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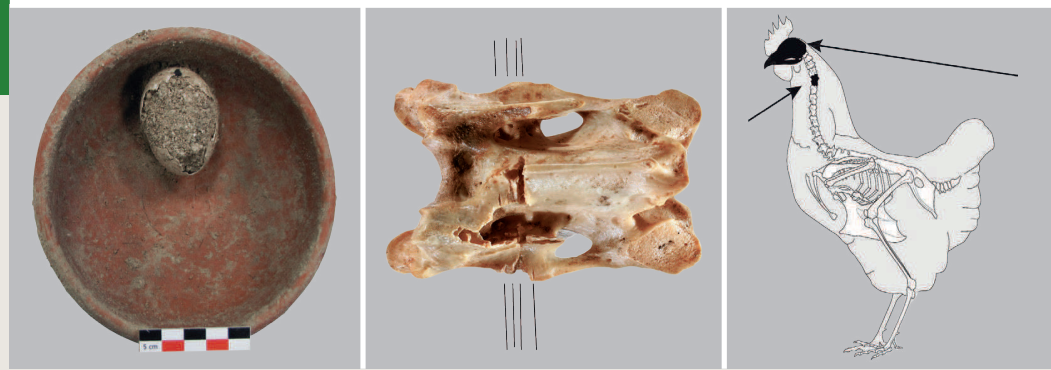
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KOLLOQUIEN ZUR VOR- UND FRÜHGESCHICHTE 26



Sabine Deschler-Erb | Umberto Albarella
Silvia Valenzuela Lamas | Gabriele Rasbach

ROMAN ANIMALS IN RITUAL AND FUNERARY CONTEXTS

Proceedings of the 2nd Meeting of the
Zooarchaeology of the Roman Period Working
Group, Basel, 1st–4th February 2018

This volume includes a number of papers that were originally presented at the conference *Roman Animals in Ritual and Funerary Contexts*, which was held in Basel (Switzerland) from 1st–4th February 2018. The conference represented the second meeting of the International Council for Archaeozoology (ICAZ) Working Group on the *Zooarchaeology of the Roman Period*.

The articles present ritually deposited animal remains across a wide geographical range and incorporate both archaeological and zoological findings. The integration of these two strands of evidence is also one of the central concerns of the ICAZ Working Group, as in the past they have often been dealt with separately. However, it is precisely this interdisciplinary cooperation that opens up new perspectives on ritual practices in a wide variety of contexts. In this volume we see the enhancement of our understanding of ritual treatment of animals in central sanctuaries, in rural areas, at natural sites, and as part of building construction processes.

The case studies presented in this volume demonstrate how animal remains such as bones and eggshells provide information beyond diet, economy, and differences in social hierarchy. Their interdisciplinary investigation additionally enables insights into practices governed by cultural, religious, and ideological conditions.

The aim of the Zooarchaeology of the Roman Period Working Group (<https://alexandriaarchive.org/icaz/workroman>) is to represent a network of exchange and collaboration across borders and to enable the understanding of the interconnections between the research questions associated with animal remains from this important historical period.

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Sabine Deschler-Erb, Umberto
Albarella, Silvia Valenzuela Lamas,
Gabriele Rasbach
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AND FUNERARY CONTEXTS

DEUTSCHES ARCHÄOLOGISCHES INSTITUT
Römisch-Germanische Kommission, Frankfurt a. M.

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Vorwort zur Reihe „Kolloquien zur Vor- und Frühgeschichte“

In Händen halten Sie, liebe Leserin und lieber Leser, den 26. Band der „Kolloquien zur Vor- und Frühgeschichte“, der Ihnen neu und doch vertraut vorkommen mag. Denn diese Reihe, die von der Römisch-Germanischen Kommission (RGK) und der Eurasien-Abteilung des Deutschen Archäologischen Instituts (DAI) gemeinsam herausgegeben wird, existiert seit 23 Jahren, seit im Jahr 1997 die Akten des Internationalen Perlensymposiums in Mannheim als Band 1 publiziert wurden. Neu ist aber, dass die RGK erstmals die Herausgabe eines Bandes im neuen Reihenformat des DAI betreut hat. Die Aufmachung der „Kolloquien zur Vor- und Frühgeschichte“ (KVF) entspricht nun der Aufmachung zahlreicher weiterer Publikationsreihen des DAI. Das neue Layout ist moderner, attraktiver und nutzerfreundlicher. Es ist nun für viele DAI-Publikationsreihen nutzbar und hat einerseits einen hohen Wiedererkennungswert, erlaubt andererseits individuelle Anpassungen und Nutzungen.

Auch der vorliegende Band ist, wie es seit ihren Anfängen prägend für die KVF ist, ein Beispiel international ausgerichteter, Forschungstraditionen und -regionen übergreifender Wissenschaft. Inhaltlich schließt dieser 26. Band an eine ganze Reihe von KVF-Sammelbänden mit interdisziplinärer bzw. fachübergreifender Ausrichtung an. Mit KVF 26 stehen diesmal interdisziplinäre Untersuchungen zu Mensch-Tier-Beziehungen in den verschiedenen regionalkulturellen Kontexten des Römischen Reiches im Mittelpunkt und insbesondere die Rolle von Tieren in Zusammenhang mit Bestattungen und anderen Ritualen.

Knochengewebe vermag sehr gut, viele verschiedene Spuren menschlichen Handelns zu konservieren, und diese Spuren können wir als Zeugnisse dieser Handlungen, aber auch der dahinterstehenden Überlegungen, Absichten und Traditionen verstehen. So erlauben Tierknochen, aber auch andere Überreste wie Eierschalen, die Verknüpfung zoologischer Methoden und Fragen mit jenen einer sozial- und kulturhistorisch orientierten Archäologie. Tierreste sind also in jedem Sinne *archäologische* Funde, die nicht nur zu Ernährungs- und Wirtschaftsfragen Auskunft geben können, auch nicht allein zu sozialhierarchisch begründeten Unterschieden bei Bestattungsbeigaben, sondern auch zu *per se* kulturhistorischen Fragen wie eben jenen nach kulturell, religiös

bzw. weltanschaulich bestimmten Praktiken, nach Differenzen in ihrer Ausübung, nach ihren regional spezifischen Bedeutungen und nach ihren Veränderungen.

Damit liegt ein informativer und instruktiver 26. Band der KVF vor mit neuen Ansätzen, neuen Fragen und neuen Einsichten in einem neuen gestalterischen Gewand. Die Aufnahme der Reihe KVF in die einheitliche Publikationsgestaltung des DAI ermöglicht auch, diesen und weitere KVF-Bände in Zukunft in der *iDAI.world* – der digitalen Welt des DAI – unter *iDAI.publications/books* online zugänglich zu machen und zum Abruf im Open Access bereitzustellen. Zwar dient auch den interdisziplinär arbeitenden Altertumswissenschaften das gedruckt erscheinende Werk nach wie vor als Hauptmedium fachwissenschaftlichen Austauschs, doch stehen uns durch die digitale Vernetzung unterschiedlicher Daten- und Publikationsformate mittlerweile zahlreiche weitere Möglichkeiten der Veröffentlichung wissenschaftlicher Inhalte zur Verfügung. Das neue Publikationsformat ermöglicht die zukunftsweisende Verknüpfung von Print und digitalen Dokumentations- und Publikationsressourcen, z. B. durch das zeitgleiche Bereitstellen digitaler Supplemente.

Das Erscheinen von 26 Bänden in kurzen Abständen zeigt, dass die vor über 20 Jahren konzipierte Reihe erfolgreich war und ist, innovativ bleibt und in eine lebendige Zukunft blickt. Auch künftig werden Eurasien-Abteilung und RGK die Reihe „Kolloquien zur Vor- und Frühgeschichte“ im neuen Gewand und – wo sinnvoll und notwendig – als hybride Verknüpfung analoger und digitaler Wissensvermittlung fortführen. Und wie bisher werden wir in die KVF Beiträge von Tagungen und Symposien aufnehmen, an deren Vorbereitung und Durchführung wir personell bzw. organisatorisch beteiligt waren.

Zuletzt noch ein Dank an alle an der vorliegenden Publikation Beteiligten. Für die Möglichkeit im neuen Reihenformat des DAI publizieren zu können, danken wir ganz herzlichen den Kolleginnen und Kollegen der Redaktion der Zentrale. Die Bildbearbeitung der Beiträge lag in den Händen von Oliver Wagner. Johannes Gier war für das Lektorat der Beiträge verantwortlich. Lizzie Wright redigierte die englischen Texte, Hans-Ulrich Voß betreute die Drucklegung des Buches. Ihnen wie den Herausgeber*innen des Bandes danken wir sehr für die hervorragende Vorbereitung und Durchführung der Publikation.

Frankfurt am Main, den 12.11.2020

Eszter Bánffy
Erste Direktorin

Kerstin P. Hofmann
Zweite Direktorin

Alexander Gramsch
Redaktionsleiter

Preface to the series “Kolloquien zur Vor- und Frühgeschichte”

In your hands, dear reader, you hold the 26th volume of the series “Kolloquien zur Vor- und Frühgeschichte”: It might seem to you different, but still familiar, because this series, concomitantly published by the Romano-Germanic Commission (RGK) and the Eurasia Department of the German Archaeological Institute (DAI), has been in existence for 23 years. The first volume, published in 1997, consisted of the proceedings of the “Internationales Perlensymposium” held in Mannheim. What is new is that the RGK has published a volume in the new DAI series format for the first time. The layout of “Kolloquien zur Vor- und Frühgeschichte” (KVF) now matches the layout of numerous other DAI publication series. This modern layout is more attractive and more user-friendly; the new format is mirrored across many DAI publication series. Not only does it have a distinctive design; it also enables individual adaptations and uses.

The present volume, as is characteristic of the KVF series from its beginnings, is an example of internationally oriented scholarship spanning diverse research traditions and research fields. In terms of content, this 26th volume continues a long tradition of conference proceedings with an interdisciplinary or cross-disciplinary orientation published within KVF. The focus of KVF 26 is on interdisciplinary studies of human-animal relationships in different regional-cultural contexts of the Roman Empire. In this, particular emphasis lies on the role of animals in burial and other ritual contexts.

Bone tissue excellently preserves many different traces of human actions. These traces can be interpreted as the evidence of these actions as well as of the underlying reflections, intentions, and traditions. Animal bones as well as other remains such as eggshells therefore make it possible to link zoological methods and issues with those related to socially and cultural-historically oriented archaeology. Animal remains are thus *archaeological* finds in every sense: They provide information not only about diet and economy, or about differences in grave goods based on social hierarchy. They touch on key cultural issues such as culturally, religiously or ideologically determined practices. Moreover, zooarchaeological analyses allow us to detect differences in these practices, to identify regionally specific meanings and the changes therein.

Thus, an informative and instructive 26th volume of the KVF series is available in a new design, including new approaches, new research questions, and new insights. In the future, through the incorporation of the KVF series into the common DAI publication design this and further volumes can be published online: on the *iDAI.world* platform – the digital world of the DAI – under *iDAI.publications/books* and in Open Access. Printed publications admittedly still serve as a main medium for subject-specific exchanges for interdisciplinary archaeological studies. The new publication format allows digital networking of various data and publication formats providing us with numerous additional possibilities for the publication of scientific content and enabling the future-oriented linking of print and digital documentation and publication resources, for example through the simultaneous provision of digital supplements.

The publication of 26 KVF volumes at short intervals shows that this series conceived over 20 years ago has been successful, remains innovative, and looks ahead to a lively future. From now on the Eurasia Department and the Romano-Germanic Commission will continue the series “Kolloquien zur Vor- und Frühgeschichte” in the new design and, where this seems reasonable and vital, in the form of a hybrid connection of analogue and digital knowledge. As in the past, in the KVF series we will continue incorporating proceedings of meetings and symposia in the preparation of which we are involved personally or organisationally.

Lastly we want to express our gratitude to all who participated in producing the present publication. We thank our colleagues from the editorial office at the Head Office of the German Archaeological Institute for the opportunity to publish in the new DAI series format. The digital imaging of the contributions was carried out by Oliver Wagner. Johannes Gier was responsible for the copyediting of the contributions. Lizzie Wright edited the English texts. Hans-Ulrich Voß was in charge of the editorial process. We are very grateful to all these people and to the editors of the volume for the outstanding preparation and realisation of this publication.

Translated by Karoline Mazurié de Keroualin.

Frankfurt am Main, 12 November 2020

Eszter Bánffy
Director

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Deputy Director

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2018



(Logo: Stefanie Deschler)

Preface

by Sabine Deschler-Erb / Umberto Albarella / Silvia Valenzuela Lamas / Gabriele Rasbach

This volume includes contributions that were originally presented at the conference *Roman Animals in Ritual and Funerary Contexts*, which was held in Basel 1st–4th February 2018 and organised by Sabine Deschler-Erb. The conference represented the second meeting of the International Council for Archaeozoology (ICAZ) Working Group on the *Zooarchaeology of the Roman Period*.

ICAZ Working Groups are largely informal and independent collectives of researchers engaged with a theme of common interest. Their association with ICAZ allows them to connect to a larger international community and benefit from a number of shared facilities, such as the ICAZ web page <<https://www.alexandriaarchive.org/icaz/index>> (last access: 20.10.20)> and Newsletter <<http://alexandriaarchive.org/icaz/publications-newsletter>> (last access: 20.10.20)>. They also enjoy the opportunity to share the ICAZ ethos of collaboration, mutual aid, and international solidarity.

The *Zooarchaeology of the Roman Period* ICAZ Working Group was originally proposed by Silvia Valenzuela Lamas and Umberto Albarella and approved by the ICAZ International Committee in 2014. The aspiration to create such a group emerged from the awareness that the Roman World was intensively connected. Nevertheless, much research on the use of animals in Roman or Romanised areas has been carried out at a localised level, often oblivious of parallel studies undertaken in other regions of Roman influence. It was clear that many of the investigated research themes – such as the use of animals in religious contexts, livestock trade, and husbandry improvements, to mention just a few – would benefit from greater integration and enhanced international synergies. This applied to the methodological approach, as well as the actual evidence from different areas of the Empire. With this objective in mind, the first meeting was organised in Sheffield (UK) 20th–22nd November 2014 by the two Working Group promoters and focused on *Husbandry in the Western Roman Empire: a zooarchaeological perspective*. The core objective of the meeting was to bring together researchers operating in different areas of the former Roman World and contiguous regions, which was successfully achieved. Some of the contributions to that conference were published in a monographic issue of the *European*

Journal of Archaeology (Volume 20, Special Issue 3, August 2017).

The focus on the western Empire that characterised the first meeting led to the need to open up geographically for the second meeting and focus on a thematic investigation which would be of fully international relevance. Sabine Deschler-Erb proposed to organise the second meeting in Basel (Switzerland) and this, at the very core of Europe, proved to be a very successful location. She suggested a number of possible topics to the informal membership of the group and the theme of ‘ritual’ was chosen. This was another fruitful move as there was hardly any shortage of material to present, and the conference provided a whirlwind of case studies across different areas, whose connections and shared questions could clearly be identified. The objective of the second meeting to move beyond the focus on the Western Empire was fully achieved. The list of papers included in this volume clearly shows the great geographic range on display, with different contributions presenting research based in the south, north, east, and west of the Roman area. The modern countries featured in the book include Austria, Belgium, Britain, Egypt, France, Germany, Greece, Italy, Malta, the Netherlands, Romania, Serbia, Switzerland and Turkey.

The Basel conference and its proceedings should provide an ideal springboard for further success and interconnection of researchers investigating the use of animals in Roman times.

Last but not least, we would like to express our great gratitude to all of the institutions and people who made the Basel conference and these proceedings possible. We thank the University of Basel, especially the Integrative Prehistory and Archaeological Science, for hosting the conference, as well as for technical and administrative support; the Swiss National Foundation, the Provincial Roman Archaeology Working group of Switzerland, and the Vindonissa chair of the University of Basel for their financial support; the Römerstadt Augusta Raurica, the Kantonsarchäologie Aargau, and the Römerlager Vindonissa for their warm welcome and generous catering; the organisation team, Monika Mráz, David Roth, and Viviane Kolter-Furrer, whose help was essential before, during, and after the conference; all student volunteers, Florian Bachmann, Debora Brunner, Marina Casaulta,

Laura Caspers, Sarah Lo Russo, Hildegard Müller, and Benjamin Sichert, who worked with great commitment; and the Romano-Germanic Commission, Frankfurt, who accepted these proceedings for their series. We thank Hans-Ulrich Voß and Johannes Gier, who carried out an excellent editing job.

The next conference will take place in Dublin (Ireland) on 11th–13th March 2021 and will be organised by Fabienne Pigière on the topic of *Animals in Roman economy*. It will certainly provide new opportunities for cross-fertilisation, collaboration, and exchange of ideas.



Diversity in unity: Animals in Roman ritual and funeral contexts

by Sabine Deschler-Erb

Religion was of great importance in the ancient world, playing a vital role in public and political life, as well as in the life and death of each individual. A common thread amongst most polytheistic ancient religions was the major role of animals in ritual sacrifice and funerary cult. There is a large body of literature dealing with Roman religion, which relies on written and iconographic sources¹. This, however, refers mostly to the Mediterranean region, and it is unclear how relevant it is to the rituals performed across the many other provinces of the Empire. Furthermore, for the study of the so-called ‘mystery cults’, which have been transmitted only orally from one follower to the other, the information value of these ‘classical’ sources is limited.

In the last 20 years bioarchaeological research has become increasingly important for the study of rituals and religion in antiquity, especially in northern Europe, as assemblages from the Mediterranean are still quite rarely analysed and published². Several reviews about animal bone remains in ritual contexts, covering a relatively wide cultural, diachronic and geographical spectrum, have recently been published³. It should be noted that many of these volumes lack a synthesis and a conclusion in regards to their religious relevance. Concerning the Roman period, the archaeozoological data from Roman ritual and funeral contexts has been augmented tremendously in the last few years. Mainly the north-western provinces have been the subject of broad and comparative studies⁴. They suggest that a great diversity of cults and rituals co-existed within the Roman Empire. Wherever the Romans went, they brought their Gods with them, but they also accepted, adapted or transformed local Gods. New cults and rituals were developed by integrating aspects of different religions, with variations in different places (syncretism). This can, for instance, be seen through the analysis of bones of sacrificed animals of which there are 17 examples in this volume (fig. 1).

Before bones can provide real information about ancient rituals some questions around methodology must, however, be examined. As usual, the archaeological context is extremely important when analysing bone finds. In ritual contexts this is even more compelling than in profane ones, as detailed observation (e.g. the position of bones in a pit), can give a crucial hint to understand the action. For this reason we decided as editors of this volume to give each contributor as much space as possible for site descriptions and detailed plans.

Many archaeozoologists would have liked to be present on the excavation where the remains they analyse come from. This helps enormously in the interpretation of ABGs (Associated Bone Groups), even if the context they come from was not explicitly sacred, as for instance the case of the multiple dog burial from the amphitheatre of *Viminacium* (VUKOVIC et al. 237–256). Even if it is clear that these dogs were treated in a very unusual way, the background of this deposit remains less clear. Similarly, the interpretation of the extraordinary sacrifice of two bullocks at *Briga* (BOURGOIS 1–17) would have been enhanced by a detailed observation and better documentation during the excavation. The sacrifice of cattle actually is rarely proven in archaeology – in contrast to written sources⁵. Therefore the example of *Briga* is an interesting case. The enormous amount of meat produced, which suggests a high number of participants at the feast, and the great importance of the sacrifice(s) is only of real significance if the two bullocks had been buried at the same time. But without seeing the remains *in situ* during the excavation, this is not possible to ascertain.

There are other cases in which the interpretation of a sacred place or deposit was only possible through the analysis of the animal bones, such as the foundations touched by a narrow trench in the *vicus* of Munningen (DESCHLER-ERB / SCHAFLITZL 53–60), or the deposit found in front of the southern gate of *Vindonissa*, which was

1 E. g. RÜPKE 2016, SCHEID 2016.

2 LIVARDA et al. 2018, 4.

3 E. g. EKROTH / WALLENSTEIN 2013; JONES O’DAY et al. 2004; LIVARDA et al. 2018; PLUSKOWSKI 2012.

4 E. g. LEPETZ / VAN ANDRINGA 2008; DESCHLER-ERB 2015; GROOT 2008; KING 2005.

5 DESCHLER-ERB.



1 The main archaeological sites referred to in the articles.

first interpreted as a cremation grave and then turned out to be a ritual deposit with 21 oil lamps, coins, and sheep legs⁶.

Excavation methods can also have an influence on the bioarchaeological results, especially in funerary contexts. At many excavations, cremations are collected by hand (LEPETZ 141–174; FIGIERE 175–183; GROOT 61–78), but if sieving is used, not only the number of human and animal bones increases, but the remains of smaller animals, such as songbirds, fishes and foetal mammals, are more likely to be recovered⁷. In order to identify these bones properly, it is important that the specialist involved in the study is trained not only in human but also in animal bones, and the use of a microscope is vital. This is, unfortunately, often not the case⁸. As a consequence, methodologies for both excavation and analysis should be described in detail in every study, in order to aid reliable and accurate comparative work concerning similarities or diversity of rituals. Through the sieving of sediments from graves and sanctuaries (e.g. in *Kempraten*: HÄBERLE et al. 79–99), however, the number of finds increases to a great degree. In terms of financial and human resources, it is not possible to analyse all of them, and sampling strategies need to be developed. These discussions around methodology will hopefully continue in the future and lead to improvements in the recovery and study of animal finds.

So far the data available suggest that cremation was the most important Roman burial method over a long period of time, and fire played an important role for cult and ritual in general⁹. This has the positive side effect that bones are preserved even in regions with acidic soils, as for instance in southern Netherlands (GROOT 61–78). Cremated bones have even helped to identify the first phase of the sanctuary in the western civilian settlement of the legionary fortress of *Vindonissa*, where the archaeological structures remained unclear¹⁰. By comparing ritual deposits from the Gaulish and Germanic provinces, it can be seen that burnt offerings were rare, but their frequency increased with Roman influence, mainly in public cult¹¹. Burnt offerings were also rare in other regions of the Roman Empire, such as Britannia, although new research in that part of the empire has shown that this was a part of accepted orthopraxy in certain ritual contexts (RAINSFORD et al. 185–199).

In the majority of cases animal bones from sanctuaries, however, are unburnt. Archaeozoologists tend to interpret them often as the remains of feasting, as can be seen in this volume (BOURGOIS 1–17; DE GROSSI MAZZORIN 25–37; KUNST et al. 123–140; HÄBERLE et al. 79–99; TRENTACOSTE 217–236; HÖPKEN/ FIEDLER 113–121; HÖPKEN/ BERKE 101–111). Feasting played a very wide-ranging social and political role in societies all over the world, e.g. in the form of meat sharing in geometric and archaic Greece (SOSSAU 201–215), and it is therefore an important topic in ethnography and archaeology¹². The problematic interpretation of animal bones as the waste from feasts has recently been discussed again by Rowley-Conwy¹³. This interpretation can logically be made for stratified material from sanctuaries, but it is much harder to do for bone remains which have been found in a domestic context. A. TRENTACOSTE (217–236) mentions several criteria which are helpful for the interpretation of bones found in a semi-subterranean shrine at Orvieto/Italy. These criteria include the occurrence of a large quantity of well-preserved bones, the special location, and the presence of banqueting ceramics. Other finds (e.g. ceramics, glass, and metal objects) are also important factors¹⁴, although some uncertainty will probably never be completely eliminated. The existence of universal rules in terms of how the remains of feasting will look is unrealistic. Each case must be evaluated separately.

This volume also presents other kinds of deposits. A significant example is the *Ploutonion* of *Hierapolis*, where animals were sacrificed by suffocation caused by toxic

6 TRUMM et al. 2019.

7 Cf. BAERLOCHER et al. 2013.

8 DESCHLER-ERB et al. in print.

9 Cf. DESCHLER-ERB 2015, 46–47.

10 LAWRENCE 2018, 111.

11 DESCHLER-ERB 2015, 161–165.

12 Cf. DIETLER/ HAYDEN 2001; JONES 2007; HASTORF 2016.

13 ROWLEY-CONWY 2018.

14 Cf. criteria catalogue in DESCHLER-ERB 2015, 119–144.



2 Relief showing a *suovetaurilia*, a Roman sacrifice in which a pig, a sheep, and a bull were sacrificed (Musée du Louvre, numéro d'inventaire MA1096).

fumes. This is a case where the written evidence and the animal remains complement each other well (DE GROSSI MAZZORIN / MINNITI 38–52). The multiple deposits with mandibles of cattle, pig, and sheep/goat which have been found in the *Domna* and *Domnus* sanctuary of Sarmizegetusa are also remarkable. It's likely that they are food offerings for the Gods (HÖPKEN / FIEDLER 113–121), which could be related to a local tradition. Overall, there is a large variety of animal rituals perceivable from Roman bone complexes, but there is a shortage of archaeozoological studies – not only in this volume, but also in general – which reflect the public Roman animal sacrifice described by ancient authors or depicted on Roman reliefs, such as the killing of a single bull or of a *suovetaurilia* (fig. 2)¹⁵. This kind of sacrifice was probably too rare to leave its mark in the archaeological record.

When archaeologists are excavating a sanctuary or a ritual deposit the first question is often to which deity or deities it was dedicated. Sometimes archaeological finds

are helpful and there are several examples given in this volume, such as the curse tablets dedicated to *Mater Magna* from the sanctuary of Kempraten-Seewiese (HÄBERLE *et al.* 79–99). At this site a mithraeum has also been identified by the standardised structures which can be found in every region of the Roman Empire¹⁶. So-called 'snail pots' in the ritual pit of Straubing speak in favour of *Sabazios* (HÖPKEN / FIEDLER 113–121). In *Carnuntum* a consecration inscription and snake-decorated pottery indicate the veneration of *Jupiter Heliopolitanus* (KUNST *et al.* 123–140). In Sarmizegetusa a consecration inscription has been found mentioning *Domna* und *Domnus*, two local deities (HÖPKEN / FIEDLER 113–121). In other cases texts from ancient writers help to identify the gods which have been venerated in the sanctuaries: for example *Pluto* in *Hierapolis* (DE GROSSI MAZZORIN / MINNITI 39–52) and *Juno* in Tas Silġ/Malta (DE GROSSI MAZZORIN 25–37). The bone assemblages which have been found in all of these sanctuaries differ completely

15 RÜPKE 2016; SCHEID 2016.

16 MARTENS 2004.

from each other in many respects, such as animal species (domestic and wild), skeletal parts, ages, and treatment (burning, butchering/feasting, deposits of whole animals or parts of them). Unfortunately, for each of these deities in general only one sanctuary has to date been analysed archaeozoologically. Therefore it cannot be said if there is a bone spectrum specific for a single deity. An exception is *Mater Magna* which has been worshipped together with *Isis*. There are three sites which are dedicated to at least one Goddess and which have also been analysed archaeozoologically: *Baelo Claudia*/Spain¹⁷, Mainz/Germany¹⁸, and Kempraten-Seewiese (HÄBERLE *et al.* 79–99). At these three sites birds play a special role. It could be concluded that birds, mainly domestic chicken, played a special role in female cults. In *mithrea*, however, there is also a dominance of chicken, but in the *mithraeum* of Tienen only cocks were present, which fits with the hypothesis that this cult was accessible only for men¹⁹. Though the structures of *mithrea* look very similar across the whole Empire, there are differences in the animal bone remains, mainly concerning the chicken, but also the pig and sheep/goat bone frequency²⁰. It is therefore quite possible that regional differences and varieties existed in animal sacrifices for other cults.

One possible reason for these differences could be the different economic bases in the various regions of the Roman Empire²¹. These are related to natural (e.g. climate, ecology, soil conditions, topography), cultural (e.g. trade routes, agriculture), and political factors, and had an influence on rituals and the animals offered. The mutual dependency of economy and rituals is the subject of ongoing discussions²². In this volume HÄBERLE *et al.* 79–99 compare the archaeozoological results from the residential area and two different sanctuaries (Gallo-Roman/*Mater magna* temple and *mithraeum*) within the same vicus. Commonalities (mainly concerning domestic mammals) could only be seen between the residential area and the Gallo-Roman temple area. A special fishing activity which can probably be traced back to an indigenous tradition, however, is only attested at the sanctuary. It can be concluded that the identity of the people who visited this sanctuary and sacrificed animals played an important role. Even if these people were living in the Roman Empire their sacrifices were more linked to Celtic than Roman customs. A similar case is presented by DE GROSSI MAZZORIN 25–37 with the example of the *Juno*

temple in Malta. The temple was first devoted to the Phoenician goddess *Astarte*. After the Roman occupation of 218 BC, the deity was assimilated to the Roman Goddess *Juno*. Among the bones from the Roman period there is an almost total absence of pig remains. Since this animal was considered impure in the Semitic-Phoenician culture, it is likely that in the Roman period people continued to show consideration for this tradition.

The faunal remains from a 4th century Church in 'Ain el-Gedida in the Egyptian desert are found in a completely different context, but the question of identity is also important here. An unusual predominance of pig bones is attested and according to the authors, this reflects the diet and economy of the early Christian communities (CRABTREE/ CAMPANA 19–24). Thus, eating or not eating pork is not only a question of religion, but also identity and economy.

Identity also plays a crucial role in burials, even though it has to be considered that animal deposits in tombs do not necessarily reflect the food habits of the living. Pigs and chicken are typically found in burials in many regions of the Roman Empire. However, compared to Pompeii, there is an abundance and diversity of meat in the burials of northern France, which continued from the Iron Age to the Roman period (LEPETZ 141–174). The same can be said for southern Belgium (PIGIÈRE 175–183) and the Roman Netherlands (GROOT 61–78). In the burials dated from Late Antiquity, the significance of chicken increases and one could ask whether there is any relationship with the mystery cults that became important at the same time. Nevertheless, there are notable regional differences also in burials. As an example, F. PIGIÈRE 175–183 discusses the deposition of geese (domestic or graylag) in graves of modern southern Belgium, which can't be observed in other regions.

The papers within this volume show the great diversity in animal bone assemblages from ritual and funerary contexts, in terms of local, social, economic, and political aspects. There is a fascinating coexistence of continued, but modified, indigenous traditions and the introduction of completely new cults. Archaeozoology can contribute a great deal to our understanding of the aspects of continuity, adaptation and change, because archaeozoologists are often working on different periods and therefore have a broad knowledge of these processes. Therefore, the analysis of animal bone remains should be intensified

17 LIGNEREUX / PETERS 2008.

18 HOCHMUTH *et al.* 2005, HOCHMUTH / WITTEYER 2008.

19 LENTACKER *et al.* 2004.

20 DESCHLER-ERB 2015, 211–213.

21 E.g. GROOT / DESCHLER-ERB 2015.

22 E.g. The Oxford Roman Economy Project Conference "The Economics of Roman Religion" on sept 22/23 2016, http://oxrep.classics.ox.ac.uk/pages/the_economics_of_roman_religion/.

because it can give a new impetus to the study of religion, a highly controversial topic of our time.

Although the ICAZ RPWG in Basel had contributions from both the western and eastern parts of the empire, studies from western Latin speaking areas dominated the programme. For future meetings we would like to try and address this imbalance so that both areas are more equally represented. The Eastern empire plays a particularly important role, as it was influenced by the Greek-Hellenistic culture and persisted for longer. The whole Mediterranean area and beyond was involved in

the economic and cultural networks of the Roman Empire, and all regions are important to understand the overall system. Through this volume, we are taking some early steps in this direction (DE GROSSI MAZZORIN/ MINNITI 39–52; CRABTREE / CAMPANA 19–24), and we are confident that further working group meetings will benefit from more discussion from the Eastern Provinces. In addition, our links with other disciplines such as classical archaeology (see SOSSAU's chapter 201–215), archaeobotany, history, and iconography are also important, and should be developed further in future meetings.

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Fig. 1: G. Rasbach, RGK. – Fig. 2: Musée du Louvre.

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