

Meller, H., Krause, J. y Risch, R. (2023) *Kinship, Sex, and biological relatedness. The contribution of archaeogenetics to the understanding of social and biological relations. 15th Archaeological Conference of Central Germany. Halle 2022. Heidelberg: Propylaeum. 340 páginas. ISBN 978-3-96929-259-4. <https://doi.org/10.11588/propylaeum.1280>*

With a rising number of articles and projects devoted to it, kinship is the next big topic that has ultimately been inspired by advances in aDNA research but is now being rediscovered by a growing number of archaeologists (for the previous, patchy history of interaction with this concept, see e.g. the overview in Whittle, 2024). As was previously the case with migration, we are faced with a situation in which the “hard” data of bioarchaeology are meeting the “soft”, but enormously varied possibilities opened by perspectives from social anthropology, history and other humanities disciplines. These are exciting times, and right in the middle of them is this book. Like other conference proceedings published by the Halle team, it is timely, collecting a broad range of interdisciplinary contributors to give their insights on a debated topic. This is a clear strength of the volume, which combines perspectives from archaeology and archaeogenetics with osteology, social anthropology/cultural studies and history. There is also a clear focus on projects run by big German institutions, like the Max-Planck-Gesellschaft, but with a broader range of representation around that.

The book is structured thematically, with theory and method overviews followed by case study sections on the Stone Age, Bronze Age and the Iron Age and later periods. The main geographical focus of the 25, mainly English-language papers (four are in German only) is Europe, with one contribution on Anatolia. This fits with the research interests of the conference organisers, although other volumes in their series had included more global contributions (e.g. the 2018 volume *Surplus without the state: Meller et al., 2018*). In a review such as this, it is impossible to do full justice to all the papers, but I will draw out some broader themes that emerge from them.

The editors’ introduction, led by R. Risch, effectively sets the scene in warning against a too close interpretative link between genetic measures of relatedness and the social concept of “kinship” – aDNA, they argue, does not provide a definitive answer, but rather gives new data points that can be correlated with other aspects (burial ritual, grave goods, access to cemetery burial and so on) to investigate in how far the control of reproduction was politically important in a given society. They also acknowledge that, compared to other world regions, prehistoric Europe shows a strong focus on female exogamy, but that this does not straightforwardly relate to women’s status, nor provide the only possible reason why women would have moved (see also Cintas Peña *et al.*, 2023).

The theoretical section of the volume develops these themes, with contributors from across different disciplines stressing the constructivist elements of kinship and warning against the “common sense” imposition of modern Western ideas of what constitutes (biological) relatedness onto the past. There is a strong sense throughout that kinship is best understood as a broad spectrum of connections. Contributors among others argue

that the biological “nuclear family” of father, mother and children is not a basic social unit in all societies (T. Thelen), that adoption and fostering can be widespread practices (E. Alber) or that non-human actors (animals, objects, spirit beings) can be included in kinship systems (C. Frieman). Even in medieval Europe, the noble agnatic descent groups which dominate our understanding of kinship in the period were not uniformly important, as W. Pohl shows.

Taken together, these papers set out important challenges for archaeologists studying kinship. First, implicit Western models must be resolutely questioned and persistent stereotypes rigorously tested. Second, if kinship is seen as a much wider set of relations, then those people who are *not* related to others by aDNA are just as important as those who are (Thelen). Indeed, kinship is not an issue that can be limited to just one field of enquiry. In Alber’s example, parenting as one kinship practice involves many daily routines and activities towards biological and non-biological kin and creates lifetime bonds. Such relations are always played out in dynamic and fluid social worlds, so if we are to understand kinship in the past, we need very broad contextualisation beyond burial sites, including gender relations, practices of care, political and ideological aspects, mobility patterns, social structure and beliefs, and so on (a point amongst others made by Frieman). This makes great demands on our data base. As Pohl writes, ideally whole cemeteries or larger collectives would be sampled, and archaeologists would provide several possibilities for how patterns could be interpreted; there is likely to be more than one plausible reading of bioarchaeological evidence.

Third, the basic data must of course be correct, and the methods section reminds us just how challenging this is. The paper by K. Alt gives a historical overview of osteological methods of estimating biological relatedness, such as dental or epigenetic traits. For a long time, these were the only routes available to address such questions, and considerable sophistication was reached in recording and analysing data. These methods remain relevant where aDNA is not preserved, or where destructive sampling is not warranted. It was therefore interesting to read that comparisons of these results with aDNA data are now in progress. The papers by Th. Günther, H. Ringbauer and D. Popli and colleagues then summarise different bioinformatics methods used to measure relatedness in ancient genomes. This is a very rapidly developing field (and entirely outside my area of expertise), but the strengths and weaknesses of each method are clearly described. The paper by R. Friedrich and colleagues is likely more intuitively understandable for most archaeologists, as it uses aDNA-derived pedigrees as prior information in the Bayesian analysis of <sup>14</sup>C dates, an innovative application that undoubtedly has large potential for others.

Together, the theory and methods sections illustrate the considerable demands faced by an interdisciplinary study of kinship, both in terms of data and of the divergent interests and priorities that various team members are likely to set. This is further reflected in the contribution by A. Scally, who draws much-needed attention to the impact of different publication cultures on the mutual perception of scholars, and thereby on the success of research communication. Publication in the kinds of journals targeted by aDNA researchers demands a level of simplification that many archaeologists find unacceptable, while the latter often react to the (even more simplistic) press releases, rather than the detailed arguments made in supplementary materials.

Even though as disciplines we have come a long way in bridging these divides, these problems make it even more important to provide other kinds of fora for interdisciplinary communication, such as the conference from which this volume stems. In this

sense, it is a shame that the theory and methods sections remain resolutely split across disciplinary lines, with archaeogenetics researchers absent from the theory section, and in turn little clear indication of how the complexity highlighted there could be integrated in more formal, testable models. This perhaps is a challenge for future forms of more experimental collaborations that go beyond what a conference proceedings book like this could reasonably achieve.

Bearing in mind the interpretative challenges identified in the introduction and the first two sections (deconstructing modern Western stereotypes; embedding kinship in reproductive politics, also by paying due attention to the role of children and of biologically unrelated people; contextualising kinship beyond the funerary sphere; and building successful interdisciplinary projects), how have the different papers in the case study sections fared?

The balance sheet is, unsurprisingly, mixed. Some of the contributions present early-stage projects and provide detailed, initial data with little or no explicit discussion of the kinship theme; others rather outline opportunities for future research. Thus, A. Gass' paper on Scythian kinship and its relations to social status is a comprehensive history of research into different models of Scythian society, pointing out how this should in the future be expanded with aDNA studies. F. Daim and colleagues provide exceptionally detailed archaeological descriptions of two Awar cemeteries that have been sampled in the course of a current EU-funded project, but only briefly mention the presence of persons of central Asian descent and do not engage with kinship in depth. In the Bronze Age section, the paper by V. Kiss and colleagues traces the first- and second-degree relationships established for the Hungarian Bronze Age multiple grave of Balatonkeresztúr, but the interpretation section focuses rather on the population-level affinities of their sample. However, the detailed osteological and bioarchaeological descriptions will be of considerable interest to period specialists.

Among the papers that most directly challenge Western “common sense” preconceptions is J. Orschiedt and colleagues' piece on the Mesolithic “shaman” burial from Bad Dürrenberg, Germany, containing an adult woman and child with a lavish grave good assemblage. Renewed excavation revealed an interesting grave construction that could have allowed for re-opening the grave. In this context, it is interesting that the two individuals are not a mother and child, as often implied, but only related to the 4<sup>th</sup> or 5<sup>th</sup> degree. This does have implications for Mesolithic kinship, which either allowed for close relations between genetically distantly related contemporaries, or considerable genealogical memory if the individuals were buried successively – the article itself does not further discuss the data from this point of view. W. Haak and colleagues' paper on the composition of Corded Ware multiple burials in Germany has a clearer connection to the volume's core theme. Closely biologically related individuals are present in all cases, and there was a focus on male lines of descent, but more complex patterns are also observable, for example the presence of half-siblings. The article thus invites further reflection around how a Corded Ware household or social group could have been composed. This question is also raised by S. Pense and team in their presentation of the Bronze Age settlement burials from Schiepzig, Germany. Biological bonds were important in selecting who was buried around particular longhouses, but many people who must have lived at the site are also missing from the burial record, pointing to the partial correspondence between who lives together and who is buried together. Which of these contexts is more relevant for a study of “kinship” is an open question.

The issue of how to interpret aDNA pedigrees and of the incorporation of other persons into the group is also raised in other contributions. For the Palaeolithic, Ch. Neugebauer-Maresch and colleagues could show that the double and single child burials at Krems-Wachtberg in Austria contained biologically related male children: a pair of twins who died a few weeks apart and were buried together, and a third-degree male relative of theirs. The paper is an eye-opener in terms of the care and effort that has gone into estimating ages at death, reminding us that not only aDNA, but also other bioarchaeological methods have vastly progressed over the past few years. There is also a comparative section on double child burials in the Palaeolithic. Unfortunately, this leaves little space for an interpretation along kinship lines, even though the data are highly suggestive. As P. Pettitt (2011, p. 211) has already drawn attention to the over-representation of males in Palaeolithic burial, it would have been interesting to discuss the role of lineage and gender (or indeed siblingship) in creating Palaeolithic kinship, as well as the intriguing genetic links established to other sites, like Dolní Věstonice. The paper provides no answers here.

M. Rivollat and colleagues offer a more interpretative reading of the French Neolithic cemetery at Gurgy, which readers may already be familiar with (*e.g.* Rivollat *et al.*, 2023). This study again points out the role of patrilineal relationships in the exceptionally extensive pedigrees, but also discusses female-centred relations, as the descendants of exogamous women born to the Gurgy patriline later return to find their own partners at Gurgy. In addition, the remains of the lineage founder were deposited as a secondary burial in the grave of an adult woman, whose aDNA could unfortunately not be recovered. While this study only discusses some of the many exciting aspects of the dataset (for example leaving out unaccompanied children, but see Hofmann *et al.*, 2024, p. 126-33), Gurgy is rapidly becoming a key reference point showcasing the complexity and multifaceted nature of Neolithic kinship.

M. Somel and colleagues' study of sub-floor burials in Neolithic Anatolia continues on this theme and for me is one of the highlights of the volume. The authors draw out broad variation in the relationship between biological relatedness and burial under the same house floors. In general, biological relatedness seems more marked earlier in the sequence and less so at later sites, particularly Çatalhöyük. There are generally also many more relations through the female line than in the Neolithic of Europe. Contrary to expectation, then, there is increasing flexibility in how kinship is reckoned, as opposed to a greater focus on inheritance as agricultural resources become more important; this is perhaps related to negotiating the tensions of coresidence. Indirectly, the paper also begs the question of when and how the importance of patrilineal descent in Europe may have emerged, and opens the possibility that it, too, could have been relaxed at certain times, for example during periods of migration and community formation. In any case, this patrilineal focus is an historically situated and by no means self-evident strategy whose logic we must question more concertedly.

In their overview over the Bronze Age Lech Valley, Germany, A. Mittnik and team also directly address kinship and kinship politics, but although they have added new genomes from the site of Haunstetten-Postillonstraße, one gets the feeling that the specificities of this site are lost in the already widely published general conclusions of this large-scale project (*e.g.* Knipper *et al.*, 2017). For example, the two immature siblings without close biological relations on the site are interpreted as outsiders who probably engaged in menial work – even though some women who clearly came from outside the community are among the most richly furnished. One could at least have considered

other possibilities here, such as temporary fostering relationships or burial according to the traditions of the children's native community. Similarly, post-marital mobility is pointedly not considered an option for the male individuals who were born and buried in the Lech valley but had lived elsewhere for a period in their lives. In the end, the potential diversity revealed here is interpreted in accordance with much later Greek and Roman family structures, rather than from the background of the more varied (and more immediately preceding) Neolithic arrangements explored in other papers.

Only a few brave contributors tackle the challenge of extending discussions of kinship beyond a strict focus on bioarchaeology. At a regional level, N. Johannsen reviews the Globular Amphora culture in northern Europe, drawing out how far-flung communities established relations through a nexus of cattle, mobility practices and longer-distance migrations. Rather pleasingly, in this case the available aDNA and archaeological evidence form a relatively coherent picture, but further studies may well increase its fuzziness. The central role of animals, mainly cattle, in creating relationship is also a fruitful line for further investigation.

At a more intimate scale, K. Rebay-Salisbury and co-authors tackle one aspect of motherhood as a social practice in the Austrian Bronze Age by investigating graves containing both adults and children. After an interesting theoretical introduction, the reader is treated to highly detailed case studies, which –in spite of being based on mtDNA only– generally succeed in establishing that mother and child was a surprisingly rare constellation in multiple burials; rather, siblingship seems to be more consistently important, even across a cultural divide. Given the current dominant readings of Bronze Age society (see, *e.g.*, Mittnik *et al.* above), this emphasis on diversity in family organisation is highly welcome, and the concept of non-biological components of “motherhood” as a practice will hopefully be pushed further in the future. Similarly, J. Brück's paper on the British Bronze Age is one of the few to seriously consider a wide variety of kin-making practices both during the burial ritual and beyond the grave (involving, for example, the breakage of significant objects, or links established through exchanging cattle). Again, this is a timely reminder not to forget the details of the archaeological evidence –with its stories on female lines of relatedness, possible same-sex marriage and ritual complexity– in our efforts to find “the” social structure and kinship system of the European Bronze Age.

In a similar vein, L. Papac and colleagues problematise intramural burials of children on Iron Age sites in Navarra, Spain. From their investigations of both aDNA and osteological data, as well as a detailed archaeological contextualisation, it seems likely that children were selected because of various unusual traits, for example because they were twins, exhibited conditions like trisomy 21, or suffered from various illnesses. Although some DNA-based family relationships could be reconstructed, it seems that buildings housed extended families and that children were brought to these sites from an even wider catchment area. Relations of care thus criss-crossed the landscape, and burials of children at specific sites *made*, rather than just reflected kin.


Taken together, the case study papers in this volume have variably succeeded in directly addressing kinship, and in taking up the challenges posed by the theoretical contributions in the volume. In several cases, the methodologically challenging aspects of establishing biological kinship have left little room to push the interpretative side of the matter. Others, however, provide rich blends of bioarchaeological and archaeological datasets that give a vivid picture of the diversity of kinship practices in the past, even in places and at times in which “patrilineality” has been the dominant explanation. This thought-provoking range of papers thus stands as another cutting-edge and successful

output of the Halle conference series, and one that will provide readers both with engaging opinion pieces and with detailed data and case studies for years to come.

## BIBLIOGRAPHY

- Cintas-Peña, M., Luciañez-Triviño, M., Montero Artús, R., Bileck, A., Bortel, P., Kanz, F., Rebay-Salisbury, K. and García Sanjuán, L. (2023) "Amelogenin peptide analyses reveal female leadership in Copper Age Iberia (c. 2900–2650 BC)", *Scientific Reports*, 13, 9594. <https://doi.org/10.1038/s41598-023-36368-x>
- Hofmann, D., Frieman, C., Furholt, M., Burmeister, S. and Johannsen, N.N. (2024) *Negotiating migrations. The archaeology and politics of mobility*. London: Bloomsbury.
- Knipper, C., Mittnik, A., Massey, K., Kociumaka, C., Kuukkalipci, I., Maus, M., Wittenborn, F., Metz, S.E., Staskiewicz, A., Krause, J. and Stockhammer, P.W. (2017) "Female exogamy and gene pool diversification at the transition from the Final Neolithic to the Early Bronze Age in central Europe", *PNAS*, 114, 10083-10088. <https://doi.org/10.1073/pnas.1706355114>
- Meller, H., Gronenborn, D. and Risch, R. (eds.) (2018) *Surplus without the state. Political forms in prehistory*. Halle: Landesamt für Vorgeschichte.
- Pettit, P. (2011) *The Palaeolithic origins of human burial*. London: Routledge.
- Rivollat, M., Rohrlach, A.B., Ringbauer, H., Childebayeva, A., Mendisco, F., Barquera, R., Szolek, A., Le Roy, M., Collieran, H., Tuke, J., Aron, F., Pemonge, M.-H., Späth, E., Télouk, J., Rey, L., Goude, G., Balter, V., Krause, V., Rottier, S., Deguilloux, M.-F. and Haak, W. (2023) "Extensive pedigrees reveal the social organization of a Neolithic community", *Nature*, 620, pp. 600–606. <https://doi.org/10.1038/s41586-023-06350-8>
- Whittle, A. (2024) "Kinship questions: three sketches from the Neolithic of Britain and Ireland", *Documenta Praehistorica*, 51, pp. 2-17. <https://doi.org/10.4312/dp.51.3>

### Daniela Hofmann

University of Bergen  
Department of Archaeology, History, Cultural Studies and Religion  
Postboks 7805, 5020 Bergen, Norway  
daniela.hofmann@uib.no  0000-0003-3538-844X