

an den Rändern zu suchen ist. Die Lage der Profilebenen in Beilagen und Tafeln wird in einem schematischen Plan (Beil. 35, Profilebene 10 liegt richtig zwischen 9 und 3) dargestellt.

Wünschenswert wäre in der Einleitung eine Übersicht über die neuen Ergebnisse für die drei anderen Viertel des Domareals und damit eine Erklärung der NW-Befundnummern, die im Katalog nicht aufscheinen. Die Leserwünsche können die sorgfältige und ambitionierte Arbeit nicht schmälern. Ein großes Verdienst ist es, die oft kleinen Ausschnitte von Befunden miteinander zu verknüpfen (vgl. vor allem Ia–Id). Weber diskutiert verschiedene Erklärungen und weist auch ausdrücklich darauf hin, dass in manchen Fällen keine Aussage oder „vertretbare Rekonstruktion“ mehr möglich ist.

Während anderenorts Doppelbasiliken meist einer einheitlichen Bauplanung folgen (J.-P. SODINI / K. KOŁOKOTSAS, *Aliki, II. La basilique double. Études thasiennes* 10 [Athen 1984] 253–312) entwickelt sich in Trier dieses Baukonzept erst durch die Umbau- und Neubautätigkeit. Vom Grabungsbefund bis zum Rekonstruktionsmodell (S. 325 Abb. 240: Phase IIIb) ist das Bemühen um anschauliche Darstellung zu erkennen. Das Modell gibt die unterschiedlichen Raumhöhen und die differenzierte Dachlandschaft wieder. Der Innenraum drückt sich in der äußeren Gliederung des Baukörpers aus. Als Mangel aber empfindet der Leser, dass vom genannten Modell nur die SW-Basilika besprochen wird.

Eine zentrale Einsicht in die rituelle Praxis ist, dass die Taufe durch Übergießen von Wasser erfolgte, wobei die Taufkandidaten etwa bis über die Knöchel im Wasser standen. So liefert die Befundinterpretation des SW-Areals der Trierer Domgrabung eine wichtige Grundlage für die Erforschung des frühen Christentums, insbesondere sobald der SW-Bereich mit den anderen drei Vierteln der Kirchenanlage verknüpft wird.

AT-9020 Klagenfurt am Wörthersee
Liberogasse 6
E-Mail: franz.glaser@landesmuseum.ktn.gv.at

Franz Glaser
Landesmuseum Kärnten
Sammlungs- und
Wissenschaftszentrum

HENRIETTE BARON, Quasi liber et pictura. Die Tierknochenfunde aus dem Gräberfeld an der Wiener Csokorgasse – eine anthrozoologische Studie zu den awarischen Bestattungssitten. Monographien des Römisch-Germanischen Zentralmuseums Band 143. Verlag Schnell und Steiner, Regensburg 2018. € 99.00. ISBN 978-3-7954-3434-2. 662 pages, 198 drawings, 356 diagrams, 30 colour plates, 173 illustrations, and 44 tables.

In 1976 and 1977, excavations in the Csokorgasse area in Vienna (AT) under the direction of Ludwig Streinz, Historical Museum of Vienna, brought to light a large Avar period cemetery. A total of 705 7th–8th century AD burials were discovered, almost three quarters (491) containing animal bones. Inhumations oriented west-east displaying gender-specific grave goods such as those found at Csokorgasse are typical of the Middle and Late Avar Periods.

Avars formed an alliance of several Eurasian mobile pastoralist groups of unknown origin. Moving westward they established the Avar Empire (late 6th to the early 9th century AD), uniting the Carpathian Basin for the first time in its known history. Lacking their own documentary sources, Avars were most widely recorded for their attacks on the Byzantine Empire between 568 to 626 AD. However, this group is well-known by its material culture recovered from large cemeteries in the Carpathian Basin. These finds include animal remains that deserve proper analysis helping their up-to-date interpretation.

The title of the book is a quote from a verse by the 12th century AD theologian Alain de Lille who pointed out that all the world's creatures hold a mirror "as a book and a picture"; observations of the natural world help the understanding of our own life. This simile is most relevant here. Animal bones in Avar Period cemeteries have been interpreted as food donations or non-specific "offerings". But why did Avars choose very specific animals and animal parts to be buried with their dead? What can we learn from these remains interred with humans of different genders, various ages and social status?

Comparable to a traditional braided bread, this book is an inseparable combination of three essential aspects of its topic:

It is a high-resolution analysis of animal remains in the best tradition of Central European archaeozoology. Archaeology has long suffered from the impossibility of reproducing sites destroyed during excavations. Minute descriptions with professional insight, based on first-hand observation offer the possibly best solution.

The second main strand is social zooarchaeology. This "*anthrozoologisch*" approach is relatively rare in the German-language literature. Research in Hungary, which dominated Avar studies due to the large number of sites from this period, has long been particularly resistant to new ideas, such as integrating results of long-standing archaeozoological investigations in the country. Archaeology developed in a closer, more organic association with zooarchaeology (*sic!*) in English-speaking countries and linguistically adjacent areas, being more sensitive to new ideas concerning animal-human relationships and post-humanistic approaches in general. Such more sophisticated interpretations, however, are quite difficult using fragmented and commingled settlement bone refuse. The Csokorgasse finds, however, were recovered in well-dated, discrete burial units, associated with the gender, age, and social status of the interred. Such well-structured assemblages lend themselves to sophisticated diachronic analyses of their potential meanings.

Finally, methodological chapters, e.g. on taphonomy and age determination, are illustrated through the example of domestic chicken, dominating in the faunal material. This facilitated the development of innovative standards for the evaluation of archaeological bird remains, filling a vacuum in current archaeozoological knowledge.

Given its respectable size (almost 700 A 4 pages) and complex structure, characteristic chapters of the book are worth having a closer look at here. Following the introduction (pp. 1–10), the Csokorgasse cemetery is presented within its archaeological context. In addition to site plans, other Avar cemeteries are also projected onto the city map of Vienna with regard to main phases of the Avar Period. The scene is clearly set both in time and space. The state of research is summarised by presenting the research history of sites in Hungary but also in eastern Austria and southern Slovakia, the north-western territories of the Avar Empire. A review of conventional interpretations is also provided: animals in Avar burials have been seen as food donations, refuse from funerary feasting, sacrificial animals, and miscellanea found among other grave goods (remains of hides, apotropaic masks, etc.).

Taphonomy is a key concept in the interpretation of excavated bones. It is the study of *post-mortem* processes that had affected the skeleton. A 17 pages long chapter (pp. 35–51) explains the relevance of taphonomy at Csokorgasse, among others using a flow chart adapted to the analysis of grave goods. Since the aims of taphonomy include documenting and understanding the perpetual loss of information in archaeological finds, it is the critical evaluation of sources in archaeozoology – excavated animal remains. In addition to ancient treatment and natural forces decimating the bone material during deposition, the inclusion of post-excavation loss is welcome in this chapter: methods of recovery, documentation, and storage may all whittle away information, thus

impacting on interpretation. Beyond a dry methodological description, principles of taphonomy are illustrated through the example of chicken skeletons recovered in numbers at Csokorgasse. Small and fragile bird bones are particularly prone to destruction and loss. Fortunately, chickens were found as more-or-less complete skeletons in graves, tangibly illustrating the effect of taphonomic loss on interpretation. A short sub-chapter (pp. 49–51) relates the thus clarified principles to other animals found in the cemetery, from large horses to delicate fish bones. The latter are worst hit by taphonomic loss as, in contrast to the compact bones of birds adapted to flying, live fish have to withstand little gravity in water. Their bones thus have evolved to be quite porous, i. e. prone to *post-mortem* destruction.

The next chapter (pp. 53–289) is a detailed analysis of animal finds, exceeding one third of the volume (237 pages). Following a brief methodological discussion (taphonomic characterisation of the material, age and sex determination, estimating size, recording of cut marks and pathological lesions), it continues with an in-depth discussion of each animal species encountered in the Csokorgasse cemetery.

As mentioned, the most commonly represented animal at Csokorgasse was domestic chicken: the remains of 323 individuals, frequently most of the skeleton, were found in 319 graves. In almost as many burials (313) bones of sheep or less frequently goat were recovered, in most cases represented by the femur of fully grown individuals. Cattle remains came to light from 240 burials, originating from an admixture of young adult and mature individuals. Pig bone, mostly from the young, occurred only in 84 graves. Apart from these common domesticates, remains of geese (domestic or wild), as well as of different wild birds were identified. They included jackdaw, northern goshawk, Eurasian skylark, rock dove, white-tailed eagle, smew, partridge, and Eurasian woodcock. In addition, bones of several species in the carpfish family, pike and catfish (*Wels s. sheathfish*) were also sporadically found. With the exception of domestic birds these species are represented by a few, disarticulated skeletal parts. Horse and dog are discussed separately, since (similarly to some chickens) they tend to be represented by complete skeletons. These two species were uncovered from four particularly rich Late Avar equestrian burials (graves 650, 690, 692, and 693). Apparently in each case a dog and a harnessed horse were buried together, representing a functional unit (although only a dog tibia was found in grave 692). The author has made a valuable attempt to deduce some information regarding the potential lifetime roles of these animals, not last based on their detailed paleopathological study. Most lesions identified on the horses from the Csokorgasse cemetery confirm observations made in other Avar burials. Deformations caused by working as mounts differ only in intensity as well as in terms of subsequent care dedicated to the horses. The chapter ends with a few miscellaneous species which – with the exception of hare – are intrusive to archaeological deposits, such as burrowing rodents or amphibians and reptiles.

Beyond the publication of the usual archaeozoological data, the main objective of this impressive work was to understand the roles animals played in Avar funerary rites. Although shorter (63 pages, 10% of the volume), the next chapter (pp. 291–353) is one of the most innovative parts of the book, an analysis of animal remains as grave goods at the Csokorgasse cemetery. Cultural communication is a decisive element of funerary rites. The variability in and symbolism of grave goods thus has the potential to mirror the semiotic code of Avars. In this sense animal remains are *bona fide* archaeological finds, reflecting social differences between the deceased as well as diachronic changes.

The age and gender of the deceased could be identified in 692 burials. In these graves animal bones were presented within the context of other characteristic grave goods such as pots, knives, beads, earrings, spindle whorls, and weapons. The presence of complex belt sets was seen as an indicator of high social status in men's graves. The use of coffins was also considered.

Beyond the conventional interpretations of animal bones in Avar burials, the author determined eight more refined functional categories detailed in separate sub-chapters (pp. 336–353):

1. goods for afterlife
2. leftovers from the funeral feast
3. refuse from ostentatious consumption (potlatch)
4. indicator of rank / status
5. donation by the community
6. metaphor or symbol
7. ritual donation to protect the living
8. generate remembrance – spectacular sacrifice

The composition of burial assemblages from Csokorgasse shows that adding animals / meat as grave goods to the burial shows a declining trend during the studied periods. Except for the few complete horses and dogs found along with Late Avar high-status men, only few animal bones seem clearly specific for any social group. Subtle tendencies, however, indicate that roosters with well-developed spurs are also associated with high-status men, a possible token of male virility increasingly used toward the Late Avar Period. Birds of prey associated with men also increase zoological diversity in male burials. Careful taphonomic analysis and the evidence of cut marks show that hens buried along with women had their feet cut off. Many hens were sacrificed during the egg-laying period as is indicated by the evidence of medullary bone in long bones. These observations help assigning individual animal bone finds to the eight functional groups. Through this technical classification, we also get closer to clarifying aspects that help determining social identities represented in the cemetery. It seems that the “fearless warrior” ranked highest, followed by the “herder of pride and wealth”. Female roles were more difficult to distinguish. Animal remains, however, were also associated with the accumulation of valuable objects in the grave, used in generating and re-perpetuating prestige. Last but not least, the sacrifice of valuable horses and the dominance of caprine bones among the food donations seem to be a clear reference to the Eurasian step-tradition of mobile pastoralism. Animals included among the grave goods carried special meaning for those in the community left behind. Ritual was also important as a performance, impressing those present at the funeral with acts of animal sacrifice on location, the likely case with horses, dogs, and even roosters and hens.

The next chapter (pp. 355–381) shows the results of archaeozoological analysis in geographical / temporal context. Even if the exemplary details from Csokorgasse are rarely matched by previous reports, the social interpretation of animal-related Avar funerary rituals enhances our understanding of these practices on a broader, regional scale. Horse and equestrian burials, most widely studied by both archaeologists and archaeozoologists are not discussed in this chapter as they have been exhaustively dealt with in the literature. It is rather subtle trends in the use of the other animals that deserve special attention here.

The regional analysis is based on the composition of animal bone assemblages from 26 cemeteries and eleven settlements in the Carpathian Basin. While spectacular Avar cemeteries have been known since the late 19th century, the study of small rural settlements began only after World War II. Bones from household refuse, however, offer an important point of reference in the study of ritual as, due to ceremonial considerations, burials do not necessarily reflect ordinary meat consumption.

While no clear pattern was found in the taxonomic composition of 7th–8th century AD faunal materials in the region, the anatomical distribution is of special interest. In all bovids, the diversity of skeletal elements decreases west to east as measured by the standard deviation of percentages by various body regions. This trend is also present but less pronounced in pig. Wild animal remains are too few to show such clear patterns, although the inclusion of hare seems more common in cemeteries in the north of the Carpathian Basin. While loose dog bones occur sporadically in burials across the region, burying dogs along with humans seems to have been more of a tradition along the Danube, mostly in Austria and Slovakia, rather than in the Great Hungarian Plain in the east. The author warns that although the Avar Empire politically united the former Roman province of *Pannonia* (west) with the *Barbaricum* (east), the ethnic composition of local populations may have differed. This may have contributed to the subsequent diversity of animal uses in burial ceremonies within the empire.

The main part of the book ends with a concise summary of findings and an outline of perspectives, reiterating the most important conclusions (pp. 383–388). A brief English summary (pp. 389–392) is followed by eleven pages of bibliography (pp. 393–403). Given the complexity of the entire book it is unsurprising but still impressive that well over 600 works in various languages are cited.

However, the volume does not end here. A catalogue of animal remains by grave (pp. 405–448; 44 pages) and a 124 pages long list of tabulated bone measurements (pp. 449–572) are appended to the main text. These are indispensable parts of both the site report and anthropological interpretations, raw data that will benefit generations of specialists. One wonders, however, whether a digital alternative could have been found to publish this massive data base. It would have made this rich volume probably cheaper and easier to handle.

Following the archaeozoological report and cultural evaluation of animal remains in the main body of the book, the third strand resurfaces at the end of the work: a detailed catalogue of the 323 individual chickens identified at the site. Recovery from discrete units (graves) made it possible to attribute various observations to individual hens and roosters of different ages. The detailed documentation of pathological changes in this properly aged and sexed collection further contributes to our knowledge of using chickens in Avar funerary rites. The author also devoted a separate chapter to ageing chickens based on the ossification of skeletal elements. This methodological innovation sets a standard in avian archaeozoology, as over 300 skeletons support the validity of age-related observations. In spite of its relevance to the site report, this is a self-standing methodological study as is implicitly acknowledged by its placement toward the end of the volume.

A detailed chronological study of the cemetery by Ludwig Streinz and Falko Daim is also appended to the book (pp. 615–626). They reconcile radiocarbon dates with the relative chronology of stylistic elements. This is particularly important in a time period which has traditionally been discussed in typo-chronological terms. According to this overview, the cemetery was continuously in use from the second quarter of the 7th century AD (Early Avar Period II) until the very end of the 8th century AD (Late Avar Period II and III). Given its importance, this chapter would have been interesting earlier in the book when the Csokorgasse site was described.

The volume ends with a single page register of the sites mentioned and 30 colour plates further illustrating some details mentioned in the main part of the book. At this point it must be mentioned that the entire book is well-illustrated by the author's own graphic work and high-quality photographs showing important details. The actual size of these bones usually occurs in the figure captions, rather than in the form of scales added to the photographs.

In summary, this volume represents important research in a region with a long tradition of state-of-the-art archaeological inquiry duly acknowledged by the author. However, she also offers new insights into what people actually saw in their animals. It becomes clear that interpretation as food donations is far too simplistic; the selected animals and animal parts carried far deeper meanings. Moreover, a change in animal donations occurred over a few generations that she could innovatively link with fundamental social changes in the Avar Empire. The author seizes the opportunity to educate archaeologists and even a broader public of lay readers about the importance, meaning, and technical implications of animal bone analysis in archaeology.

SE-106 91 Stockholm
Lilla Frescativägen 7
E-mail: laszlo.bartosiewicz@ofl.su.se

László Bartosiewicz
Osteoarchaeological Research Laboratory
Stockholm University

FRANS THEUWS / MIRJAM KARS (Hrsg.), The Saint-Servatius Complex in Maastricht. The Vrijthof Excavations (1969–1970). Mit Beiträgen von Chrystel Brandenburgh, Line van Wersch, Raphaël Panhuysen, Titus Panhuysen, Menno Dijkstra, Frans Theuws, Liesbeth Smits, Mirjam Kars and Dieuwertje Smal. *Merovingian Archaeology in the Low Countries Volume 4*. Habelt Verlag, Bonn 2017. € 119,-. ISBN 978-3-7749-4024-6. 606 Seiten mit zahlreichen, meist farbigen Abbildungen, vier Klappafeln und einer farbigen Faltbeilage.

Dieser vierte Band der mittlerweile etablierten Reihe zur Merowingerzeit in den Niederlanden ist einer der herausragenden Grabungen gewidmet, den Untersuchungen auf dem Friedhof um die St. Servatius-Kirche in Maastricht. Grabungen wurden in Maastricht seit dem 19. Jahrhundert durchgeführt. Die modernen, 1969 begonnenen und seither kontinuierlich fortgeführten Forschungen haben Maastricht in den Fokus zahlreicher Diskussionen gerückt, beispielsweise um die Kontinuität zwischen Antike und Frühmittelalter, die Etablierung des Christentums in den nördlichen Randbereichen des Karolingerreiches oder die Herausbildung früher Städte in der Karolinger- oder Ottonenzeit. Die für Maastricht gewonnenen Erkenntnisse sind damit eine Art Eichmarke für die Region zwischen linkem Niederrhein, Maas und Nordseeküste.

Allerdings war der Weg zu diesem Punkt kein einfacher, wie die beiden Kapitel, in denen Titus Panhuysen und Frans Theuws die Geschichte der Grabungen darstellen (S. 48–86), zeigen. Nicht nur die Etablierung der Mittelalterarchäologie in den Niederlanden, sondern die gesamte Struktur der Bodendenkmalpflege, die Etablierung des Verursacher-Prinzips und das ausgewogene Wechselspiel zwischen staatlicher Denkmalpflege (*Rijksdienst voor het Outhedkundig Bodemonderzoek*, ROB) und kommunaler Archäologie werden hier wie in einem Brennglas deutlich. Ausgesprochen lesenswert sind die Absätze, in denen über die Etablierung der geeigneten Grabungstechnik oder die Diskussion um die Finanzierung der erforderlichen Maßnahmen berichtet wird. Die anfänglich völlig ungenügende Ausstattung, die fehlende Kenntnis hinsichtlich der notwendigen Grabungstechnik sowie der wiederholte Wechsel in den Verantwortlichkeiten (ROB, Stadtarchäologie, Grabungsfirmen) muss für die handelnden Personen mit prägenden Erfahrungen verbunden gewesen sein. In Kenntnis dieser Hintergründe werden viele Strukturen der niederländischen Archäologie verständlicher.

Der geschilderte methodische Ansatz wird in den folgenden Kapiteln (S. 88–154) fortgeführt. Eingehend wird die Dokumentation der Grabungen vorgestellt, es wird das Vorgehen bei der Auswertung diskutiert und darauf aufbauend die Zuordnung der Befunde hinsichtlich Stratigrafie und Datierung. Eine Harris-Matrix (Beil. Abb. 11,1) erleichtert das Verständnis sehr. Bemerkenswert