Styria, Austria	inhumation cemetery	c. 740 – 1000	274	yes	2	81, 83, 207	Breibert 2015	
Kulmbach	Bavaria, Germany	inhumation cemetery	Carolingian	96	no			Pöllath 2002	
Kümmersbruck	Bavaria, Germany	settlement, smithing workshop	c. 700 – 900	3	no	1	68, 127.127, 208	Hensch 2018	
Längdorf	Carinthia, Austria	inhumation cemetery	c. 740 – 900	7	no			Eichert 2010a	
Langenau	Baden- Württemberg, Germany	inhumation cemetery	early medieval	114	yes	1	208	Hachmeister 1992	
Langenselbold	Hesse, Germany	single burial site	c. 450 – 550	1	no			Thiedmann 2008	
Lanžhot - Padělky	Jihomoravský kraj, Czech Republic	inhumation cemetery	c. 800 – 900	10	no			Dostál 1962	
Lauchheim- Mittelhofen	Baden- Württemberg, Germany	settlement	c. 400 – 800	0	no		47-48	Stork 2004	
Lauchheim- Mittelhofen	Baden- Württemberg, Germany	Hofgrablege	c. 750 - 850	86	no		47-48	Schoenenberg 2021	
Lauchheim- Wasserfurche	Baden- Württemberg, Germany	inhumation cemetery	c. 400 – 700	1308	no			Stelzner et al. 2020 Höke et al. 2018 Höke et al. 2019 Höke et al. 2020 Höke et al. 2021	
Leerhafe	Lower Saxony, Germany	church	late medieval - early modern period	n.k.	yes	1	208	Bärenfänger and Grefen-Peters 2005; Gardeta and Duma 2013	

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Leest	Brandenburg, Germany	bi-ritual cemetery	c. 800 – 1200	12	no			Kersting et al. 2016	
Leifling	Carinthia, Austria	inhumation cemetery	early medieval	6	no			Eichert 2012a	
Leihgestern	Hesse, Germany	inhumation cemetery	c. 500 - 700	22	yes	1	209	Thiedmann 2008	
Lengerich-Hohne	North Rhine- Westphalia, Germany	settlement area	c. 600 – 800	0	no			Ruhmann 2003	
Leobersdorf	Lower Austria, Austria	inhumation cemetery	c. 600 – 850	188	yes	1	209	Daim 1987	
Leuthen-Wintdorf	Brandenburg, Germany	hilltop settlement/for tification	c. 900 – 100	0	no			Biermann 2000	
Libice - Akropolis	Středočeský kraj, Czech Republic	churchyard	c. 900 – 1200	369	yes	1	209	Mařík 2009	
Libice - Kanín II	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	143	yes	7	82, 147, 209	Mařík 2009	
Libice - Kanín I/III	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	10	no			Mařík 2009	
Libice - Ke Hradišti	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	2	no			Mařík 2009	
Libice - Na Růžku	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	12	no			Mařík 2009	

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Libice - Sonda 300	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	1	no			Mařík 2009	
Libice - Sonda 311	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	3	no			Mařík 2009	
Libice - Sonda 38	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	1	no			Mařík 2009	
Libice - Sonda 42	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	1	no			Mařík 2009	
Libice - U cukrovaru	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	82	yes	1		Mařík 2009	
Libice - U evangelické fary	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	2	no			Mařík 2009	
Libice - U nádraží	Středočeský kraj, Czech Republic	inhumation cemetery	c. 900 – 1200	54	no			Mařík 2009	
Linz-Zizlau	Upper Austria, Austria	inhumation cemetery	c. 600 – 700	160	yes	2	211	Ladenbauer-Orel 1960	
Linz-Zizlau II - St. Peter	Upper Austria, Austria	inhumation cemetery	Merovingian	76	no			Kößler 2015	
Lübben-Steinkirchen	Brandenburg, Germany	settlement area	c. 700 – 1000	0	no			Biermann 2000	
Luhe-Wildenau	Bavaria, Germany	inhumation cemetery	Carolingian	12	no			Pöllath 2002	
Lužice	Jihomoravský kraj, Czech Republic	inhumation cemetery	c. 500 – 600	116	yes	1	68, 211	Klanica and Klanicová 2011	one grave dates to the 9th/10th century
Magdeburg	Saxony-Anhalt, Germany	churchyard	Ottonian	10	no			Kuhn 2005	Ottonian church
Mainleus-Buchau- Dörfles	Bavaria, Germany	inhumation cemetery	Carolingian	13	no			Pöllath 2002	

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Markt Einersheim	Bavaria, Germany	inhumation cemetery	Merovingian	33	yes	1	211	Pütz 2019	
Martinsheim-Einheim	Bavaria, Germany	inhumation cemetery	Merovingian	58	yes	1	212	Pütz 2019	
Mattsee, St. Michael	Salzburg, Austria	churchyard	c. 700 – 1000	8	no			Melzer 1980	
Mautern, Grüner Weg	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	4	no			Friesinger 1971-74	
Mautern, Nikolaihof	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	4	no			Friesinger 1971-74	
Meinborn	Rhineland- Palatinate, Germany	strayfind	Merovingian	2	no			Grunwald 1998	
Mengen	Baden- Württemberg, Germany	inhumation cemetery	c. 400 – 800	935	no			Walter 2008	
Michelberg	Lower Austria, Austria	churchyard	c. 1200 – 1800	n.k.	no			Lauermann et al. 2015	almost exclusively burials of neonates and infants
Mieders	Tirol, Austria	churchyard	medieval	6	no			Sydow 1991	
Mikulčice, basilica (church III)	Jihomoravský kraj, Czech Republic	churchyard	c. 900 – 1100	571	no		47, 83	Klanica et al. 2019	
Mistelbach, Landeskrankenhaus	Lower Austria, Austria	inhumation cemetery	c. 650 – 822	59	no			Distelberger 1996	
Mittelbuchen	Hesse, Germany	inhumation cemetery	c. 600 – 700	14	no			Thiedmann 2008	
Mitterpullendorf	Burgenland, Austria	inhumation cemetery	c. 1000 – 1100	42	no			Obenaus 2010	
Mitterretzbach	Lower Austria, Austria	settlement	c. 600 – 1100	0	no			Nowotny 2015	
Mockersdorf	Bavaria, Germany	inhumation cemetery	c. 700 – 900	42	yes	1	136, 212	Brundke 2013b	
Mödling, Lerchengasse	Lower Austria, Austria	inhumation cemetery	Langobardian	9	no			Stadler 1978	

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Molzbiel	Carinthia, Austria	churchyard	c. 700 – 1000	50	no			Eichert 2010a	
Möning	Bavaria, Germany	inhumation cemetery	c. 600 – 700	17	no			Later 2015	
Moosburg, St. Peter	Carinthia, Austria	churchyard	c. 780 – 1800	49	no			Eichert 2010a	only medieval burials were investigated
Mühling	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	43	no			Friesinger 1971-74	
Mülhofen, Bendorf	Rhineland- Palatinate, Germany	inhumation cemetery	Franconian	52	no			Grunwald 1998	
München-Aubing	Bavaria, Germany	inhumation cemetery	early medieval	859	no			Dannheimer 1998	
Munzingen	Baden- Württemberg, Germany	inhumation cemetery	c. 600 – 800	234	no			Groove 2001	
Nabburg	Bavaria, Germany	inhumation cemetery	Carolingian	20	no			Pöllath 2002	burials excavated until 2002
Nabburg, St. Johannsfriedhof	Bavaria, Germany	churchyard	c. 900 – 1600	200	yes	1	52, 121- 122	Hensch 2014	
Nebersdorf	Burgenland, Austria	inhumation cemetery	c. 950 – 1050	4	no			Obenaus 2010	
Neresheim	Baden- Württemberg, Germany	inhumation cemetery	c. 450 – 700	158	yes	1	101-103, 213	Knaut 1993	
Neumarkt an der Ybbs	Lower Austria, Austria	inhumation cemetery	early medieval	8	no			Friesinger 1971-74	
Neumeichow	Brandenburg, Germany	inhumation cemetery	c. 1100 – 1200	7	no			Stapelfeldt and Jungklaus 2010	
Neusiedl an der Zaya	Lower Austria, Austria	inhumation cemetery	c. 900 – 1000	2	no			Friesinger 1975-77	
Nieder-Erlenbach	Hesse, Germany	inhumation cemetery	c. 500 – 725	130	no			Thiedmann 2008	

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Nieder-Florstadt	Hesse, Germany	inhumation cemetery	Merovingian	5	no			Thiedmann 2008	
Nieder-Mörlen	Hesse, Germany	inhumation cemetery	c. 500 – 700	34	no			Thiedmann 2008	
Niederndorf, St. Georg	Tirol, Austria	churchyard	Early medieval – 1376	13	yes	1	213	Sydow 1989	
Nieder-Weisel	Hesse, Germany	inhumation cemetery	Merovingian	9	no			Thiedmann 2008	
Nikitsch	Burgenland, Austria	inhumation cemetery	c. 1000 – 1075	3	no			Obenaus 2010	
Növenthien	Lower Saxony, Germany	inhumation cemetery	c. 1100 – 1300	50	yes	1	136, 145, 213	Peters 1966	
Nowy Targ, Wrocław	Lower Silesian Voivodeship, Poland	settlement area	medieval city center		yes	1	71, 94, 214	Gardela and Duma 2013	
Oberbüren	Canton Bern, Switzerland	pilgrimage, churchyard	late medieval - early modern period		yes	n.k.	124	Eggenberger et al. 2019	
Oberderdingen- Strümpfeläcker	Baden- Württemberg, Germany	inhumation cemetery	c. 600 - 800	83	yes	1	214	Banghard 2009.	
Oberflacht	Baden- Württemberg, Germany	inhumation cemetery	c. 500 – 700	300	no			Schiek 1992	
Oberlangkamp, St. Georg	Tirol, Austria	churchyard	early medieval	18	no			Sydow 1988	more burials have been excavated, but only the early medieval burials are listed in Thanados and considered for the catalog
Oberleiserberg	Lower Austria, Austria	inhumation cemetery	c. 900 – 1100	109	no		53, 81	Richards in preparation	

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Obermieger	Carinthia, Austria	inhumation cemetery	early medieval	6	no			Eichert 2010a	
Obertrum	Salzburg, Austria	inhumation cemetery	c. 600 – 800	4	no			Hell 1974	
Ockstadt	Hesse, Germany	single burial site	Merovingian	1	no			Thiedmann 2008	
Oechlitz	Saxony-Anhalt, Germany	inhumation cemetery	early medieval	72	yes	1	79, 214	Müller 2013 Müller 2020	
Oensingen-Bienken	Canton Solothurn, Switzerland	inhumation cemetery	c. 600 – 700	23	no			Motschi 2020	
Oggau	Burgenland, Austria	inhumation cemetery	early medieval	5	no			Kaus 1988	
Okarben	Hesse, Germany	inhumation cemetery	c. 500 – 700	40	no			Thiedmann 2008	
Örménykút	Com. Békés	settlement area	c. 700 – 1100	4	no			Herold 2004	
Ornding	Lower Austria, Austria	inhumation cemetery	c. 800 – 1000	5	yes	1	117, 214	Wais 1967.	
Orosháza - Béke Tsz - Homokbánya	Com. Békés, Hungary	inhumation cemetery	c. 700 – 850	152	yes	2	82, 136, 215	Juhász 1995	
Orosháza-Bónum Téglagyár	Kom. Békés, Hungary	inhumation cemetery	c. 675 – 750	243	yes	2	82, 136, 215	Juhász 1995	
Ostheim	Hesse, Germany	inhumation cemetery	c. 500 – 700	3	no			Thiedmann 2008	
Peggau	Styria, Austria	inhumation cemetery	c. 700 – 950	17	yes	1	215	Gutjahr 2012	
Peigen, Pielsting	Bavaria, Germany	inhumation cemetery	early medieval	262	no			von Freeden and Lehmann 2005	

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Pellendorf/Gaweinstal	Lower Austria, Austria	settlement area	c. 600 – 1000	3	yes	2	85f, 216	Kühtreiber et al. 2008 Kühtreiber 2020 Kühtreiber 2022 Novotny et al. 2006	
Pfaffenhofen	Tirol, Austria	churchyard	c. 550 – 725	23	no			Sydow 1982 Lippert 1983	
Pfakofen	Bavaria, Germany	inhumation cemetery	c. 550 – 725	523	no			Lohwasser 2013	
Pfettrach-Höfen, Altdorf	Bavaria, Germany	inhumation cemetery	early medieval	45	no			Engelhardt et al. 1996	
Pieścida	Masovian voivodeship, Poland	inhumation cemetery	medieval	n.k.	yes	1	216	Gardeła and Duma 2013	
Pilsting	Bavaria, Germany	settlement area	c. 700 – 1100	20	yes	20	216	Ganslmeier 1988: Kreiner 1989	
Pitten	Lower Austria, Austria	Inhumation cemetery	c. 750 – 850	132	yes	2	95, 216	Friesinger 1975- 1977	
Pitten Schlossberg	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	6	no			Windl 1981	
Pleidelsheim	Baden- Württemberg, Germany	inhumation cemetery	c. 400 – 700	264	yes	1	46, 146, 217	Koch 2001	
Plescherken	Carinthia, Austria	inhumation cemetery	early medieval	3	no			Eichert 2010	
Pliening	Bavaria, Germany	inhumation cemetery	c. 450 – 700	260	yes	1	217	Codreanu - Windauer 1996	
Pocking-Inzing	Bavaria, Germany	inhumation cemetery	c. 500 – 800	311	no			Bertram 2002	

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Podersdorf am See	Burgenland, Austria	inhumation cemetery	c. 600 – 900	39	no			Tobias et al 2020	
Podersdorf am See	Burgenland, Austria	settlement area	c. 600 – 900	5	yes	1	67f, 217	Tobias et al 2020	
Pottenbrunn	Lower Austria, Austria	inhumation cemetery	c. 750 – 850	220	no			Petschko 2013	
Pottschach	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	16	yes	1	218	Friesinger 1971-74	
Pötsching	Burgenland, Austria	inhumation cemetery	c. 1050 – 1100	3	no			Obenaus 201	
Poznań-Śródka	Greater Poland Voivodeship, Poland	inhumation cemetery	early medieval	400	yes	2	96, 218	Pawlak and Pawlak 2015.	
Prague - Vinoř	Czech Republic	fortification, inhumation cemetery, sacred space	c. 900 -1200	117	yes	1	110f, 123, 143, 218- 219	Štefan et al in print	
Prämonstratenserstift Grobe, Wilhelmshof	Usedom, Germany	churchyard	c. 1100 – 1600	70	no			Biermann et al. 2017 Jungklaus 2017	
Pressath-Riggau- Eichelberg	Bavaria, Germany	inhumation cemetery	Carolingian	18	no			Pöllath 2002	
Probleb	Styria, Austria	inhumation cemetery	c. 700 – 950	6	no			Jontes 1973	
Puch	Carinthia, Austria	inhumation cemetery	c. 740 – 900	3	no			Eichert 2010a	
Puppitsch Obermühlbach	Carinthia, Austria	inhumation cemetery	c. 740 – 830	8	yes	1	219	Eichert 2010a	

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Quetzin	Mecklenburg- Vorpommern, Germany	hilltop settlement/for tification, settlement area	c. 900 – 1200	0	no			Bleile 2008	
Rabensburg	Lower Austria, Austria	inhumation cemetery	c. 800 – 900	34	no			Friesinger 1975-77	
Radol'a	Kysucké Nové Mesto district, Slovakia	inhumation cemetery	medieval	n.k.	yes	1	219	Gardela and Duma 2013: 324	
Regensburg, Niedermünster III	Bavaria, Germany	church, churchyard	c. 700 – 1700	50	no			Wintergerst 2019	
Regensburg- Großprüfening	Bavaria, Germany	cremation cemetery	c. 600 – 700	40	no		48	Losert 2011	
Reifnitz	Carinthia, Austria	inhumation cemetery	early medieval	2	no			Eichert 2010a	
Reipersdorf	Carinthia, Austria	inhumation cemetery	early medieval	4	no			Eichert 2010a	
Ritzersdorf	Lower Austria, Austria	inhumation cemetery	c. 700 - 950	10	no			Friesinger 1971-74	
Rödingen	North Rhine- Westphalia, Germany	inhumation cemetery	c. 470/500 - 700/20	702	no			Janssen 1993	
Rudelsdorf	Upper Austria, Austria	inhumation cemetery	Baiuvarian	242	no			Csar 2003	
Rullstorf	Lower Saxony, Germany	bi-ritual cemetery	c. 600 – 800	52	no			Hornig 1993	
Runding-Satzdorf	Bavaria, Germany	inhumation cemetery	Carolingian	54	no			Pöllath 2002	

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Saffig-Wannenköpfen	Rhineland- Palatinate, Germany	inhumation cemetery	c. 550 – 650	248	yes	2	113, 128, 143, 219	Melzer 1993	
Salchendorf	Carinthia, Austria	inhumation cemetery	c. 740 - 830	5	no			Eichert 2010a	
Salzburg, Lexengasse	Salzburg, Austria	inhumation cemetery	c. 650 – 725	36	no			Hell 1974	
Sankt Andrä an der Traisen	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	2	no			Friesinger 1971- 1974	
Sankt Georgen bei Neumarkt	Styria, Austria	Churchyard, church	1146-1845 existence of the church; 1200-1600 occupation of the churchyard	46	yes	1	220	Steinegger 2020	
Sankt Pantaleon-Erla	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	5	yes	1	220	Friesinger 1971-74	
Sankt Stefan an der Gail	Carinthia, Austria	churchyard	early medieval	2	no			Eichert 2010a	
Sappl	Carinthia, Austria	inhumation cemetery	early medieval	7	no			Eichert 2010a	
Schleitheim	Canton Schaffhausen, Switzerland	churchyard	c. 600 – 1200		no			Burzler et al. 2002	
Schleitheim-Hebsack	Canton Schaffhausen, Switzerland	inhumation cemetery	c. 425 - 700	841	no			Burzler et al. 2002	the total number of excavated burials comprises both burial sites in Schleitheim
Schleitheim	Canton Schaffhausen, Switzerland	Settlement area	c. 425 - 700	0	no			Burzler et al. 2002	

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Schnaitheim	Baden- Württemberg, Germany	inhumation cemetery	c. 600 – 800	13	no			Leinthal 2003	early medieval graves buried in hallstatt period burial mounds
Schnaitheim	Baden- Württemberg, Germany	settlement area	c. 600 – 800	0	no			Leinthal 2003	
Schöningen	Lower Saxony, Germany	churchyard	late medieval	n.k.	yes	1	220	Gardela and Duma 2013	
Schrauding	Styria, Austria	inhumation cemetery	c. 400 – 950	3	no			Kramer 1992	
Schrenz	Saxony-Anhalt, Germany	inhumation cemetery, fortification	c. 800 – 1100	20	yes	1	220	Schiefer 2011	
Schretzheim	Bavaria, Germany	bi-ritual cemetery	c. 525/530 – 680	632	yes	1	46, 110, 220-221	Koch 1977	
Schwanenstadt	Upper Austria, Austria	inhumation cemetery	c. 400 – 800	100	yes	3	136, 220- 221	Tovornik 2002	
Segnitz	Bavaria, Germany	inhumation cemetery	Merovingian	51	yes	1	222	Pütz 2019	
Serock	Masovian voivodeship, Poland	churchyard	late medieval - Modern Period		yes	1	222	Gardela and Duma 2013	
Sierninghofen	Upper Austria, Austria	inhumation cemetery	c. 775 – 850	13	no	1	223	Tovornik 1978 Pertlwieser and Tovornik 1978	
Sindelsdorf	Bavaria, Germany	inhumation cemetery	c. 500 – 800	329	no			Menke and Menke 2013	
Sommerrein	Lower Austria, Austria	inhumation cemetery	c. 625 – 800	223	no			Daim and Lippert 1984	
Spittal an der Drau, St. Peter	Carinthia, Austria	churchyard	early and high medieval, Modern Period	219	No			Karpf and Meyer 2010	only medieval burials were investigated

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St. Valentin Landschach	Lower Austria, Austria	inhumation cemetery	c. 700 – 950	6	no			Friesinger 1971-74	
Staffelstein "Siechenhaus"	Bavaria, Germany	inhumation cemetery	Carolingian	64	no			Pöllath 2002	
Stainach	Styria, Austria	inhumation cemetery	carolingian	15	no			Kloiber 1953	
Stallhofen	Carinthia, Austria	inhumation cemetery	early medieval	14	no			Eichert 2010a	
Stammersdorf	Carinthia, Austria	inhumation cemetery	early medieval	3	no			Eichert 2010a	
Stans, Laurentiuskirche	Tirol, Austria	churchyard	late medieval	9	no			Sydow 1990	
Stará Kouřim	Středočeský kraj, Czech Republic	inhumation cemetery	c. 830 – 930	156	yes	4	223	Šolle 1966	
Starigrad-Oldenburg (Oldenburger Wall)	Schleswig-Holstein, Germany	settlement, church, churchyard	c. 630 – 1300	185	Yes	15	72f, 145, 149, 223- 224	Gabriel and Kemke 2011	
Stegendorf	Carinthia, Austria	inhumation cemetery	early medieval	2	no			Eichert 2010a	
Stein, Flur Altenburg	Lower Austria, Austria	settlement area	c. 800 – 900	4	yes	2	224	Kühtreiber and Obenaus 2017 Kreitner 1994	

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Steinabrunn	Lower Austria, Austria	inhumation cemetery	early medieval	61	yes	1	224	Friesinger 1971-74	almost 50% subadult individuals. according to the initatilly published map of the site (Krenn 1939) , there is no prevailing grave orientation on the site, all orientations vary considerably. thus, no burial with a deviating orientation from west-east standard was noted was considered for the catalog
Steinbrunn	Burgenland, Austria	inhumation cemetery	c. 1050 – 1175	19	no			Obenaus 2010	
Stetten an der Donau	Baden- Württemberg, Germany	inhumation cemetery	c. 630 – 720	209	Yes	1	224	Weis 1999	
Stotzing	Lower Austria, Austria	inhumation cemetery	c. 975 – 1050	26	no			Obenaus 2010	
Stradów	Świętokrzyskie Voivodeship, Poland	inhumation cemetery	c. 1000 – 1200	n.k.	yes	1	89, 225	Falis 2008	
Straß	Upper Austria, Austria	inhumation cemetery	early medieval	2	no			Pertlwieser and Tovornik 1981	
Straubing, St. Peter	Bavaria, Germany	churchyard	c. 600 – 700	4	no			von Freeden 2009	
Straubing- Bajuwarenstraße	Bavaria, Germany	inhumation cemetery	c. 400 – 700	809	no			Geisler 1998	
Strullendorf- Amlingstadt	Bavaria, Germany	inhumation cemetery	Carolingian	88	no			Pöllath 2002	
Sulzburg "Geißmättle"	Baden- Württemberg, Germany	churchyard	c. 1100 – 1300	73	no			Alt et al. 2008	

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Svätý Peter	Nitriansky kraj, Slovakia	inhumation cemetery	c. 900 – 1000	11	no			Točík 1968	
Szabolcs	Com. Szabolcs- Szatmár-Bereg	inhumation cemetery	c. 900 – 1200	391	yes			Kovacs 1994	
Szekszárd, Bogviszlói ut	Kom. Tolna, Hungary	inhumation cemetery	Avar	786	no	3	225-226	Rosner 1999	
Tamsweg-Apfelknab	Salzburg, Austria	inhumation cemetery	c. 830 – 900	10	no			Eichert 2008	
Telfs	Tirol, Austria	inhumation cemetery	early medieval	12	no			Sydow 1984	
Templin, St. Maria Magdalenenkirche,	Brandenburg, Germany	churchyard	c. 1200 - 1800	276	yes	1	225	Jungklaus 2007	
Terfens	Tirol, Austria	inhumation cemetery	c. 600 – 700	24	no			Lippert 1989	
Teublitz-Saltendorf- Kuntsdorf	Bavaria, Germany	inhumation cemetery	Carolingian	12	no			Pöllath 2002	
Thalgau, St. Martin	Salzburg, Austria	churchyard	early medieval	34	no			Melzer 1986	
Thunau, Burial Mounds	Lower Austria, Austria	inhumation cemetery	c. 800 – 850	5	no		50	Breibert and Wiltshcke-Schrotta 2010	not all known burial mounds have been excavated
Thunau, Obere Holzwiese	Lower Austria, Austria	inhumation cemetery	c. 750 – 950	207	yes	2	226	Nowotny 2018	
Thunau, Talsiedlung	Lower Austria, Austria	settlement area	c. 800 – 1100	n.k.	yes	3	47, 68, 226-227	Obenaus 2018; personal communication with M. Obenaus	
Thunau, Untere Holzwiese	Lower Austria, Austria	inhumation cemetery	c. 1100 – 1399	8	no			Nowotny 2018	

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Thurnau-Alladorf	Bavaria, Germany	inhumation cemetery	c. 700 – 900	273	no			Pöllath 2002	
Thurnau-Felkendorf- Kleetzhöfe	Bavaria, Germany	inhumation cemetery	Carolingian	79	no			Pöllath 2002	
Tofting bei Tönning	Schleswig-Holstein, Germany	settlement area	c. 100 – 200	n.k.	yes	1	69f, 227	Bantelmann 1955 Beilke-Voigt 2007	
Tornow	Brandenburg, Germany	settlement area	c. 1000 – 1200	0	no			Herrmann 1991	
Trabenig	Carinthia, Austria	inhumation cemetery	early medieval	2	no			Eichert 2010a	
Trais-Horloff	Hesse, Germany	inhumation cemetery	Merovingian	5	no			Thiedmann 2008	
Trais-Münzberg	Hesse, Germany	inhumation cemetery	Merovingian	5	no			Thiedmann 2008	
Trofaiach	Styria, Austria	inhumation cemetery	c. 900 – 1000	4	yes	1	227	Gutjahr 2000	
Tulln (Flst 3102)	Lower Austria, Austria	inhumation cemetery	c. 900 – 1000	34	no			Friesinger 1971-74	
Tunel Wielki Cave	Lesser Poland Voivodeship, Poland	cave	1655 – 1657	1	yes	1	76, 136, 227	Wojenka et al. 2021	
Unterhaching	Bavaria, Germany	Hofgrablege	c. 450 – 550	10	no		47	Haas-Gebhard 2013	
Unterthürheim	Bavaria, Germany	inhumation cemetery	c. 500 – 700	256	yes	2	228	Grünwald 1988	
Usedom, Am Hain	Mecklenburg- Vorpommern, Germany	bi-ritual cemetery	c. 950 - 1150	197	yes	7	82, 228	Biermann and Freder 2009	
Usedom, Priesterstraße	Mecklenburg- Vorpommern, Germany	inhumation cemetery	c. 1100 – 1300	196	yes	3	229	Biermann and Freder 2009	
Vác-Kaviscbánya	Com. Pest, Hungary	inhumation cemetery	c. 600 – 800	515	yes	2	96, 109, 229	Tettamanti 2000	

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Villach Judendorf	Carinthia, Austria	inhumation cemetery	c. 830 – 1000	29	no			Eichert 2010a	
Villach Judendorf Sandpit	Carinthia, Austria	inhumation cemetery	c. 740 – 830	3	no			Eichert 2010a	
Villach Lind	Carinthia, Austria	inhumation cemetery	c. 660 – 780	4	no			Eichert 2010a	
Villach Perau	Carinthia, Austria	churchyard	c. 900 – 1000	2	no			Eichert 2010a	
Villach Völkendorf Nord	Carinthia, Austria	inhumation cemetery	c. 780 – 830	5	no			Eichert 2010a	
Villach, Judenbichl	Carinthia, Austria	inhumation cemetery	c. 900 – 1500	155	no			Eichert 2010a	
Villach, St. Martin	Carinthia, Austria	churchyard	c. 800 – 899	3	no			Eichert 2010a	
Volders	Tirol, Austria	inhumation cemetery	early medieval	153	no			Berger et al. 2007	
Wallern	Burgenland, Austria	inhumation cemetery	Arpadian	56	no			Obenaus 2010	
Waltendorf	Bavaria, Germany	inhumation cemetery	Carolingian	23	no			Pöllath 2002	
Wartmannstetten	Lower Austria, Austria	inhumation cemetery	early medieval	38	no			Hampl et al. 2005	
Wawrzeńczyce	Lesser Poland Voivodeship, Poland	inhumation cemetery	early medieval	n.k.	yes	1	90, 136, 230	Mazur and Mazur 2011	
Weingarten	Baden- Württemberg, Germany	inhumation cemetery	c. 400 – 800	801	no	0		Roth and Theune 1995	
Weismain	Bavaria, Germany	inhumation cemetery	c- 725 – 900	251	yes	5	230	Pöllath 2002	
Weismain- Wallerberg- Schammendorf	Bavaria, Germany	inhumation cemetery	Carolingian	18	no			Pöllath 2002	

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Weikersburg	Rhineland- Palatinate, Germany	inhumation cemetery	Franconian	7	no			Grunwald 1998	
Wenigumstadt	Baden- Württemberg, Germany	bi-ritual cemetery	c. 400 – 900	309	no			Stauch 2004	
Wernswig	Hesse, Germany	n.k.	medieval	n.k.	yes	2	231	Heintel 1961 Gardela and Duma 2013	
Wien Csokorgasse 1997	Vienna, Austria	inhumation cemetery	c. 600 – 750	39	no			Greußing and Benedix 2019	A total of 730 burials were uncovered in Wien- Csokorgasse. However, only the 39 graves that have been comprehensively examined and published were considered for this catalog
Wien Liesing, Kernstockgasse	Vienna, Austria	inhumation cemetery	c. 650 – 850	27	Yes	1	213	Daim 1977	
Wien, Aspangstraße	Vienna, Austria	inhumation cemetery	c. 600 – 650	3	no			Chmelar et al. 2011	
Wien, Eipeldauer Straße	Vienna, Austria	inhumation cemetery	c. 400 – 550	6	no			Greußing and Benedix 2019	
Wien, Geblergasse 47	Vienna, Austria	inhumation cemetery	c. 800 – 900	2	no			Mosser et al. 2014	
Wien, Hauffgasse	Vienna, Austria	inhumation cemetery	c. 650 – 750	4	no			Greußing and Benedix 2019	
Wien-Heiligenstadt St. Jakob	Vienna, Austria	church	c. 1200 – 1700	c. 400	Yes	400	75, 76, 124, 149, 190, 231	Lindenhofer 2012, Müllan 2006	

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Wien, Mariahilfer Gürtel	Vienna, Austria	inhumation cemetery	c. 560 – 600	3	no			Tobias et al. 2010	
Wien, Ottakringer Straße	Vienna, Austria	inhumation cemetery	c. 450 – 500	4	no			Greußing and Benedix 2019	
Wien, Salvatorgasse	Vienna, Austria	inhumation cemetery	c. 450 – 550	4	no			Greußing and Benedix 2019	
Wien, Stephansdom	Vienna, Austria	inhumation cemetery	c. 700 – 1200	32	no			Greußing and Benedix 2019	There is a total number of 481 burials that were found in and around the Stephansdom. Most of them were found during construction of the Ubahn. The majority of these burials belongs to a late antique burial ground, 32 date to the Early Middle Ages, which is supported by C14 analyses
Wiener Neustadt, Am Bulgarengrund	Lower Austria, Austria	inhumation cemetery	c. 550 - 800	8	no			Hampl 1974	
Wieselburg, Schubertstraße	Lower Austria, Austria	inhumation cemetery	c. 800 – 1100	12	no			Ladenbauer-Orel and Denk 1967	
Wimm	Lower Austria, Austria	inhumation cemetery	c. 700 – 800	76	no		50	Breibert 2005	
Windecken	Hesse, Germany	inhumation cemetery	Merovingian	5	no			Thiedmann 2008	
Wölfersheim	Hesse, Germany	inhumation cemetery	Merovingian	6	no			Thiedmann 2008	
Wülfigen	Baden-Württemberg, Germany	settlement area	c. 1000 – 1200	0	no			Schulze-Dörflamm 1991	
Zamárdi-Rétiföldek	Com. Somogy, Hungary	inhumation cemetery	Avar	1497	yes	4	231	Bárdos and Garam 2009	

Site	Couny/Area, Country	Type of Site	Site Date - Period	Number of excavated Burials in total	Deviant Child Burials	Number of Deviant Child Burials	Index	Citation	Comment
Zillingtal	Lower Austria, Austria	inhumation cemetery	Avar	106	no			https://thanados.net/entity/136584	
Złota Pińczowska	Świętokrzyskie Voivodeship, Poland	inhumation cemetery	c. 1000 – 1300	n.k.	yes	1	88, 232	Miśkiewicz 2010, Gardeła and Duma 2013, Gardeła 2020	
Żukowo	Masovian voivodeship, Poland	inhumation cemetery	c. 1000 – 1200	n.k.	yes	1	233	Dzik 2006; Gardeła and Duma 2013	
Zwentendorf	Lower Austria, Austria	inhumation cemetery	c. 900 – 1100	623	no			Heinrich 2001	

