

Edited by:

JULIA KATHARINA KOCH, WIEBKE KIRLEIS

GENDER TRANSFORMATIONS

in Prehistoric and Archaic Societies



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CRC1266-excavation of a Bronze Age burial mound near Bornhöved (LA117),
Kr. Segeberg, Germany, in summer/autumn 2018. The leadership was taken
over by 2 women, the team also included 10 women and 11 men, of whom the
female staff were present for a total of 372 days and the male for 274 days.

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Preface of the series editors

With this book series, the Collaborative Research Centre *Scales of Transformation: Human-Environmental Interaction in Prehistoric and Archaic Societies* (CRC 1266) at Kiel University enables the bundled presentation of current research outcomes of the multiple aspects of socio-environmental transformations in ancient societies. As editors of this publication platform, we are pleased to be able to publish monographs with detailed basic data and comprehensive interpretations from different case studies and landscapes as well as the extensive output from numerous scientific meetings and international workshops.

The book series is dedicated to the fundamental research questions of CRC 1266, dealing with transformations on different temporal, spatial and social scales, here defined as processes leading to a substantial and enduring reorganization of socio-environmental interaction patterns. What are the substantial transformations that describe human development from 15,000 years ago to the beginning of the Common Era? How did interactions between the natural environment and human populations change over time? What role did humans play as cognitive actors trying to deal with changing social and environmental conditions? Which factors triggered the transformations that led to substantial societal and economic inequality?

The understanding of human practices within often intertwined social and environmental contexts is one of the most fundamental aspects of archaeological research. Moreover, in current debates, the dynamics and feedback involved in human-environmental relationships have become a major issue, particularly when looking at the detectable and sometimes devastating consequences of human interference with nature. Archaeology, with its long-term perspective on human societies and landscapes, is in the unique position to trace and link comparable phenomena in the past, to study human involvement with the natural environment, to investigate the impact of humans on nature, and to outline the consequences of environmental change on human societies. Modern interdisciplinary research enables us to reach beyond simplistic monocausal lines of explanation and overcome evolutionary perspectives. Looking at the period from 15,000 to 1 BCE, CRC 1266 takes a diachronic view in order to investigate transformations involved in the development of Late Pleistocene hunter-gatherers, horticulturalists, early agriculturalists, early metallurgists as well as early state societies, thus covering a wide array of societal formations and environmental conditions.

The volume *Gender Transformations in Prehistoric and Archaic Societies* shows that gender matters on all societal levels and throughout times; be it in reconstructed social and economic organisation in research on prehistoric times, in the investigation and recent perception of women's roles in past and modern societies or as expressed in the still low representation of females in higher academic positions of knowledge production in archaeology. The proceedings are the outcome of the inter-

national Workshop on *Gender Transformations in Prehistoric and Archaic Societies*, which took place from 8-10 March 2018 in Kiel, Germany, organised within the framework of CRC 1266 *Scales of Transformation*. The workshop provided a platform to stimulate discussions on gender transformations in the past and the effects of gender inequality on scientific discourses in our research community, which was much appreciated by the numerous international participants, who promoted and enjoyed the cross-cultural academic exchange.

This volume is being presented in the 21st century, about 100 years after female suffrage was established in Germany. Nevertheless, feminists are still confronted with draw-back mechanisms, leading, *e.g.*, in Switzerland to demonstrations by women, who continue to have to demand equal pay, or in Germany, where females once more have to fight for sexual self-determination because gynaecologists are juristically punished if they inform the public about medical treatment concerning abortion. This shows that even today, gender equality and gender freedom are not self-evident, and that their necessity has to actively be kept alive in the general consciousness. Gender transformations, the topic of the workshop and this volume, also accompany our discussions on societal and environmental transformations, in particular when dealing, *e.g.*, with material culture or settlement patterns in the past, but also with the question of scientific actors and gendered bias in doing research. By gendering the archaeological discussion on transformation processes within the framework of our CRC, we want to assimilate and stimulate the impulses of gender-sensitive research and processes that are currently on the European and the worldwide agenda.

We are very thankful, in particular to Julia Katharina Koch, for the organisation of the workshop and for her engagement with the editing of this book. Her expertise in gender archaeology and her long-lasting engagement with the German association *FemArc e. V.* and the EAA-community *Archaeology and Gender in Europe* (AGE) enabled her to bundle an impressive number of contributions on gender transformations for this volume. We are especially grateful to Nicole Schwerdtfeger and Carsten Reckweg for the preparation of the figures for publication and to Katharina Fuchs and Hermann Gorbahn for controlling the editing flow and for further support with technical and communication issues. We also wish to thank Karsten Wentink, Corné van Woerdekom and Eric van den Bandt from Sidestone Press for their responsive support in realizing this volume.

Wiebke Kirleis and Johannes Müller

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Introduction to gender transformations

Julia Katharina Koch and Wiebke Kirleis

Interdisciplinary investigations into the processes of transformation in a crucial period of human history, namely, 15,000 to 1 BCE, are the mission of the Collaborative Research Centre (CRC) 1266 'Scales of Transformation: Human-Environmental Interaction in Prehistoric and Archaic Societies', funded by the German Research Foundation (DFG), initially for the period 2016-2020 (Müller/Kirleis 2019). The long-term perspective, from late Pleistocene hunter-gatherer groups to early state societies, allows the CRC 1266 team to address transformational processes in a wide range of societal and environmental settings. Within the network of components determining social behaviour, gender plays a dominant role in many societies. Therefore, we can expect to see a strong interaction between gender identities, social diversity and transformation processes for many prehistoric and archaic societies. In the autumn of 2017, the CRC put out an open call for papers for a workshop that was intended to achieve an overview of the extent to which the social category 'gender' was involved in the process of transformation, and vice versa – that is, which transformations can be uncovered through this social category of 'gender'. Due to the great interest expressed in this workshop, titled 'Gender Transformations in Prehistoric and Archaic Societies', it eventually grew into a conference, which took place from 8 to 10 March 2018 at the University of Kiel, Germany, with 30 presentations and more than 70 participants from 16 countries, ranging geographically from the USA to Kazakhstan. Thanks are owing to the directors of the CRC for supporting this development.

The workshop 'Gender Transformations in Prehistoric and Archaic Societies' was a bigger event in a series of conferences, workshops and sessions on gender archaeology held in recent years. In this way, the Kiel event has brought together two strands of research that were already converging. On the one hand, workshops on gender archaeology have been organised at irregular intervals at universities in Germany since the early 1990s, with the first groups of female students from Tübingen and Kiel being organised as part of the network of women in archaeology (now *FemArc e. V.*) founded at that time. In addition, various university institutes and the AG (Arbeitsgruppe, working group) Gender Studies of the three regional *Verbände für Altertumsforschung* (the German associations of antiquarian studies) have anchored the topic among the wider specialist public (for a list of the conferences, see Koch, in preparation). On the other hand, the Kiel conference strengthened the connections with the international community of researchers in the field

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of gender archaeology. Several of the speakers are members of the European Association of Archaeologists community 'Archaeology and Gender in Europe', established in 2008. Following an initial initiative by female colleagues from Norway, Spain, Romania and Germany, this community (previously working group) has been meeting regularly at the EAA annual meetings since 2009, and in October 2017, it met for the first time for an independent workshop, entitled 'Gender and Change in Archaeology', in Lisbon (Palincas and Martins, in preparation).

Due to the wide range of speakers at the Kiel conference, not only in terms of country of origin and employment setting, but also in terms of age, we were able to ensure through the programme that current and longer-running discussions could be followed up in the talks and linked with the topic of the CRC 1266. In addition to representatives of the first generations of feminist archaeologists, who tend to be well connected to colleagues elsewhere, the conference presenters also included colleagues who deal with the issue of gender somewhat in isolation in their home countries and home institutions. Thus, these proceedings present a wide variety of current research on gender archaeology, anchored in the research traditions and status of various countries in Europe and Asia. It was left up to each of the authors or groups of authors to decide whether to focus on women's or men's roles, whether to focus on the relationships of all groups or of individual gender and age groups, and whether to use 'traditional' or feminist explanations. Two essays (those by Ana Martins and Jan Turek) are departures from the kind of factual discussion that is traditionally considered scientifically objective, and instead present personal experiences and opinions. Such experimental contributions have been part of archaeological gender research since its inception.

Both in the course of the meeting and in the editorial phase that followed, we ourselves experienced how much the societal setting can shape and determine research. Unfortunately, a prominent example is playing out today in Hungary¹. Since April 2017, the Hungarian government's higher education teaching act has imposed restrictions on academic freedoms. In this context, gender studies, a subject taught at only two universities, was heavily attacked and, finally, dropped from the list of university subjects in October 2018. Further developments in Hungary show that populist attacks on academic gender studies should not be considered in isolation but should be seen as a symptom of a right-wing extremist position and a harbinger of social radicalisation. In comparison, the academic clashes around traditional gender roles and their social impact that take place in other countries seem relatively benign. These populist attacks make the availability of international conferences as a space for free discussion all the more important. But in order for people to access such conferences, they must have freedom of travel. We have our colleague Judith Thomalsky, of the German Archaeological Institute (Deutsches Archäologisches Institut, DAI) in Tehran, to thank for the fact that our colleagues from Iran were able to attend the meeting despite the extremely long visa application period, which almost caused their participation to fall through. At a time of growing tensions between governments around the world, it is even more important for scientists to be able to communicate and discuss with each other without restrictions.

1 'Orbán-Regierung will Geschlechterforschung von Unis verbannen'. ZEIT ONLINE, 13 August 2018 <www.zeit.de/politik/ausland/2018-08/ungarn-verbannung-gender-studies-universitaeten-zsolt-semyen>. – 'Ungarn verbannt Geschlechterforschung aus den Unis'. ZEIT ONLINE, 16 October 2018 <www.zeit.de/politik/ausland/2018-10/gender-studies-ungarn-studienfach-abschaffung-universitaeten-viktor-orban>. – Lauren Kent and Samantha Tapfumaney 'Hungary's PM bans gender study at colleges saying "people are born either male or female"'. CNN 19 October 2018. <edition.cnn.com/2018/10/19/europe/hungary-bans-gender-study-at-colleges-trnd/index.html>. – Sophie Schirmer, 'Das ist bedrohlich für uns und für Ungarn als Ganzes'. ZEIT ONLINE, 23 October 2018 <www.zeit.de/campus/2018-10/gender-studies-verbot-ungarn-studierende-stimmungsbild>.

For these reasons, we felt it was important that the discussion of the societal context of archaeological research – here with a focus on academic field work – was linked to the discussion of the research content of gender studies and to the main thematic emphasis of CRC 1266. This is the rationale behind our formulation of the three main topics of the conference: ‘gendering fieldwork’, ‘tracing gender transformations’ and ‘gendering and shaping the environment’.

Gendering fieldwork

Excavations shape our discipline in ways that go beyond being a setting for obtaining archaeological data. The social interactions before, during and after a field campaign determine, to a large extent, the human interactions in the field of archaeology. It is exactly this interaction that was elucidated in the keynote, ‘Matters of gender in a prominent excavation by the German Archaeological Institute. Fieldwork and gender in the Kerameikos in Athens’, by Jutta Stroszeck, based on the research history of one of the main excavations of the DAI in Greece. It was the participation of several women – as well as the inclusion of allied disciplines, such as anthropology, in the excavations and the subsequent processing of the material – that prompted an expansion of research questions and perspectives, resulting in a differentiated approach to the various groups within ancient Greek society. The biographical aspects of scientific work are the topic of Ana Cristina Martins paper ‘Women in the field. Preliminary insights from images of archaeology in Portugal in the 1960s and the 1970s. A first essay’, based on the research history of archaeology in Portugal. As a work-around for the incompleteness of the written sources, she employs the art-historical method of photo interpretation to unlock new aspects of women’s work in the context of academic field work. The next three contributions focus on the present. Doris Gutmiedl-Schumann, in addressing the first half of her title, ‘Gendered and diversified fieldwork classes in prehistoric archaeology? An examination of and a perspective on Bachelor study programs of German universities’, impressively demonstrates that the training of students during fieldwork classes should not just be about excavation techniques and finding artefacts, but also about the imparting of social skills, which can improve the quality of the work on future excavations. The paper titled ‘Personal report on archaeological fieldwork in Mongolia’, by Birte Ahrens and Christiane Franken, who had been involved in local DAI campaigns for several years, unfortunately could not be published here. It showed that an international comparison can provide valuable stimulus to the evaluation of the respective work situations of women and men. The public perception of archaeologists as people in the context of excavations is the focus of the contribution “‘*Fieldwork is not the proper preserve of a lady*’”. Gendered images of archaeologists from textbooks to social media’, by Jana Esther Fries. She also shows to what degree female archaeologists have the power to guide this perception, especially in the context of the current social media options.

Tracing gender transformations

The focus of this session was twofold: (1) the influence of transformation processes on gender relations and roles and (2) the active and passive impact of social groups on transformation processes. Within the CRC 1266, the term *transformations*, in general, is defined as processes leading to a substantial and enduring re-organisation of socio-environmental interaction patterns. One of the goals is the analysis of individual cases of transformation as historical incidents with their particular development, diagnostics and triggers. But in addition to these big, historical transformations, there are transformations in an individual human life – influenced by

an ever-changing cultural and spatial framework. It is significant that in gender archaeology these multiple different timescales coincide.

This section opens with a methodological part. In the keynote, ‘What is gender transformation, where does it take place, and why? Reflections from archaeology’, Marie Louise Stig Sørensen discusses the two levels of the definition of gender: gender as ideological expression and gender as an experiential quality of individual lives and how this quality, in turn, is linked to different levels of transformation. The analytical possibilities are shown by means of examples from the Bronze Age. Johanna Kranzbühler questions the dichotomy between sex and gender with her article ‘Osteology defines sex and archaeology defines gender? Insights from physical anthropology’. It shows the possibilities and limitations of osteological sex and the physical facts of human biology. Nils Müller-Scheeßel discusses the close connection among sex, gender, age and status, as well as the applicability of different gender concepts to archaeology using the example of ‘Gender in Linearbandkeramik research. Traditional approaches and new avenues’. The variability of gender concepts, especially in early prehistoric societies, was explained by John Robb in his talk ‘What would Neolithic gender actually look like and how would we know it when we see it?’ (see Robb and Harris 2018).

Cemeteries offer immediate access to a reconstruction of gender relations, so it is not surprising that the majority of the papers present an analysis of graves. This group of papers covers all time periods and regions. Conform the time frame of the CRC 1266, lectures about hunting and gathering cultures of the Palaeolithic, all the way up to the early urban societies of archaic times, were included in the program of the conference. The first in the series is Daniela Nordholz’s paper, ‘Changing gender perception from the Mesolithic to the beginning of the Middle Neolithic’, with an analysis of Mesolithic tombs in terms of the extent to which a representation of the deceased’s gender was even made in the burial, and if so, with which object types. Alexandra Anders and Emese Gyöngyvér Nagy show how much this gender display still varies regionally and temporally in the Neolithic, with ‘Making the invisible visible. Expressing gender in mortuary practices in north-eastern Hungary in the 5th millennium BCE’. Clear gender differentiation in burials – as it is known from the Tiszapolgár culture, but which in some places began up to 500 years earlier – but is not fully and consistently implemented until the beginning of the Copper Age. However, a generalisation of Neolithic gender relations cannot be made based on their results (as was argued in the presentation by John Robb [since published as Robb and Harris 2018], who linked the emergence of gender to the complex societal structures of the age of metal).

Jan Turek discusses the fact that minorities can be visible in a culture with strict burial customs, in his essay ‘Copper Age transformations in gender identities’. However, it depends on one’s own world view whether one would even expect and recognise these minorities within the cemeteries. Ethnographic and historical analogies can help us to question our own point of view. Emma R. Usmanova and Marina K. Lachkova focus on ‘Gender symbolism in female graves of the Bronze Age evidenced by the materials from the Lisakovsk burial complex of the Andronovo cultural horizon’. The focus is on adult women with special grave goods, who are interpreted either as priestesses, mothers or professional weavers. The presence of daggers as grave goods suggest that these positions were associated with social power. A good counterpoint is provided by transformations in male biographies that Natalie Berseneva discusses for the same Central Asian region, in ‘Male gender identity during the Ural Bronze Age. On the way down?’. Changes in social roles over the course of a human life do not necessarily equate to an increase in status and power; sometimes an age-related decline in power can be seen in the grave goods. Maria Ochir-Goryaeva uses the example of Scythian kurgans to show that the standards used to reconstruct male status groups cannot be used to reconstruct

female status groups. In support of the reconstruction of ‘Transformations in a woman’s life in prehistoric and archaic societies of the Scythians and the Kalmyks’, she draws on ethnographic analogies of nomadic Kalmyk cultures, in which women who have reached a particular stage in their life cycle can have equal rights to men. Caroline Trémeaud chose a statistical approach to the definition of gender groups in her article ‘Tracing gender in funerary data. The case study of elite graves in the North-Alpine complex (Late Bronze Age to La Tène B)’, which enables her to achieve differentiation for a greater number of graves across the main sex groups, as well as across chronological and regional variations and developments. The existence of remarkably rich women’s graves in the early Iron Age becomes more comprehensible in the context of cultural change. Katharina Rebay-Salisbury offered an insight into the current European Research Council project ‘The value of mothers to society. Responses to motherhood and child rearing practices in prehistoric Europe’, in which graves of women and children are studied with archaeological and anthropological methods. Preliminary reports on this project have already been published elsewhere (Rebay 2017; 2018; Rebay *et al.* 2018). Due to her pregnancy, unfortunately, Brina Škvor Jernejčič’s paper ‘Tracing social categories in Late Bronze Age and Early Iron Age societies through funerary practices’ had to be cancelled during the workshop and could not be included in this volume. It is part of her current post-doctoral project, titled ‘Beyond materiality. Prehistoric communities and their burial customs in the light of new scientific analyses’.

Against the background of historical cultural landscapes, Ilona Venderbos traces the ‘Social manipulation of gender identities in Early Iron Age Latium Vetus (Italy)’ as a region of the newly arising Roman society. The starting point for her are mainly the burials, which were subject to chronological and cultural changes. A remarkable shift in gender conceptions was also noted by Christian Heitz for pre-Roman southern Italy. ‘Time- and space-related genders and changing social roles. A case study from Archaic southern Italy’ discusses the components of the encounter between the native inhabitants and immigrants from the Greek colonial cities. For this he draws comparisons with parallel developments in modern colonization processes. Traces of the changes leading to an empowerment of the male side and a de-powerment of the indigenous communities can be found in settlements and sculptures, as well as in grave furnishings.

Gender transformations should not just be understood as a long-term process within a group or within a human life. The recording by means of archaeological methods of the transformations that occurred within a comparatively short-lived action, such as rites of passage, are also discussed in this volume. Therefore, it is not surprising that two contributions deal with prehistoric shamanism through the addition of the gender perspective, but with different intentions. Nataliia Mykhailova discusses the possibilities of revealing Mesolithic shaman burials in her ‘“Shaman” burials in prehistoric Europe. Gendered images?’, by drawing parallels to ethnographic examples, especially from Siberia. Andy Reymann uses also the example of shamans, in his paper ‘Part-time females and full-time specialists? Identifying gender roles in ritual behaviour and archaeological remains’, to discuss the reconstruction of individual identities from prehistoric burials. Aysel Arslan presents a research-historical transformation of archaeological interpretation in ‘Beyond gender. Approaches to anthropomorphic imagery in prehistoric central Anatolia’, and thereby addresses the problem of how to interpret pictorial traditions. Having gone through a phase of (partly ideological) interpretation as ‘mother goddesses’, this group of finds is now being subjected to fact-based and context-related analyses, as the author demonstrates for the site of Kösk Höyük, in Anatolia. The presentation ‘Anthropomorphic motifs on statue-menhirs, menhir-stelae and orthostats. Male, female or beyond gender?’, by Reena Perschke, also revolved around the difficulties of interpreting abstract symbols in the context of Western and central European megalithics; unfortunately, it is not

published as part of these proceedings (see Perschke 2014; in press). Virginie Defente devotes her attention to a completely different artefact type, namely necklaces, in her paper 'Art and gender. The case study of enamelling in continental Europe (4th-3rd century BCE)'. Using a combination of antiquarian analysis of the finds and natural science analyses of the skeletons, she points out that late La Tène grave groups can reveal references to family associations.

Gendering and shaping the environment

This title was used to describe the intent of the third session, which asks us to connect environmental archaeology and gender archaeology more closely than they have been thus far. From the introductory discussion, by Julia Koch and Oliver Nakoinz, it becomes clear that very different approaches could be unified in this session – studies on the division of labour and the associated design of the environment and contributions to the interpretation of settlement structures are two main topics; others may follow in the future.

Aysel Arslan set herself the task to uncover division of labour using the still-new method of palaeodermatoglyphics, in her study 'Shaping clay, transmission of knowledge. Division of labour in the 7th and 6th millennia in western Anatolia'. However, as this is a preliminary report on her ongoing dissertation and as it is not customary in Turkey to publish excerpts before finishing one's PhD, she was not in a position to publish her talk; instead, we have included a paper on one aspect of her master's thesis in the volume (see above).

Rouhollah Yousefi Zoshk, Saeed Baghizadeh and Donya Etemadifar introduce the possibilities of early written records, in the form of administrative lists, for the reconstruction of 'The gender division of labour during the proto-Elamite period in late 4th millennium BCE Iran', using a case study from Tepe Sofalin on the Iranian Central Plateau. They point out that in proto-Elamite societies, specialised production within the household, using specialised workers, involved the participation of men, women and children within a pastoral nomadism subsistence system.

Flint-knapping activities have long – and over-simplistically – been assigned to the male sphere. With her study 'Change and continuity. Gender and flint knapping activities during the Neolithic in the Paris basin', Anne Augereau presents a differentiated analysis of the finds. Her study of funerary goods in the first Danubian cultures, in particular the western LBK, shows that regular blades produced from rare raw materials accompanied some males, while ordinary flakes made on local flints accompanied the women. Following that, she postulates a division of labour: The knapping of regular blades could have been a male activity, while the production of the less regular blades could have been an activity carried out by women and children. Augereau also traces changes in the Neolithic groups that followed. Division of labour in sedentary Neolithic societies is also the focus of the paper 'Labour organisation between horticulture and agriculture. Two separate worlds?', by Wiebke Kirleis. She was able to demonstrate that diverse strategies of subsistence strategies co-existed in the northern Neolithic, and that these strategies were carried out by actors from multiple social groups. The technological innovation of the ard in the mid-4th century BCE, however, brought changes to the social sphere of cereal production, in the form of specialisation and hierarchy as new elements of labour organisation. Therefore, she assumes that the ard may have been one important driver for social change, bringing the activity of ploughing – as carried out by the individual – into a gender stratification context within the narrow socioeconomic segment of extensive agriculture. Beata Kaczmarek presented her work 'Children in the Mycenaean workshop. Linear B writing versus grave goods' exclusively during the workshop, analysing in particular children's relationships with, and attachment to, adults. Unfortunately, this paper was not submitted for this volume.

The connections between spatial structures and social groups connect the last subsection of the third section of the volume. The research by Olena Fedorchenko on settlement structures and related gender aspects, presented in ‘Upper Palaeolithic hunting societies in the region near the Black Sea’, unfortunately was not submitted for this volume. She used ethnographic descriptions of hunting and settlement strategies among the Indigenous societies of the Plains region of North America to argue that an early evolution of settlement strategies can indicate the development of gender systems during the Upper Palaeolithic period in Europe. Modern architectural theory forms the background for the analysis ‘The construction of space and gender in prehistory. An approach to the Chalcolithic walled enclosures of Iberia?’, by Ana M. Vale. Moving beyond modern androcentric discourse and Western stereotypes of house and family, she argues that the construction of walled enclosures as collective spaces points to ambiguous and fluid uses.

Up until now, there have been few opportunities to discuss the contents of gender archaeology, women’s archaeology and feminist archaeology in such a large, international context. We were pleased that the framework offered by the workshop ‘Gender transformations’ was used intensively for collegial discussions and that it provided a platform for the lively exchange between pioneers of gender studies and colleagues who have only recently discovered gender research for themselves. Gender research is still on the move and in upheaval: on the one hand, it can be seen as an accepted part of social archaeology, but on the other, the results of this research are still mainly promoted only by female researchers, as reflected in the proportion of women among the speakers and in the audience (both c. 80%). But here, too, diversity is the key to continued changes in perspective.

Acknowledgments

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References

- Koch, Julia K. (accepted) ‘Let’s talk about money. Third-party funds and archaeological gender research in Germany’. In: Palincas, Nona, and Martins, Ana (eds). *Gender and Change in Archaeology. Workshop of the EAA community ‘Archaeology and Gender in Europe’, Lisbon October 2017*. Bukarest/Lisboa, in preparation.

- Müller, Johannes, and Kirleis, Wiebke 2019. The concept of socio-environmental transformations in prehistoric and archaic societies in the Holocene: An introduction to the special issue. *The Holocene*, special issue 'Scales of transformation'. doi: <10.1177/0959683619857236>, e-published 28 June 2019.
- Palincas, Nona and Martins, Ana in preparation (eds). *Gender and Change in Archaeology. Workshop of the EAA community 'Archaeology and Gender in Europe', Lisbon October 2017*. Bukarest/Lisboa.
- Perschke, Reena 2014. *Die Megalithen des südlichen Morbihan (Bretagne) – Genese und Entwicklung einer monumentalarchitektonisch geprägten Landschaft* (PhD thesis LMU Munich).
- Perschke, Reena, in press. Das Motiv der „Dolmengöttin“ – Zur Genese eines pseudo-neolithischen Göttinnenkultes. In: Koch, Julia K., Jacob, Christina, and Leskovar, Jutta (eds). *Prähistorische und antike Göttinnen. Befunde – Interpretationen – Rezeption*. Jubiläumstagung '20 Jahre FemArc-Netzwerk archäologisch arbeitende Frauen', Heilbronn 2011. *Frauen – Forschung – Archäologie* 13 (Münster: Waxmann).
- Rebay-Salisbury, Katharina 2017. Bronze Age beginnings: the conceptualisation of motherhood in prehistoric Europe. In: Cooper, D. and Phelan, C. (eds). *Motherhood in Antiquity*. New York: Palgrave Macmillan, 169-196.
- Rebay-Salisbury, Katharina 2018. Personal relationships between co-buried individuals in the central European Early Bronze Age. In Lillehammer, Grete, and Murphy, Eileen (eds). *Across the Generations: The Old and the Young in Past Societies, Childhood in the Past Monograph Series 8*. Stavanger: Museum of Archaeology, University of Stavanger, 35-48.
- Rebay-Salisbury, Katharina, Pany-Kucera, Doris, M. Spannagl-Steiner, F. Kanz, P. Galeta, Teschler-Nicola, Maria, and Salisbury, Roderick B. 2018. Motherhood at early Bronze Age Unterhautzenthal, Lower Austria. *Archaeologia Austriaca*, 102, 71-134.
- Robb, John, and Harris, Oliver J. T. 2018. Becoming Gendered in European Prehistory: Was Neolithic Gender Fundamentally Different? *American Antiquity*, 83, 128-147.



Fig. 1. Participants of the international CRC 1266-workshop 'Gender transformations in prehistoric and archaic societies' at Kiel University, 8 to 10 March 2018 (photograph: CRC 1266).

1 Gendering fieldwork

Matters of gender in the Kerameikos excavation in Athens

Jutta Stroszeck

Abstract

This article discusses gender with respect to the Kerameikos excavation in Athens, Greece, in a two-fold manner: In the first part, three examples of gender approaches towards the Kerameikos find material are given. The importance of anthropological analyses not just for sex determination but also for gender studies is stressed, and a brief survey of the anthropological studies of the Kerameikos burials is presented. Subsequently, the importance of a combined archaeological and historical analysis of the excavated areas and architecture for the analysis of gender in spaces is briefly touched upon. In the second part, the general development of the roles of women in Greek archaeology is used as a background for a survey of gender expressed as part of group identity in sex groups, age groups, or social groups (*e.g.* men, women, foreigners, social and financial elites) in the history of excavations in Greece, and in the Kerameikos in particular.

Keywords: *ancient Greece, Kerameikos, ancient Greek burial culture, gender, history of excavation*

Introduction

The term gender in relation to the Kerameikos site (Athens, Greece) usually brings to mind the Early Iron Age necropolis found there and published in detail by the German Archaeological Institute (Deutsches Archäologisches Institut, DAI), which still carries out excavations there today. The Submycenaean (Early Iron Age), Protogeometric, and Geometric graves are of particular interest, as they have been studied cooperatively by archaeologists and anthropologists. The well-published Kerameikos tombs were

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taken as a basis for pilot studies in the field of gender studies, thereafter published by Ian Morris¹, Sanne Houbby-Nielsen², and Lynn Foxhall³, among others.

By proceeding in two parts, I will try to mirror gender studies as they have taken place on this site, with a focus on gender transformations. In the first part, I provide an overview of the Kerameikos site and of gender in studies relating to the Early Iron Age and the Classical period. In the second part, I present an insight into the history of the excavation in relation to gender by posing and answering two questions: In what way can archaeological research be influenced by gender? And how has this influence transformed over the years?

Cooperation between archaeologists and anthropologists

The study of gender is a matter of interdisciplinary research. Within an ancient necropolis, for instance, it must be based on a solid cooperation between anthropologists and archaeologists, if it is to yield reliable results from which we can deduce information about the role of sex and subsequently of gender. The anthropologist is supposed to deliver information concerning the sex and age of the skeletons by looking at the bone material (among other things), while the archaeologist is supposed to analyse the arrangement of the burial itself and the grave goods within a framework of time, cultural and local tradition, and social context. The combined results of both allow for gender considerations. There are several skeletons from the Kerameikos excavations that have been studied by three different anthropologists, providing us with a chance to look at discrepancies between their approaches and results.

The first such cooperation ever in the Kerameikos was published in 1910 by Alfred Brueckner (1861-1936) who was a former assistant of Heinrich Schliemann (1822-1890) at Troy, and Marinus Geroulanos (1867-1960)⁴. They worked together in 1909 during the excavation of the 4th century BCE tombs in the burial plot of a family from Herakleia, situated on the south side of the famous so-called Street of Tombs (discussed below). After a break caused by the First World War, Brueckner resumed work in 1927. This time he was cooperating with Ioannis Kumaris (1879-1970), the director of the Anthropological Institute in Athens since 1915⁵. During the 1930s and 1940s, increased interest in anthropological data is reflected by the presence of several specialists on the site. Prominent among them was the young Emil Breitingner (1904-2004), whom Karl Kübler (1897-1990) had called upon in 1938. The results of Breitingner's studies on the Submycenaean skeletons from the Kerameikos were published in 1939⁶. In addition, the cremated remains were studied by the Greek doctor Apostolopoulos⁷.

In 1942, during the Second World War, John Lawrence Angel (1915-1986) from the Division of Physical Anthropology at the Smithsonian Institution in Washington included a series of Kerameikos skeletons, most of them already published by Breitingner, in his study titled *Skeletal Material from Attica*, which appeared in 1945⁸. In the summer of 1977, Sara Biesel (1932-1996) from the same institution worked

1 Morris 1987; 1992.

2 Houbby-Nielsen 1995; 1996.

3 Foxhall 2013.

4 Brueckner 1910; Geroulanos 1910.

5 Alfred Brueckner, *Tagebuch* 6 (1915-1928) 120 (8 and 9 March 1927); Karl Kübler, *Tagebuch* 4 (1936-1939) 48 (26 February 1927).

6 Breitingner 1939.

7 Kübler 1939, 101 note 1. Apostolopoulos's first name is not known.

8 Angel 1945.

for a few weeks in the Kerameikos, analysing again the already known skeletons, plus some of the more recent finds. Among those were 61 skeletons from the ‘Eckterrasse’ and the Messenian precinct⁹. She resumed analysis of more skeletons in 1982¹⁰. Other traditional anthropological studies were carried out for a relatively small number of individuals each, by P. Fischer in 1986¹¹, Tina McGeorge in 1988¹², Lisa Little in 1995¹³, Markku Niskanen in 1996¹⁴, and Anna Lagia in 2000 and 2007¹⁵. The first thing that becomes apparent to the archaeologist is that results of anthropological studies, like those of archaeological research, are a matter of interpretation, depending on the preservation state of the bones and the experience of the researcher, to name just two major factors. If the anthropologist is provided with the results of the archaeologist’s analysis before the bone analysis is done, these results can have a strong influence on sex determination in ancient skeletons. And even if both studies are prepared separately, confrontation with the archaeological material sometimes results in a surprise.

Part 1: Gender studies in the Kerameikos

Gender transgression in Iron Age burials?

According to the Wikipedia definition, gender is ‘*the range of characteristics pertaining to, and differentiating between, masculinity and femininity. Depending on the context, these characteristics may include biological sex (i.e., the state of being male, female, or an intersex variation), sex-based social structures (i.e., gender roles), or gender identity*’¹⁶. In fact, most people belong to more than one gender group. In all cases, gender can be dominant – and it can be elusive. I decided therefore to present an example of the problems encountered during gender determination in the Submycenaean and Protogeometric necropolis, specifically tombs 46 and 27. Thus far, 148 tombs of this period have been published from the Kerameikos¹⁷. Of those, 26 inhumated and 19 cremated human skeletons have been studied by anthropologists¹⁸. The skeleton from tomb 46 in the Pompeion necropolis of the Submycenaean (Early Iron Age) period was studied by Emil Breitingner in 1939. He recognised an adult woman¹⁹. Her garment was held in place by two long needles (length: 0.38 m) at each shoulder. The dress was fastened along her left side, with two bronze fibulae found in situ. She wore two finger rings on the left hand and three on the right hand, and a gold spiral that had probably adorned her hair was found next to her left ear. Grave goods were two *amphoriskoi* and a two-handled drinking vessel (Fig. 1).

Because of the kind and the quality of the grave goods, the Submycenaean tomb 27 was also characterised as female by the excavator, Karl Kübler, who characterised this burial as the ‘*Skelett eines jungen Mädchens* (skeleton of a young girl)’²⁰, with a length of 1.20 m from neck to feet (Fig. 2). Breitingner was more equivocal,

9 Biesel 1990, 151-159 Fig. 75 pl. 65.

10 Report in the Kerameikos archive, DAI Athens.

11 Hand-written evidence for this in the Kerameikos volume 1 (1939) at the Kerameikos excavation. Fischer’s first name is not known.

12 The skeleton Eck 64; evidence in the Kerameikos archive.

13 Published in *Archäologischer Anzeiger* 1995, 646 note 41. Skeleton of a 20-year-old woman.

14 Lecture by M. Niskanen (University of Oulu), ‘Temporal shifts in the craniofacial configuration: Results from the Athenian Agora, Kerameikos, and Corinth’, 24 November 2006.

15 Lagia 2000, 456-493; 2007.

16 Comp. Renfrew and Bahn 2001, 218-222.

17 Kübler 1939; Ruppenstein 2007.

18 Breitingner 1939; Lagia 2007, 273.

19 Breitingner 1939; 232; Kübler 1939, 24 Fig. 46.

20 Kübler 1939, 18 Fig. 27; Breitingner 1939, 231.



Figure 1 (above). Kerameikos (Athens, Greece) tomb 46. Submycenaean burial of a woman (Kerameikos Archive [DAI Athens]: KER 601).



Figure 2 (right). Kerameikos (Athens, Greece) tomb 27. Submycenaean burial (Kerameikos Archive [DAI Athens]: KER 625).

writing ‘girl?’²¹. Again, there were bronze needles, probably fixing a garment at the shoulders (40 and 24 cm preserved), taken by Kübler as a hint towards a traditional garment worn by Athenian women: ‘Zur Verteilung des Schmuckes auf Männer- und Frauengräber ist zu sagen, daß die langen Schulternadeln natürlich nur von Frauen getragen wurden.’²² In addition, three bronze fibulae probably belonged to the dress. Around the right upper arm was a bronze bangle, and on each hand were four finger rings. Kübler stated that bronze finger rings such as the one on the left hand, with an oval shield (the so-called shield ring, *Schildring*) – a variety derived from Mycenaean culture – had been found ‘mostly’ in female graves²³. Yet, the study of the skeleton by Sara Bisel, done in 1977, clearly shows that this is a boy, estimated to be 13 years old (Fig. 3), raising the question of gender transgression (a boy who for some reason was gendered female)²⁴.

Concerning the Early Iron Age necropolis in general, a decisive shift can be observed, from little gender distinction during the Submycenaean period to clear gender distinction, accompanied by a change from inhumation to cremation, during the following Protogeometric period. In Protogeometric graves, the cremated remains of men were buried in neck-handled amphorae (as seen in the skeleton of

21 Kübler 1939, 18 Fig. 27; Breitingner 1939, 231.

22 Kübler 1939, 81 (‘about the distribution of adornments in male and female graves we can say that the long needles at the shoulders were of course worn only by women’).

23 Athens, Kerameikos inv. M 151-154. Kübler 1939, 86. He knows of one exception (*ibid.* 82 note 2) from tomb 19, where he deduces the sex of the deceased, again from the grave goods – a wine vessel and a beaker – as male. Unfortunately, there is no anthropological study of this skeleton and the skeleton itself is absent from the record today.

24 Photo KER 625 a. Comp. Ruppenstein 2007, pl. 4 top left (skeleton). The skeleton has the number 68 AK in J.L. Angel’s card files, which were completed by S. Bisel (Kerameikos Archive).

Smithsonian Institution - Division of Physical Anthropology
SKELETON MEASUREMENTS, INDICES, and MORPHOLOGY

Cap. # 143
(not studied in 1938)

Field number *G.2.A.1* Sex *♂* Age estimate *13+* Date *8/13/77* Observer *J.H.*

Area *Hell. nec. Greece* Site *Athens, Kerameikos* Group *S.M.G. 27* Period *Submycenaean* Condition *Fair*

<p>Bone</p> <p>HUMERUS</p> <p>Maximum length <i>235?</i> <i>240</i></p> <p>Head vertical diameter .. <i>33</i> <i>33</i></p> <p>Maximum midshaft <i>17</i> <i>18</i></p> <p>Minimum midshaft <i>15</i> <i>14</i></p> <p>Bi-epicondylar breadth .. <i>41</i> <i>41</i></p> <p>Torsion angle</p> <p>Middle index</p> <p>Shaft shape</p> <p>Oval <i>Deltoid/cead T.</i> <i>T.</i></p> <p>Piano-convex</p> <p>Prismatic</p> <p>Intermediate</p> <p>Trapezoid</p> <p>Rectangular</p> <p>Olecranon perforation</p> <p>Supracondylar foramen</p> <p>RADIUS</p> <p>Maximum length <i>+</i> <i>179</i></p> <p>Bowing <i>+</i> <i>+</i></p> <p>Interosseous crest <i>sl</i> <i>sl</i></p> <p>ULNA</p> <p>Maximum length <i>199</i> <i>179</i> <i>(200)</i></p> <p>Forearm breadth</p> <p>CLAVICLE</p> <p>Maximum length <i>med. 62</i> <i>lat. (116)</i> <i>35</i></p> <p>SCAPULA</p> <p>Total height</p> <p>Inferior height</p> <p>Breadth (morphol.)</p> <p>Spine breadth</p> <p>Acromion a - p</p> <p>Total index</p> <p>Fossae index</p> <p>Bi-acromial breadth</p> <p>Superior border</p> <p>Concave</p> <p>Wavy</p> <p>Straight</p> <p>Notch</p> <p>Vertebral border</p> <p>Convex</p> <p>Intermediate</p> <p>Concave</p>	<p>Bone</p> <p>SCAPULA</p> <p>Teres origins</p> <p>Acromion shape</p> <p>Sickle</p> <p>Triangular</p> <p>Intermediate</p> <p>Quadrangular</p> <p>Clavicular facet</p> <p>Age plaque</p> <p>Glenoid shape</p> <p>Elliptical, Oval, Comma</p> <p>Glenoid lipping</p> <p>Pleating</p> <p>Buckling</p> <p>Atrophic patches</p> <p>FEMUR</p> <p>Bicondylar length <i>*364</i> <i>*360</i></p> <p>Maximum length <i>*367</i> <i>243</i> <i>*363</i></p> <p>Head maximum diameter ... <i>35</i> <i>35</i></p> <p>Sub - a - p <i>23</i> <i>23</i></p> <p>trochanteric transv. ... <i>24</i> <i>24</i></p> <p>Mid - a - p <i>23</i> <i>24</i></p> <p>shaft transv. <i>23</i> <i>21+</i></p> <p>Distal epiphysis br. <i>66</i> <i>-</i></p> <p>Torsion angle</p> <p>Neck - shaft angle <i>133</i> <i>136</i></p> <p>Platymeric index</p> <p>Filastric index</p> <p>Robusticity index</p> <p>Gluteal crest <i>sl sharp</i> <i>sl</i></p> <p>Fossa <i>+</i> <i>+</i></p> <p>Third trochanter <i>(-)</i> <i>(-)</i></p> <p>Poirier's facet <i>+</i> <i>+</i></p> <p>Anterior neck erosion <i>+</i> <i>+</i></p> <p>Bowing <i>+</i> <i>+</i></p> <p>Shaft section <i>Pl. conc. Pl. conc.</i></p> <p>Gastrocnemius origin <i>sl. carborund.</i></p> <p>Adductor tubercle <i>sl</i> <i>sl.</i></p>	<p>Bone</p> <p>FIBULA</p> <p>Length (l.cond.-malleolus) <i>272</i></p> <p>Nutrient a - p <i>25</i> <i>27</i></p> <p>foramen transv. <i>20</i> <i>20</i></p> <p>Upper epiphysis br. <i>58</i> <i>58</i></p> <p>Lower epiphysis br.</p> <p>Retroversion angle <i>14</i> <i>20</i> <i>3:18</i></p> <p>Malleolar torsion angle</p> <p>Platymeric index</p> <p>Shaft section</p> <p>I Prism</p> <p>II Oblique prism</p> <p>III Concave prism (lat.)</p> <p>IV Rhomboid</p> <p>V Convex prism (post.)</p> <p>VI Piano-convex</p> <p>Cruciate ligament markings</p> <p>Popliteal crest <i>st groove</i> <i>st</i></p> <p>Squatting facets</p> <p>FIBULA</p> <p>Length</p> <p>STATURE</p> <p><i>Epiphyses open, shaft right</i></p> <p><i>st final shape</i></p> <p>Brachial index</p> <p>Crural index</p> <p>Intermembral index</p> <p>Relative shoulder breadth</p> <p>Relative hip breadth</p> <p>Somatotype</p> <p>Type of accompanying skull</p> <p>Anomalies</p> <p>Pathologies</p>
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*Epiphyses unitted ex. unless stated **

Figure 3. Sara Biesel, field record card for skeleton from Kerameikos tomb 27, dated 13 August 1977 (Kerameikos Archive [DAI Athens]).

two youths from Kerameikos burial A; Fig. 4), while those of women were buried in shoulder- or belly-handled amphorae (Fig. 5).

In addition, the grave markers reflected gender. Huge pots were put on top of the graves to mark the location; craters were used for men and amphorae for women²⁵. This has led to the perception that the realm of water – supposedly carried in amphorae, with belly handles – belonged to the female sphere, while the consumption of wine – represented by the craters, which are mixing vessels for wine during common symposia – characterised the male sphere²⁶.

Kerameikos and gender: An example from the classical period

Gender groups in classical Athens comprise groups determined by sex and age, as well as social groups, such as foreigners, slaves, and many more. To some extent, each of these groups can be related to special burial habits, by looking at the way the skeleton is treated, at the grave goods, and at the grave markers. A particular benefit of the period is that the findings can be related to written sources. From classical

25 Whitley 1996, 222-223.
26 Whitley 1996, 222.

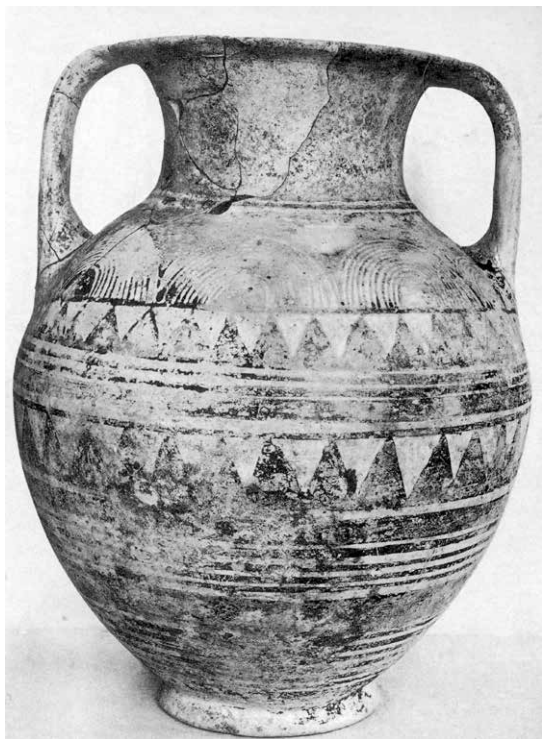


Figure 4 (left). Kerameikos (Athens, Greece) tomb A. Neck-handled 'male' amphora inv. no. 523. No scale (Kerameikos Archive [DAI Athens]: KER 2520).



Figure 5 (right). Kerameikos (Athens, Greece) tomb A. Belly-handled 'female' amphora inv. no. 235. No scale (Kerameikos Archive [DAI Athens]: KER 2665).

texts, it becomes clear that women were not only perceived as different from men but also, clearly, as inferior within the social hierarchy²⁷.

The situation with regard to identifying sex in classical and Hellenistic burials is different from the Early Iron Age period, because now sex can be determined either by anthropological analysis of the bones or by archaeological identification of an inscribed grave monument with a specific burial. Both possibilities of identification of the sex of a deceased person are available in the Kerameikos. Again, differences in vessel forms used as grave markers indicate differences in sex: On Attic grave reliefs, amphora *loutrophoroi* signalled unmarried men (Fig. 6), while *hydria loutrophoroi* signalled unmarried females (Fig. 7)²⁸. The difference in the use of vessels – water vessels (*hydriae*) for women and wine vessels (amphorae) for men – that occurs here again makes this pattern look like a kind of continuum in Athenian society.

There are even examples of the combining of anthropological study with epigraphical and archaeological data. In 1909, Marinos Geroulanos determined the sex of a group of eight individuals buried in one closed grave precinct. The owners of the plot were two brothers, Agathon and Sosikles, *metics* (foreigners who lived permanently in Athens) from Herakleia, on the Pontic Sea.

There were three men and one woman buried in sarcophagi, two children buried in clay tubs, and two cremations. As the grave monuments in the precinct were well preserved, and as they mention the names of the deceased, the only female skeleton

27 Stansbury-O'Donnell 2006, 224; Harris *et al.* 2013, 105: '... gender was genuinely central to people's lives. Ancient Greeks understood their world through conceptual dichotomies, and the opposition between male and female was one of the most sweeping. Men and women were understood as having fundamentally different natures. This was reflected not only in visible difference between male and female bodies, but also in their characters and capacities ... contexts in which they did different tasks or the same tasks differently were the norm. In theory, at least, men were strong, rational and able to engage in public interaction; women were weaker, liable to be swayed by feelings and principally capable of acting within the household sphere'.

28 Margariti 2016, 182.



identified received the name of the only woman mentioned in the inscriptions: Korallion, the wife of Agathon.

On her grave relief, she is represented sitting on a backless chair, dressed and veiled, her right hand clasping the hand of her husband, Agathon²⁹, as noted in the inscriptions above each of the individuals. Geroulanos described the skeleton as belonging to a ‘not very old woman’.³⁰ If we assume that means between 20 and 30 years old, we have a representation of a woman of that age and of married status (Fig. 8). Her grave goods give a closer insight into her fields of activity³¹: She was equipped with a mirror (a utensil as well as a symbol of beauty), a pair of iron scissors, two small oil flasks, and two *alabastra*. Over the shin bones there was a layer of wooden cylindrical tubess and alternating beads, very likely ornaments from a dress she was buried in (Fig. 9). It is indeed remarkable that three of the

Figure 6 (left). Kerameikos (Athens, Greece). Amphora loutrophoros stele inv. I 274 for Kleidemos (Kerameikos Archive [DAI Athens]: KER 6036).

Figure 7 (right). Athens (Greece), National Museum. Grave stele for a girl inv. no. 1863 (Margariti 2018, 105 Fig. 3).

29 Stroszeck 2014, 192 Fig. 39,4.

30 Geroulanos 1910, 147.

31 Brueckner 1910, 133-135 Figs. 18; 19.



Figure 8 (left). Kerameikos (Athens, Greece). Grave stele for Korallion inv. P 688 (Kerameikos Archive [DAI Athens]: KER 6004).

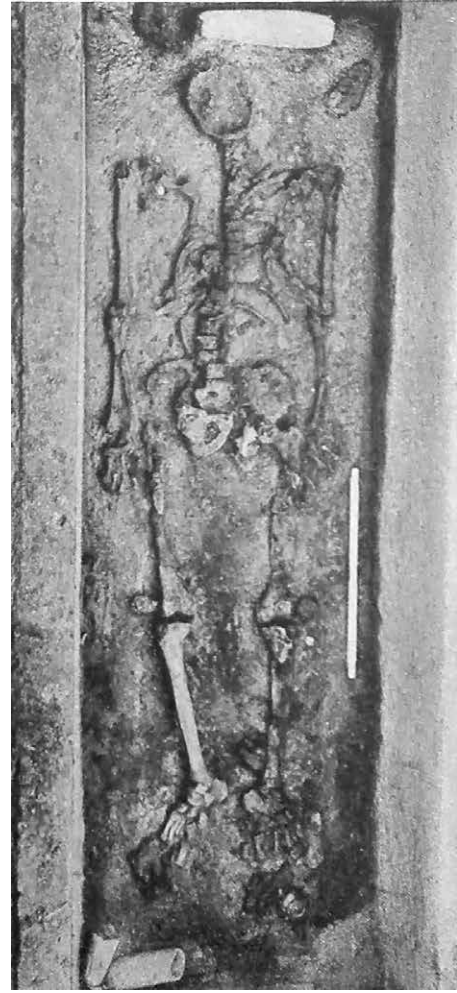


Figure 9 (right). Kerameikos (Athens, Greece). Burial with skeleton of Korallion in situ (Brueckner 1910, 134 Fig. 19).

four pairs of scissors that have been found in classical Kerameikos tombs thus far come from anthropologically analysed tombs of women; the fourth one comes from a cremation burial that has not yet been analysed. The scissors may characterise the married, young woman, indicating wool working in the household (spinning and weaving and the production of clothing)³².

The archaeologically, epigraphically, and anthropologically defined sex is available for a relatively small number of burials only. Apart from Korallion, there is an entire family of four persons (mother, father, and two boys, named Philoumene, Philoxenos, Dion, and Parthenios, respectively) from Messene³³, again foreigners; Eupheros³⁴ (a young boy); Lissos³⁵ (a young man); Dionysios from Kollytos³⁶ (a 32-year-old citizen who had been horse riding all his life, as his bones betrayed);

32 The idea that scissors might symbolise the untimely death of a young married woman is obviously not an ancient one, because in ancient art, women are not represented with this attribute. Compare neoclassical representations of the three Moirai and of Atropos alone, for example, on the monument for Lila and Eleni Thomoglou at the First Cemetery in Athens (Kyriazi 2012, 49).

33 Kovacsóvics 1990, 97-109; 113 no. 106; 114 nos. 109 and 110; 114 s. no 111.

34 Kerameikos, inv. I 417. – Stroszeck 2014, 225 Fig. 55,1.

35 Kerameikos, inv. I 417 a. – Stroszeck 2014, 225 Fig. 55,2.

36 Kerameikos, inv. I 248, P 690. – Stroszeck 2014, 194-198 Fig. 40,3.



Figure 10. Kerameikos (Athens, Greece). Grave stele for Eukoline inv. no. I 422 (Kerameikos Archive [DAI Athens]: KER 6271).

Eukoline³⁷; the *metics* Sotion from Adramyttion³⁸; Ktesikles from Histiaia, on Euboea³⁹; and a slave called Thallis⁴⁰.

In classical Athens, women's responsibilities were childbirth and motherhood, control of the household activities (such as preparing food), ensuring sufficient water (brought by female slaves and young girls), and the processing of wool for the production of clothing (cleaning the wool, spinning, and weaving). Women's virtues were thus self-control (*sophrosyne*) and productivity (*philergia*). Women were perceived as emotionally uncontrolled and reactive, but also as manipulating and persuasive with respect to the men of the *oikos*. Consequently, the Athenian ideal of a woman wasn't interfering or persuasive. This is expressed, for instance, in the name Eukoline ('the pleasing one'), appearing frequently during the 5th and 4th century (Fig. 10)⁴¹.

The average living conditions of women in that period are mirrored by the mortality rates deduced from the Kerameikos: Summing up her results on the average life duration of women during the classical period, Sara Bisel wrote:

*'the average age at death is significantly lower for women than for men. In the Eckterrassen, the average age at death for women was 30,9 and for men 40,9; while in the Messenian tombs, women died at 31,1 and men at 34,6 years of age'*⁴².

Gendered space

In recent years, gender studies have been extended to gendered space, and there again, the Kerameikos plays its role, as a part of Athens for which sufficient ancient written sources are available to draw conclusions about the way and by who the

37 Kerameikos, inv. P 694. – Stroszeck 2014, 222-223 Fig. 53,1.

38 Kerameikos, inv. I 347. – IG II² 12754; Knigge 1976, 159 no. 358 pl. 11,1-3; 67,6.

39 Kerameikos, inv. I 457. – Knigge 1976, 160 no. 362 pl. 71,6.

40 Kerameikos, inv. I 345. – Knigge 1976, 158 no. 355 pl. 12,4,5.

41 Kerameikos, Inv. I 422 (epigram translated by C.W. Clairmont: 'This woman had a name that matched her kindly disposition and her life. She lies here beneath the soil, having fulfilled the lot for which she was born').

42 Bisel also took samples from the bones for 'mineralogic analyses', to be done, as she writes, at the Trace-Metal-Laboratorium of the Mayo Clinic, Rochester, Minnesota, USA (responsible persons there: J.M. McCall, P. Hass, G. Mussmann). The results were never published. The sampled bone material is now held at University of Waterloo, Ontario, Canada (M. Liston, personal communication 2018).

streets, defensive structures, and private houses, as well as the space of the classical (*i.e.* ‘democratic’) necropolis were used.

There are several spaces clearly defined by gendered activities, for example, a large private house, the so-called *Bau Z*. Recent gender studies rely heavily on the publication of *Bau Z* in the *Kerameikos* for reconstructing gender roles of women and prostitutes as opposed to those of men in Athenian society⁴³. Within the spaces of private houses, there were clearly gendered areas, the *andron* and the *gynaikonitis*⁴⁴. The more public space, called *andron* (‘the men’s rooms’), refers to the entrance, main courtyard, and rooms where the men held their symposia. Mostly, these rooms were at street level. Water supplied through a well or cistern, a kitchen, and a bathroom were necessary for the functioning of an *andron*. The *gynaikonitis* (‘the women’s rooms’) is separate but accessible through this area, and is sometimes located on the first floor. It was the private area of the family, used mainly by women. To this area belonged the bedrooms, an inner courtyard, a separate water supply, as well as a kitchen. The household activities here comprised the preparation and consumption of the daily meals, childcare, and the production of textiles and clothing.

Outside the house, women of married status were active, but not on their own⁴⁵. Rather, they gathered in groups on the roads leading to and from the necropoleis, where they were active either accompanying a funeral or visiting the private burial plots, as it was their duty to fulfil the rituals of the burial cult for the dead of their *oikos*⁴⁶. They brought oil and maybe also water in specific vessels, they adorned the grave stelae with woollen bands, and they brought branches of trees and other equipment for the adornment of the graves in large baskets, as is attested by the many representations on red figure and white ground *lekythoi*.

Therefore, as noted by Andres Andrén in 1998, the study of the differences in gender in the *Kerameikos* graves should be enriched by taking a chronological perspective:

‘Material culture [...] has a more mixed social and gender background. This social and gender difference between artifact and text is clear, for example, at the Kerameikos cemetery in ancient Athens. Inscriptions and pictures on the grave stones were, like other “public” monuments, mainly written by and for men (see Thomas 1992). The burials, including the deposition of artefacts in the graves, were mainly created by women. Because death above ground was the province of men and death below ground was the sphere of women, it is possible to detect gender differences in the view of the buried people. Above all, the image of woman is divided, since the pictures and texts on the grave stones show the women as chaste housewives and mothers, whereas the gravegoods instead arouse associations with the cult of Aphrodite and with women as erotic beings (Houby-Nielsen 1997). To put it in somewhat extreme terms, the difference between gravestones and grave finds in these contexts can be described as male texts versus female artifacts’⁴⁷.

Women cared for the body in the house, followed the bier (which was carried by men) in lament, maybe even selected the grave goods (but this is nowhere testified to). Men will have selected the place of the tomb, because they were owners of land and women did not have this right on their own. Maybe only men selected the tomb monument and the inscriptions. But the women were to keep the burial places in order and to care for the monuments, anointing them and adorning them with twigs, flowers, and ribbons they brought along in caskets. Would they not also read

43 Knigge 2005; Davidson 2013.

44 Schnurr-Redford 1996, 89-98; Lysias 1 (on the murder of Eratosthenes) 9.

45 Schnurr-Redford 1996, 130; 138-139.

46 For example, Lysias 1 (on the murder of Eratosthenes) 8. Schnurr-Redford 1996, 187.

47 Andrén 1998, 174.

the inscriptions and repeat the epigrams out loud? Who would have stopped them from doing that?

Other women frequented the streets, and in particular the Kerameikos area around the gates, during the hours of the evening and the night. The Kerameikos was famous throughout antiquity for the prostitutes offering their services there publicly. A respectable woman would, therefore, not be seen out there on her own after sunset, as it obviously would be impossible to avoid coming across men who did not belong to their *oikos*⁴⁸.

Men alone, on the other hand, were active generally in the public areas. In the Kerameikos, these are the Pompeion and the streets around the Athenian defensive system: the city walls, the Dipylon, and the Sacred Gate, and also the Proteichisma. On the city walls, men were patrolling and guarding the city. They were exercising and dining officially in the Pompeion at its various phases, and the building also was used for the education of young men, who were listening to – among others – Diogenes's philosophics. The Pompeion was also used for the distribution of wheat (given out to male citizens)⁴⁹. The active part of the famous torch race performed during the Panathenaic and other festivals on the road between the Academy and the Acropolis passed the Dipylon gate and was, of course, a matter for men only.

Part 2: Gender in the history of the Kerameikos excavation and Greek archaeology

Matters of gender in the history of the Kerameikos excavation cannot be seen and understood without the overall background of the development of archaeological research in Greece. Interest in ancient history and archaeology first developed among an educated elite who either could afford to travel for leisure (as the young English noblemen who undertook their 'grand tour' in the 18th and 19th centuries) or who were travelling anyway for political and/or military reasons (such as the Italians sent by the Venetians to discover the resources of the Greek mainland and the Peloponnese⁵⁰, and the Philhellenes), or both, for example, George Gordon Byron (Lord Byron) (1788-1824)⁵¹. On the other hand, most of the historians and antiquarians, who are the other group forming the field, were not travelling at all, because of lack of funds.

Interest in antiquity was also instigated during the 18th century by royal and noble courts that were heavily interested in adorning their palaces and gardens with pieces of ancient art. Starting in the 18th century, admission to these treasures for the wider community was provided by the new national museums (the British Museum, founded in 1753, and the Louvre, founded in 1793, after the French revolution). Their main focus was collecting ancient art, in particular, but not exclusively, Greek art.

It was against this background that archaeological fieldwork in Greece was initiated during the 19th century, and it was funded by great men. For example, Ernst Curtius (1814-1896) excavated at Olympia (at that time the Kingdom of Greece) and the excavations were funded by the German Kaiser himself, instigated by the unbelievable success of Heinrich Schliemann (1822-1890) in identifying the site of Troy (at that time the Osmanic Empire), where he had excavated since 1868, and

48 Schnurr-Redford 1996, 121; 130.

49 Stroszeck 2014, 88-93.

50 Tsiknakis 2016, 289.

51 Wikipedia contributors, Lord Byron, in: *Wikipedia, The Free Encyclopaedia*. <en.wikipedia.org/w/index.php?title=Lord_Byron&oldid=896795045>, retrieved 13 May 2019.

ancient Mycenae (at that time the Kingdom of Greece), where the palace and tombs of the hero Agamemnon could be linked to the literary Homeric tradition. Perfect publicity strategies made Schliemann a star and promoted the interest in Homeric archaeology among the European elites. Schliemann's architect, Wilhelm Dörpfeld (1853-1940), followed Curtius in conducting the excavations at Olympia, and Carl Blegen (1887-1971), formerly also at Troy, started excavating at Pylos (at that time the Kingdom of Greece) in search of the remains of another Homeric hero, Nestor.

As a result, archaeology in Greece became '*hoffähig*' (appropriate) in northern Europe: From 1908 until the First World War, the German Kaiser Wilhelm II (1859-1941) himself took his summer residence at Gastouri (Kerkyra), about 10 km south of the town of Korfu, in a palace named after the Trojan hero Achilles (Achillion) by its former owner, Elisabeth von Österreich-Ungarn (known as Sisi), who, having a crush on Troy and Homeric poetry powered by Schliemann's effective marketing of his excavations, had built it in 1890. In 1911, the monarch personally supervised the excavations of the temple of Artemis on the island⁵², carefully instructed by Wilhelm Dörpfeld and Reinhard Kékulé von Stradonitz (1839-1911), and he even wrote a report about this, called *Erinnerungen an Korfu*, in 1924⁵³. In pictures of these excavations, women appear in the role of onlookers. Other royals were to follow⁵⁴.

Few women were able to travel to Greece during the 19th century, and even fewer did this on their own accord. Outstanding exceptions were Lady Jane Digby Ellenborough (1807-1881), more of an adventurer in nature, who lived in Athens and Greece in the 1830s and 1840s before she went on to Syria, where she married a Syrian 'son of the desert' at Palmyra⁵⁵, and Sophie de Marbois-Lebrun, called the Duchesse de Plaisance (1785-1854), an eccentric who lived in Athens from 1830 until her death, in 1854⁵⁶. As for men, a prerequisite for women's interest in archaeology was access to education. In Germany and northern Europe, women during the 19th century had few possibilities to learn Greek and Latin and become interested in the ancient world. Their world was in the present. At the most, they had an in-house teacher, or governess – and this again only applied to wealthy women of the social elites. In that group, there were women interested in archaeology. One of them was the daughter of law professor Carl Friedrich von Savigny (1777-1861), Elisabeth 'Bettina' von Savigny (1805-1835). She was a direct link between the Prussian Empire and Greece, and she had a splendid education⁵⁷. Shortly after King Otto (1815-1867) had taken residence in Greece in 1834, she followed her husband, Konstantinos D. Schinas (1801-1870), a law student of her famous father, to Greece. First, they lived in Nafplion (Argolid), and when the court moved to Athens, they followed soon after. During this time, she wrote detailed reports to her parents, knowing that her letters would be read not only by family members and that some of the information would finally reach the Prussian court. The letters concern many parts of public and private life in both Greek capitals, and they shed light on politics and persons, but they also contain archaeological information. For example, she gives an accurate account of the ruins on the site of ancient Tiryns (at that time the Kingdom of Greece), which

52 Henneberg 2004.

53 Wilhelm II 1924.

54 Persson 1937, 190-191: The Swedish excavations were made possible through the '*deep interest for archaeology that the Swedish crown prince took*'. The prince visited Greece in 1920 and in 1922, personally participated in the excavations for several weeks.

55 Schoeller 1987.

56 Wikipedia contributors, Sophie de Marbois-Lebrun, Duchess of Plaisance, in: *Wikipedia, The Free Encyclopedia*. <en.wikipedia.org/w/index.php?title=Lord_Byron&oldid=896795045>, retrieved 13 May 2019.

57 Stroszeck 2018.

she visited in December 1834⁵⁸, of Mycenae and the tomb of Agamemnon⁵⁹, and of the ancient ruins at Athens⁶⁰. Like many other foreign women at King Otto's court, Bettina died young from disease, in 1834.

Until the 20th century, there were almost no women conducting excavations in Greece. Before the First World War, only two exceptions are known: Hetty Goldman (1881-1972) and Alice Leslie Walker (1885-1954)⁶¹. They were the only women up to that point who had managed to obtain a permit to conduct their own excavations in Greece. They selected the site of Halai, in the Eastern Locrid, near Atalanti (Phthiotis, at that time the Kingdom of Greece) on the Greek mainland, and worked there together in 1911 and 1912. This was before either of them had even finished a PhD. It should be mentioned that they were members of the financial and intellectual elite: Hetty came from the famous banker's family of Goldman-Sachs. She completed her PhD, on terracottas from Halae, at Bryn Mawr College (Pennsylvania, USA) in 1916, while Alice finished her thesis in 1917.⁶² They united again in excavations at Eutresis near Lefktra (Boeotia, at that time the 2nd Hellenic Republic) between 1924 and 1927.

In 1911, during the British excavations at Phylakopi on the island of Milos (at that time the Kingdom of Greece), conducted by Richard Dawkins (1870-1955), three women managed to take part in the field research: Dorothy Lamb (1887-1967)⁶³, Lilian E. Tennant, and Hilda Lorimer (1873-1954)⁶⁴. Both the field director and John Droop (1882-1963), another participant of that year, agreed later that women were unfit for such cooperation and that they even disturbed men in their free expression during the exciting moments of the excavation. The only exception, in their view, were the wives of the excavators⁶⁵. Here, a pattern occurs that gained more and more importance during the years to come.

At about the same time (*i.e.* in 1913), the Kerameikos excavation was handed over from the Greek Archaeological Society to the German Archaeological Institute, then the Kaiserlich Deutsches Archäologisches Institut, a state institution. As funding plays a decisive role in any excavation, it is worth noting that the Kerameikos excavation was financed from the start mainly by an organisation specialising in archaeological research (the Αρχαιολογική Εταιρεία) rather than by rich or royal individuals⁶⁶. This continued, in a way, also during the German excavations. The Greek excavators were all men⁶⁷, and so, in the beginning, were the German excavators and their entire team of workers. But after the First World War, during the 1920s and 1930s, a gradual change occurs concerning the participation of women.

At the scientific end of excavations at this time, women appeared in the role of wives of the excavators, some more, some less involved in the work's progress. Sophia Schliemann (1852-1932) may have paved the road here⁶⁸. Her high social rank and the huge success of her husband's perfectly promoted excavations almost made it look normal that she accompanied him during the campaigns in Troy. The

58 Steffen 2002, 124.

59 Steffen 2002, 179-181.

60 The so-called 'prison of Socrates' and the 'wheat measure of Pericles': Steffen 2002, 131; about the Akropolis: *ibid.* 131-132; report about the find of an inscription in the Piraeus: *ibid.* 204; about the Kephissos spring: *ibid.* 212, and so on.

61 Walker and Goldman 1915; Goldman 1918; Mellink and Quinn 2004.

62 Her dissertation on 'The Pottery of the Necropolis of Locrian Halae', written in 1917 at the University of California, Berkeley, was never published.

63 Gill 2017.

64 Christiansen 2018.

65 John Droop quoted by Kokkinidou 2012, 16 note 1.

66 Petrakos 1987.

67 Petrakos 1987, 44; 46; 85; 111.

68 Kokkinidou 2012, 26 Fig. 9. Wikipedia contributors, Sophia Schliemann. In: *Wikipedia, The Free Encyclopedia*. <en.wikipedia.org/w/index.php?title=Sophie_de_Marbois-Lebrun,_Duchess_of_Plaisance&oldid=894613962> retrieved 13 May 2019.



Figure 11. Kerameikos (Athens, at that time the Kingdom of Greece). Excavation team with Hedwig Brueckner in 1929 (Kerameikos Archive [DAI Athens]: KER 1031).

participation of Hedwig Brueckner (no dates available), Brueckner's wife, in the Kerameikos excavation cannot be seen without this forerunner and other parallels mentioned below. We do not know anything about her educational background. She obviously accompanied her husband during the campaigns in 1929 and 1930. In her husband's diaries, she is mentioned twice for her help, in taking photographs and in restoring the pottery finds⁶⁹. When the Kerameikos research team met for an official photograph in 1929, the excavators first posed in front of the 'Eckterrasse', with Alfred Brueckner in the centre; Toni Hess (architect, no dates available), Karl Kübler, and Hubert Knackfuß (1866-1948) to the left; Fritz Wirth (Roman pottery specialist, no dates available) to his right; and Willy Zschiettschmann (1900-1976) to his far right⁷⁰. Then, a second photo was taken, where Hedwig Brueckner was positioned in the centre, seated right in front of her husband. Nothing in her dress and demeanour points to the fact that she played an active part (Fig. 11). In contrast to this, the wife of Axel Waldemar Persson (1888-1951), the director of the Swedish excavations in the Argolid, who accompanied her husband during the campaigns at Asine, Dendra, and Midéa (all in the Argolid, at that time the Kingdom of Greece and the 2nd Hellenic Republic) on the Peloponnese between 1922 and 1939, is represented in a photograph taken in 1930 at Asine next to her husband. She is included in the team, as the picture presents the entire excavation crew of that year, together with the workers (Fig. 12)⁷¹. One of the many female workers on this excavation is kneeling on her left knee, in the front row. During the British excavations at Perachora (Korinthia, at that time the 2nd Hellenic Republic), Dilys Powell (1901-1995) accompanied her husband, Humphrey Payne (1902-1936), the field director of the site. The couple had married in 1926. After the early death of her husband in 1936, Powell wrote a famous book about that period in her life, before she became an internationally well-known journalist and film critic⁷². In this book,

69 In his article 'Mitteilungen aus dem Kerameikos V', Brueckner (1931, 1) briefly gives credit to her as a photographer: '... die Aufnahmen der Einzelfunde zumeist Frau Hedwig Brueckner' ('the photo of the single finds mostly by Frau Hedwig Brueckner').

70 KER 1030.

71 Persson 1937, 191-194.

72 Powell 1946, 84; Fig. after p. 100.



Figure 12. Asine (at that time the Kingdom of Greece). Swedish excavation team of Axel Persson in 1930 (Wells 1998, 40 Fig. 29).



Figure 13. Perachora (Korinthia, at that time the 2nd Hellenic Republic). British excavation, Humphrey Payne and his wife, Dilys, in Greek dress at a 'glendy' in 1927 (Powell 1946, Fig. opposite p. 100).



Figure 14. Berbati (at that time the 2nd Hellenic Republic and the Kingdom of Greece). Swedish excavations, Ingrid Åkerström washing sherds with female workers in the 1930s (Wells 1998, 87 Fig. 78).

the intellectual describes her role as mainly accompanying her husband, with no actual field responsibilities (Fig. 13).

The situation was different with the wives of excavators of the following generation. They were now also shown and photographed during their involvement in the on-site activities. One example is Ingrid Åkerström (no dates available). She was the wife of the Swedish archaeologist Åke Åkerström (1902-1991), a pupil of Axel Persson, who excavated at Berbati (Argolid, at that time the 2nd Hellenic Republic and the Kingdom of Greece) in 1934-1938 and 1953-1959⁷³. Photographs show Ingrid in the 1930s in action educating the sherd washers (Fig. 14). Most prominent and a trendsetter in that respect was, of course, Agatha Christie (1890-1976), the wife of the archaeologist Sir Max Mallowan (1904-1978), who was 14 years her junior. They had met first at the Ur excavations in Mesopotamia and married in 1930. She accompanied him on many field campaigns during the years 1930-1950. In her memoirs, she provides a written record of her duties: she was *restoring* pottery, cleaning, cataloguing and photographing artefacts, mainly small finds⁷⁴. But until well after the Second World War, we hardly ever see women in the role of leading field archaeologists in their own right, at least not in Greece.

The differences in the way the wives of the excavators appear may be due to the country of origin of the excavators or to personal behaviour. Whatever the reason, there is a gradual development towards more presence of women and female archaeologists on-site. In Greece, archaeology as a discipline had an elite

73 Persson 1937, 198-200.

74 For example, Christie 1977, 472-473; 479; 480.

connotation during the 19th and early 20th centuries. The first women who were accepted in the Archaeological Society of Athens, for instance, all belong to this group⁷⁵. The actual work on-site, on the other hand, was done by nameless workers who – in the countryside, not in Athens – were often female⁷⁶. This is probably the reason why Greek intellectual women were hesitant to get involved in the actual excavation business: on-site work was for working men and women, and would probably endanger their status.

The difference between Athens and the countryside is striking. At the level of the workers, there were no females occupied in the Kerameikos, as far as I know of, not even a cook. This is completely different from the royal Swedish excavations at Asine, in the Argolid. Photographs from the royal Swedish archive show women occupied in the excavations as working staff, shovelling and pushing wheelbarrows along with male workers⁷⁷. There may be several reasons for this. First, living in the villages out in the countryside, women were obviously accustomed to work in the fields anyway. Secondly, I venture to suppose that women were simply cheaper workers and this is why they were allowed in.

In looking at the situation after the Second World War, it comes as no surprise that from 1960 onward, there is a sudden increase in female archaeologists involved in fieldwork. I suppose this had to do with the general lack of men. Some of the men who had been sent to war were not available for archaeological activities, either because they did not survive the war or because they had sustained physical trauma that made them unable to work in the field, or they had to make a living for their families working in other occupations because the jobs for archaeologists were rare and not paid well – if at all.

Apart from that, in Germany – and consequently in the Kerameikos – some archaeologists had been involved in Nazi careers until 1945 (*e.g.* Walter Hahland) and were therefore not eligible for university teaching or any archaeological research conducted by the German Archaeological Institute in Greece.⁷⁸ Under these circumstances, women came seriously into play. The Kerameikos had been under French administration control during the years immediately after the war, while American archaeologists, such as Virginia Grace (1901-1994), had access to certain groups of material.⁷⁹ After the memorable visit to Greece of the first federal chancellor of the Federal Republic of Germany, Konrad Adenauer (1876-1967), in 1954 (Fig. 15), the Kerameikos excavation was resumed on the part of the German Archaeological Institute, within the framework of the envisioned Greek-German cultural treaty (*Kulturabkommen zwischen Deutschland und Griechenland*), which came into being in 1956⁸⁰. From 1955 onward, the new excavation director, Dieter Ohly (1911-1979), equipped with huge funds from the German parliament (*Bundestag*), interestingly, hired an entire group of young male specialists for the complete refurbishment of the site, which he undertook between 1955 and 1960⁸¹. The young men were Jürgen Trumpf (b. 1931), Hagen Biesantz (1924-1996), Wolfgang Schiering (1925-2005),

75 The first woman who was accepted as a member of the Archaeological Society of Athens, in 1860, was Princess Dora d'Istria (1928-1888); Kokkinidou 2012, 109.

76 For example, the women who were occupied in the Swedish excavations: Wells 1998, 23 Fig. 10.

77 Wells 1998, 30; 34-35 Figs. 17; 19; 22-24.

78 Walter Hahland (1901-1966) had been an active member of the NS-Dozentenbund (National Socialist union of university teachers): Wikipedia contributors, Walter Hahland, in: *Wikipedia, The Free Encyclopedia*. <de.wikipedia.org/w/index.php?title=Walter_Hahland&oldid=187510723>, retrieved 13 May 2019.

79 Immerwahr 1996.

80 For the full text of the treaty of 17 May 1956, see <de.wikisource.org/w/index.php?title=Kulturabkommen_zwischen_Deutschland_und_Griechenland&oldid=3437730>, retrieved 13 May 2019.

81 Wikipedia contributors, Dieter Ohly, in: *Wikipedia, The Free Encyclopedia* <de.wikipedia.org/w/index.php?title=Dieter_Ohly&oldid=163259731>, retrieved 13 May 2019.



Figure 15. Federal chancellor of the Federal Republic of Germany Konrad Adenauer during his visit to Athens in March 1954 (private collection).

Reinhard Lullies (1907-1986), Alfred Mallwitz (1919-1986), and Goerd Peschken (b. 1931). From 1960, there were also Klaus Vierneisel (1929-2015), Gottfried Gruben (1929-2003), and others. The only female on the site in the period 1955-1960 who was working on a paid basis was Judith Perlzweig (1921-2013)⁸². She had worked at the Agora excavations before and knew the Kerameikos because she had been helping Grace in her work there in the late 1940s and early 1950s. The early 1960s brought change in the field, as now women took part in all parts of the Kerameikos work, from administration to excavation. We even see female specialists appear: Ursula Knigge (1930-2010), for example, started her work on the site as a trained photographer, and Angelika Kubanek (no dates available) as an architect⁸³.

The leading female in Greek archaeology during those years was Semni Karouzou (1898-1982)⁸⁴. She was the wife of Christos Karouzos (1900-1967), the director of the National Museum, and an intimate friend of the German Archaeological Institute's director, Emil Kunze (1901-1994)⁸⁵. In a way, Semni continued the series of wives of the excavators as described above, but she set new standards. From 1921, she had been active in the archaeological service of Greece (as a subordinate). She and her husband were members of the German Archaeological Institute, and they had given back their membership during the German occupation of Greece. From

82 Judith Perlzweig Binder worked in the Kerameikos 1957-1959. Documents in the Kerameikos archive, DAI Athens; see also Dipylon 2018.

83 See Niemeier 2010; Wikipedia contributors, Ursula Knigge, in: *Wikipedia, The Free Encyclopaedia*. <de.wikipedia.org/w/index.php?title=Ursula_Knigge&oldid=160429012>, retrieved 13 May 2019. A. Kubanek worked as an architect on the Kerameikos site in 1957 and on the Samos excavations during the 1960s.

84 Nikolaidou and Kokkinidou 1998; Kokkinidou 2012, 112-129 Fig. 31. 33-35. 37; Dyson 2006, 224.

85 Christos Karouzos: Kokkinidou 2012, 116-119; Emil Kunze: Fittschen 1995, 1-11.

the 1950s, Semni was to set standards for Greek female archaeologists that were maintained for decades, influencing the careers of Evi Touloupa (b. 1924), Angeliki Andriomenou (dates not available), Lila Marangou (b. 1938), and many others. Her standards not only referred to the education of the women, but also to the social and financial background of their families (ἀπο καλή οικογένεια – to have a proper family background) and the networks they belonged to. She would ask newcomers to Greece two questions: Where is your family from? and Who was your teacher?

Franz Willemsen (1910-1999) was the first Kerameikos director to hire women as assistants on the site⁸⁶. They were educated women from well-to-do families: Barbara Schlörb (1931-2009), Ursula Knigge, Bettina von Freytag-Löringhoff (b. 1943), and Avgi Proukakis (no date available). The female architect Angelika Kubanek-Clemente was a novelty as an on-site architect.

In summary, we can say that female archaeologists in Greece during that period were characterised by easy financial circumstances that gave them freedom from everyday obligations and access to an education at university level acquired outside Greece. Many of them either never married or were married without children. Through Franz Willemsen's job politics, Ursula Knigge was eventually assigned the post of Kerameikos field director in 1974. Willemsen was also second director to the German Archaeological Institute in Athens, and as a result of his other commitments, Knigge had, in fact, been managing the excavation for him for years before. She remained in office until November 1995. Thus, in contrast to other long-term excavations of the German Archaeological Institute in Greece (e.g. Olympia, Samos, or Tiryns), the Kerameikos was a pioneer in having a female excavation director. This made Knigge a prototype. The scarcity of successful women in German archaeology up to this point may be understood if we realize that in compilations of archaeologist's lives as presented in a 1988 volume by Reinhard Lullies, titled *Archäologenbiographien*, among 164 archaeologists there are only 2 women⁸⁷.

The strategies of female archaeologists to access and rise up the ranks in the field of archaeology had their price: even today, many successful female archaeologists remain unmarried, and many married female archaeologists do not have any children. In many cases, female archaeologists married another classicist or prehistorian who shared their predominant interest. A prominent example was Semi Karouzou.

A complete dedication to the field of research during the scientifically fertile years makes it hard for female archaeologists to incorporate pregnancy, birth, and family into their lives. Also, the infrastructure of excavations and field research in general is not accommodating to children. Consequently, it appears that some women spent their working lifetime proving that they could work in the field just like men. Could we call this an attempt at gender transformation? To answer this, it needs to be said that during the 19th and 20th centuries, a male successful archaeologist was expected to be married and to have a supporting wife as well as children, and to have achieved recognition in society. The first examples of this in Athens were Heinrich Schliemann and Wilhelm Dörpfeld, and there were many more to follow. It was the role of the wife to *'keep the mens's back free of other responsibilities'*, as these generations expressed it, in order to allow the men to dedicate themselves completely to their work. Only occasionally did this undivided dedication to classical studies, among other reasons, lead male archaeologists active in Athens to remain unmarried, for example, Karl Otfried Müller (1797-1840), Habbo Gerhard Lolling (1848-1894), and Hans von Prott (1869-1903)⁸⁸. This group of men, who invested all their energy into research, is probably very comparable in their life and work to the

86 Franz Willemsen: Fittschen 2000; Knigge 2000.

87 Lullies 1988.

88 Stroszeck 2008.

unmarried female archaeologists who occurred more than two generations later, after the Second World War.

The number of women who were both mothers and (field) archaeologists only increased slowly during the 1970s. Prior to the 1970s, this group, even more so than the unmarried or the married-without-children group, was stereotyped as impulse-driven and unable to think logically, yet helpful in day-to-day matters – just like the women in classical Athens. Only occasionally, successful female archaeologists did become mothers and managed to uphold their standards in research, such as Barbara Vierneisel-Schlörb (1931-2009), who had married the archaeologist Klaus Vierneisel (1929-2015). In spite of her fundamental publications, though, she never had an official position as an archaeologist.

It looks like motherhood was a factor that was prone to influence the careers of many female archaeologists. Likely for that reason, even though there has been a huge rise in the number of unmarried mothers in society at large, this group among archaeologists is almost vanishingly small.

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References

- Andrén, Anders 1998. *Between Artifacts and Texts: Historical Archaeology in Global Perspective*. Contributions to global historical archaeology. New York: Plenum.
- Angel, John Lawrence 1945. Skeletal Material from Attica. *Hesperia*, 14, 279-363.
- Bisel, Sara 1990. Anthropologische Untersuchungen. In: Kovacsovics, Wilfried K., *Die Eckterrasse an der Gräberstraße des Kerameikos*. Kerameikos. Ergebnisse der Ausgrabungen 14. Berlin: De Gruyter, 151-159.
- Breitinger, Emil 1939. Die Skelette aus den submykenischen Gräbern. In: Kraiker, Wilhelm, and Kübler, Karl, *Die Nekropolen des 12. bis 10. Jhs*. Kerameikos. Ergebnisse der Ausgrabungen 1. Berlin: De Gruyter, 233-255.
- Brueckner, Alfred 1910. Κεραμεικού ανασκαφαί. Αρχαιολογική Εφημερίς, 49, 95-143.
- Brueckner, Alfred 1931. Mitteilungen aus dem Kerameikos V. *Athenische Mitteilungen*, 56, 1931, 1-32.
- Christiansen, Stella 2018. Hilda Lorimer (1873-1954). In: Parkin, Alice, and White, Bethany (eds). *Women in Oxford's History Podcast. Exploring women's contributions to a city's past. Series 2*. <womenofoxford.wordpress.com/2018/07/31/series-2-hilda-lorimer-1873-1954/>, e-published 31 July 2018; retrieved 13 January 2019.
- Christie, Agatha 1977. *An Autobiography*. London: Dodd, Mead & Company.
- Davidson, James 2013. Bodymaps: Sexing Space and Zoning Gender in ancient Athens. In: Foxhall, Lin and Neher, Gabriele (eds). *Gender and the City before Modernity*. Gender and history special issue book series. Oxford: Wiley-Blackwell, 107-124.
- Dipylon 2018. Judith Binder's Opus Magnum. In: *Webpage of Dipylon. Society for the Study of ancient Topography*. <dipylon.org/en/2018/05/07/judith-binders-opus-magnum/>, e-published 7 May 2018; retrieved 15 January 2019.
- Fittschen, Klaus 1995. Gedenkfeier für Emil Kunze und Semni Karusu am 10. März 1995. *Athenische Mitteilungen*, 110, 1-11.
- Fittschen, Klaus 2000. Franz Willemsen, 1910-1999. *Athenische Mitteilungen*, 115, 12-17.

- Foxhall, Lin 2013. *Studying Gender in Classical Antiquity*. Cambridge: Cambridge Univ. Press.
- Geroulanos, Marinos 1910. Σκελετοί Ἡρακλεοτῶν ἐν τῷ Κεραμεικῷ. *Αρχαιολογική Εφημερίς*, 49, 143-148.
- Gill, David 2107. Dorothy Lamb (1887-1967): A Pioneering Mediterranean Field-Archaeologist. In: Joukowsky, Martha Sharp, and Lesko, Barbara S. (eds). *Breaking Ground: Women in Old World Archaeology*. Web project at *Brown University*. <www.brown.edu/Research/Breaking_Ground/bios/Lamb_Dorothy.pdf>, e-published 2017; retrieved 13.01.2019.
- Goldman, Hetty 1918. With the Spade in Greece. *Radcliffe Quarterly*, 2, 34-36.
- Harris, Oliver J. T., Hughes, Iessica, Osborne, Robin, Robb, John, and Stoddart, Simon 2013. The Body and Politics. In: Robb, John and Harris, Oliver J. T. 2013 (eds). *The Body in the History. Europe from the Palaeolithic to the future*. New York: Cambridge University Press, 98-128.
- Henneberg, Jörg M. 2004. *Das Sanssouci Kaiser Wilhelms II. Der letzte Deutsche Kaiser, das Achilleion und Korfu*. Oldenburg: Isensee.
- Houby-Nielsen, Sanne 1995. 'Burial Language' in Archaic and Classical Kerameikos. *Proceedings of the Danish Institute at Athens*, 1, 129-191.
- Houby-Nielsen, Sanne 1996. Women and the Formation of the Athenian State: The evidence of Burial Customs. *Mètis. Anthropologie des mondes grecs anciens*, 11, 233-260.
- Houby-Nielsen, Sanne 1997. Grave Gifts, women, and conventional values in hellenistic Athens. In: Hannestad, Lise, Engberg-Pedersen, Troels, and Bilde, Per (eds). *Conventional Values of the Hellenistic Greeks*. Conference Rongsredgaard 25-28 January 1995 Aarhus. *Studies in Hellenistic civilization* 8. Aarhus: Aarhus University Press, 220-262.
- Immerwahr, Sara A 1996. Biography of Virginia Grace. In: Joukowsky, Martha Sharp, and Lesko, Barbara S. (eds). *Breaking Ground: Women in Old World Archaeology*. Web project at *Brown University*. <www.brown.edu/Research/Breaking_Ground/bios/Grace_Virginia.pdf>, written: October 1996; e-published 27 July 2004; retrieved 23 January 2019.
- Knigge, Ursula 1976. *Der Südhügel*. Kerameikos. *Ergebnisse der Ausgrabungen* 9. Berlin: De Gruyter.
- Knigge, Ursula 2000. Zum Tod von Franz Willemsen. *Antike Welt*, 31, 207.
- Knigge, Ursula 2005. *Der Bau Z*. Kerameikos. *Ergebnisse der Ausgrabungen* 17. München: Hirmer.
- Kokkinidou, Dimitra (Κοκκινίδου, Δήμητρα) 2012. *Οι γυναίκες στην αρχαιολογία. Ιστορίες στο Ημίφως* [Women in archaeology. Twilight stories]. Thessaloniki: Zéte.
- Kovacsovics, Wilfried K. 1990 *Die Eckterrasse an der Gräberstraße des Kerameikos*. Kerameikos. *Ergebnisse der Ausgrabungen* 14. Berlin: De Gruyter.
- Kübler, Karl 1939. *Die Nekropolen des 12. bis 10. Jahrhunderts*. Kerameikos. *Ergebnisse der Ausgrabungen* 1. Berlin: De Gruyter.
- Kyriazi, Nelly 2012. The Influence of Ancient Greek Sculpture und the Sepulchral Monuments of the First Cemetery of Athens. In: Stroszeck, Jutta, and Frielinghaus, Heide (eds). *Vorbild Griechenland. Zum Einfluss antiker griechischer Skulptur auf Grabdenkmäler der Neuzeit*. Möhnese: Bibliopolis, 41-51.
- Lagia, Anna 2000. Preliminary Analysis of the Human Skeletal remains. *Archäologischer Anzeiger*, 456-493.
- Lagia, Anna 2007. The Human Skeletal Remains. In: Florian Ruppenstein, *Die submykenische Nekropole. Neufunde und Neubewertung*. Kerameikos. *Ergebnisse der Ausgrabungen* 18. München: Hirmer, 273-279.
- Lullies, Reinhard 1988 (eds). *Archäologenbildnisse. Porträts und Kurzbiographien von klassischen Archäologen deutscher Sprache*. Mainz: von Zabern.
- Margariti, Katia 2016. On identifying the deceased in two-figured and multi-figured scenes of classical Attic funerary reliefs. *Journal of Greek Archaeology*, 1, 177-192.

- Margariti, Katia 2018. Lament and Death instead of Marriage: The Iconography of Deceased Maidens on Attic Grave Reliefs of the Classical Period. *Hesperia*, 91-176.
- Mellink, Machteld J., and Quinn, Katherine M. 2004. Hetty Goldman, 1881-1972. In: Cohen, Getzel M., and Joukowsky, Martha Sharp (eds). *Breaking Ground: Pioneering Women Archaeologists*. Ann Arbor: University of Michigan Press.
- Morris, Ian 1987. *Burial and Ancient Society: The Rise of the Greek City-State*. New Studies in Archaeology. Cambridge: Cambridge University Press.
- Morris, Ian 1992. *Death-Ritual and Social Structure in Classical Antiquity*. Key themes in ancient history. Cambridge: Cambridge University Press.
- Niemeier Wolf-Dietrich 2010. Ursula Knigge 1930-2010. *Athenische Mitteilungen*, 125, VII-XII.
- Nikolaidou, Marianna, and Kokkinidou, Dimitra 1998. Greek women in archaeology: an untold story. In: Díaz-Andreu, Margarita, and Sørensen, Marie Louise S. (eds). *Excavating women: a history of women in European archaeology*. London: Routledge, 235-265.
- Persson, Axel 1937. L'Activité Suédoise en Grèce au point de vue archéologique. *Archaeologiai Értésitö*, 50, 190-203.
- Petrakos, Vasilis Ch. (Πετράκος, Βασίλης Χ.) 1987. *Η εν Αθήναις Αρχαιολογική Εταιρεία. Η ιστορία των 150 χρόνων της 1837-1987*. Athens: Archaiologikē Hetaireia.
- Powell, Dilys 1946. *The Traveller's journey is done*. London: Hodder & Stoughton.
- Renfrew, Colin, and Bahn, Paul 2001. *Archaeology. Theories, Methods, and Practice* [3rd edition]. London: Thames & Hudson.
- Ruppenstein, Florian 2007. *Die submykenische Nekropole. Neufunde und Neubewertung*. Kerameikos. Ergebnisse der Ausgrabungen 17. München: Hirmer.
- Schnurr-Redford, Christine 1996. *Frauen im klassischen Athen. Sozialer Raum und reale Bewegungsfreiheit*. Antike in der Moderne. Berlin: Akademie-Verlag.
- Schoeller, Ghislaine 1987. *Lady Jane. Eine Frau verführt ihre Zeit. Biographischer Roman*. Bergisch Gladbach: Lübbe.
- Stansbury-O'Donnell, Mark D. 2006. *Vase Painting, Gender and Social Identity in Archaic Athens*. New York: Cambridge University Press.
- Steffen, Ruth 2002 (ed.). *Leben in Griechenland 1834 und 1835. Bettina Schinas, geb. von Savigny. Briefe und Berichte an ihre Eltern in Berlin*. Münster: C. Linau.
- Stroszeck, Jutta 2008. 'Ein ergreifendes Bild der Trauer'. Antikenrezeption auf dem Ersten Friedhof von Athen. Zur Grabstele des Epigraphikers Hans von Prott (1869-1903). *Thetis*, 15, 2008, 145-149.
- Stroszeck, Jutta 2014. *Der Kerameikos in Athen. Geschichte, Bauten und Denkmäler im archäologischen Park*. Möhnese: Bibliopolis.
- Stroszeck, Jutta 2018. Mit König Otto in Athen: Zwei Schicksale. Bettina Schiná, geb. de Savigny (1805-1835) und Bernhard Ornstein (1806-1896). In: Schlumm, Hans-Bernhard, and Kertscher, Andreas (eds). *Deutsche Spuren in Griechenland. Der Beitrag der deutschen Einwanderung im 19. Jahrhundert zur Entwicklung Griechenlands*. Athen: Griechenland Zeitung, 55-88.
- Tsiknakis, Kostas (Τουκνάκης, Κώστας Γ.) 2016. Μία Περιγραφή του Ναού του Νεμείου Διός στα Τέλη του 17ου Αιώνα. In: Katsonopoulou, Dora, and Partida, Elena (eds). *ΦΙΛΕΛΛΗΝ. Essays presented to Stephen G. Miller*. Athens: The Helike Society, 289-298.
- Walker, Alice Leslie, and Goldman, Hetty 1915. Report on Excavations at Halae of Locris. *American Journal of Archaeology*, 19, 418-437.
- Wells, Berit 1998 (ed.). *Life around an excavation*. Catalogue of an Exhibition at Nauplion 24.10.-14.11.1998. Athens: Swedish Institute at Athens.
- Whitley, James 1996. Gender and hierarchy in early Athens. The strange case of the disappearance of the rich female grave, *Mêtis*. *Anthropologie des mondes grecs anciens*, 11, 209-232.
- Wilhelm II 1924. *Erinnerungen an Korfu* [2nd edition]. Berlin: De Gruyter.

Women in the field. Preliminary insights from images of archaeology in Portugal in the 1960s and the 1970s. A first essay

Ana Cristina Martins

Magis movent exempla quam verba

Abstract

Between the end of the 1960s and 1974, Portugal experienced a sort of political ‘spring’ (Primavera Marcelista). It started with the final illness of the dictator António de O. Salazar (d. 1970) and ended when the authoritarian Estado Novo government that he had established in 1933 was overthrown (Barreto 2000; Otero 2000). It was a time for hope and adventure, individual and collective, as, for the first time since the end of the 1950s, new ideologies, new theoretical frameworks, and new ways of working began to be introduced in the country, mainly thanks to a generation of intellectuals who went abroad to study at Western European and American universities. Archaeology was no exception, opening the way to international collaboration, in order to update theories, methodologies, and methods. This new era for this science in the country was only possible due to the commitment of the ‘transition generation’ of archaeologists, who constituted a bridge to new ways of thinking the past, of doing fieldwork, and of analysing the excavated data. The intellectual elites followed the new foreign theoretical frameworks and were eager to apply them in their everyday life. Even so, Portuguese society remained strongly conservative overall, especially concerning women. Despite this conservatism, a growing number of young women began studying archaeology, doing fieldwork, travelling abroad to update their knowledge, and collaborating with foreign colleagues.

Who were these women? What were their social and economic backgrounds? These are some of the questions I intend to answer in this paper. In addition, I aim to comprehend the reasons for some behavioural differences observed between female and male archaeologists, applying the Panofsky method of image interpretation (Panofsky 1939), using photographs as a primary historical source.

Keywords: *Portugal, history of archaeology, history of women, image interpretation*

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Some first thoughts, doubts, and possible answers

Writing about women in Portuguese archaeology is a massive exercise for a number of reasons. The first reason is that there are, as yet, few archaeologists dealing with it, which I connect to the insufficiency of women and gender studies in university curricula – a circumstance that I think should be analysed by different experts. The second reason is tightly linked to the first, namely, a silent disregarding for the theme, especially from most archaeological leaders in the country, including women, women who are reproducing – probably unconsciously – male narratives to ensure their university positions. The third reason is that there is a general understanding of gender and women’s studies as exclusively female issues, which leads to unwished-for research ‘ghettos’. But, knowing this, most Portuguese historians, of all genders, seem to continue to replicate male discourses – narratives that tend to ignore women’s historical reality, even though there is a women’s history to be encompassed by world history. Unless we stop replicating these discourses, women will remain accomplices – although involuntarily – of a world historiography they did not shape, live, represent, or write.

There are some Portuguese university groups working very seriously on women’s issues. However, they are mostly focused on sex and gender equality problems, women and health care, sexual liberty, education, and labour – topics usually analysed from a sociological and a constitutional point of view, as they became central in Portuguese society after the Revolution of 25 April 1974. In the meantime, some of women’s political, economic, and social requirements had already been fulfilled. Others, however, still need to be accomplished, even though women are the main workforce in the country. More than that, Portugal ranks fourth among the European Union (EU) countries in terms of proportion of women scientists and technicians, and the three main private cultural and scientific foundations (Fundação Calouste Gulbenkian, Fundação de Serralves, and Fundação Champallimaud) are headed by women (EUROSTAT data 2017). But inequality is still a problem, as mentalities are not changing as quickly as the legislation.

There are also universities comprising research groups more focused on the role played by women in the arts, literature, higher education, health care, suffragism, and the First World War. What about women in science? It seems a subject that does not draw as much attention as it does in other countries. Why? Maybe this national peculiarity can be explained by the absence of the second-wave feminism in the country due to the totalitarian and patriarchal regime of the *Estado Novo* (New State) (Vicente 2000; Torgal 2009). But two other phenomena may also have played a role in this process: the complex return of socially more liberal and urban Portuguese citizens from the former colonies (by then already labelled ‘Overseas Provinces’) following their independence, and the rapid adoption of a democratic constitution based – in theory – on equal rights for everybody (Silva 2000). Three events that somehow persuaded women to become more aware of their social role, of their role as an important workforce and, last but not the least, of their role as an important piece in the national political scenario. Their voices began to matter. And the proportion of women in secondary schools and colleges grew significantly over the past four decades.

I suspect that, because they did not live through this history and since women scientists now predominate in the country, the post-Revolution generations do not understand just how relevant it can be to study the history of women in science, at least not quantitatively. As for the top scientific positions, they are still occupied by men, even if this picture is also gradually changing. For instance, most national museums – archaeological ones included – are headed by men. And this is just one example of this sort of ‘transition time’, when most of the population remains ruled

by a gender (male) minority, as it has been throughout centuries. Most women do not even recognise how they continue to unquestioningly duplicate theories and ways of looking at the surrounding world. What is more, most women make almost no effort to compose other narratives resulting from new ways of seeing and from approaching life more in line with some social (Western) realities.

And this is a sensitive aspect to the history analysed in this paper: are there different ways of analysing the same phenomena, depending on whether one is a woman or a man? Do they think differently? Do they see things and approach things differently? Do they interpret things differently simply because of their biological sex? Or do they do so because they are the product of centuries of reproducing and transmitting, generation upon generation, the same ideas, based on the same life experiences, and therefore the same views and approaches? Regardless of the reasons, something is changing – and it must change, since more than a half of the world's population lives, sees, feels, and acts differently each day. And each day shows them that there is another way than the male way of approaching, analysing, and solving the same situations.

What about archaeology?

In those (Western) countries where second-wave (and even third-wave) feminism was rooted deeply, archaeology became a very interesting research field, as it encouraged researchers to unveil women archaeologists and the role they played in the development of multiple aspects of archaeology, from fieldwork to museum studies (Frink and Weedman 2006). Additionally, it opened the way to approach the past from a feminist point of view while scrutinising the origin of some theories and even the language and the iconography (re)produced in compendiums, monographs, journals, newspapers, didactic material, movies, museum exhibitions, museum catalogues, and oral and/or poster presentations. And the conclusion was that the past seemed to be very similar to the most recent present. In fact, there was a predominant androcentric idea of that same past transferred almost unaltered to daily life, embodying almost every angle of our day-to-day life. On the other hand, there is an unconscious anachronism in analysing the past from our contemporary perspective. Can historians interpret the past otherwise? Or is the past always contemporaneous?

Still, this anachronical historical approach seemed no longer fit the reality of those (Western, mainly Anglo-Saxon and French) times. That is also why the generation of scholars graduating by the end of the 1960s and the beginning of the 1970s opened a Pandora's box from which are being now pulled such themes as the domestic dimension of life, always devalued, together with the role of women in cultural exchange, namely, through marriage politics, and rituals. Historians of archaeology are now facing and comprehending these new approaches in some way thanks to the so-called 'Third Science Revolution in Archaeology' (Kristiansen 2014, 24). At the same time, regional, national, and transnational projects on women in archaeology are being financed by the EU to reinforce equality in EU society and to underline the relevance of women's multiple roles.

What about women in archaeology in Portugal?

In 1996, Susana Oliveira Jorge and Vítor Oliveira Jorge wrote the first essay on Portuguese women archaeologists (Jorge and Jorge 1996) – an attempt that did not seem to gain the interest of their fellow archaeologists and was seen more as an extravagance than a real archaeological exercise – because it was based on archival research and not on hard fieldwork (when most archaeologists refer to fieldwork, they do not mean archives and libraries). It is most impressive that, although most senior archaeologists have dedicated one or two papers to the history of archae-

ology in Portugal – while almost never mentioning the presence and contribution of women – they did not consider this history as a valid basis for future research projects. Why? Is it possible that they evaluated the history of archaeology as a prevalent domain for historians, and not so much for archaeologists? Probably, yes. But it is also possible to understand the late inclusion – compared with other countries – of the history of archaeology in Portuguese university curricula as a function of the priority given to fieldwork.

The history of archaeology should not be just one subdiscipline. It should play its own role within research units, contributing to interdisciplinary and transversal activities as much as possible. This is also why we could expect young scholars to be motivated to do history of archaeology. But they are not; instead most of them feel it a waste of time, unless it clarifies issues related to specific sites, collections, and artefacts they are studying. Only then do young scholars recognise its relevance, as biologists do regarding history of biology, anthropologists do regarding anthropology, or museologists do regarding museology.

In short, we identify the absence of women and gender studies in Portuguese archaeological curricula with the still weak status of the history of archaeology in these same curricula, as it continues to be regarded more as a dilettante exercise within the archaeological community. Additionally, I suspect that most Portuguese students and some professors – mainly male – have never read an essay on women, gender, and archaeology. Is this a strong statement? Maybe it is. But, how also can I explain, for instance, the fact that they constantly mix up sex and gender?

In 2017, my colleagues and I organised the second international seminar and workshop on gender and archaeology in Portugal. The time gap between that workshop and the first was three years. And there were almost no differences. To start with, the roster of Portuguese speakers was almost the same. This means that, contrary to the initial motivation and expectation, the impact of the first workshop was zero. More surprisingly, however, was the non-attendance of professors and students during the sessions. How can and how should I analyse this circumstance? Can I state that they do not care about this issue? If so, why? Is it because (as heard from some male colleagues) this is a women's affair – meaning that people ignored the gender aspect and therefore thought it not worthy of academic awareness? But even if I can understand – but hardly accept – this kind of reaction and response from older academics, I do not comprehend the disinterest shown by younger students. Is it because they follow, in this matter, as in many others, the thoughts of their professors? But some of these professors are women...

If the recurrent oral narrative spread in university corridors – not so in classrooms – is that this is a women's affair (to avoid saying 'feminist', in a pejorative way), then it is understandable that women professors do not try to officially change this view, as male professors continue to dominate candidate juries. It might be very clarifying to analyse the iconography of homepages of certain archaeological research centres, as they are full of sexist issues (even if unconscious): men prevailing in leading roles, mostly in fieldwork. I will scrutinise this subject elsewhere, in forthcoming essays and papers.

Portuguese women in the field (a brief glimpse)

Women in the field were a serious and complex issue, not only in Portugal, but in every part of the Western world (Díaz-Andreu and Sørensen 1998; Sørensen 2000) – elite women, that is, as peasants and other professional categories, were of course used to manual labour. The nobility, especially the rural nobility, was well acquainted with peasants and looked after – in a paternalistic way – the people working and living on their land, that is, within their power geographies. And elite women

were getting used to travelling abroad, even if with chaperones, with their parents or brothers, to complete the 'Grand tour' (Colletta 2015). Nevertheless, the problem with women in the field emerged (not so) surprisingly with the establishment of Liberalism and with the bourgeois mentality. Interesting that it was botany which conferred some individual freedom on women (Page and Smith 2011). While walking in their own gentry properties and gardens, they collected plants and built a sort of domestic herbarium for their own pleasure, but also for the instruction of their family members, especially the youngest ones, usually their brothers, sons, or nephews. In fact, it was a sort of 'women's' work, as it implied inventorying, storing, and sometimes drawing and working in watercolour, which accorded with their education profile and with what (high) society expected from them.

Practising archaeology – as geology, for instance – was another thing (Burek and Higgs 2007). Some women were rich enough to bypass all social conventions and even gain the admiration of both women and men (but mostly the jealousy of women). Some were spies (Lukitz 2006) with their path opened, secured, and assured by top politicians, diplomats, and officers; some were married to archaeologists. Only exceptionally were they simple adventurers with nothing to lose, no money, no social condition, no family, no honour, being free in their search for (presumably) happiness.

Portuguese archaeology was a male occupation, at least during the 19th century and the first decades of the 20th century. This is not to say that women were completely absent from archaeology. Besides attending conferences and congresses, becoming members of erudite societies (usually as wives and/or daughters of male associates), there is at least one example of a woman, Amélie de Clarange Lucotte, who drew and created watercolours of some of the artefacts discovered by her husband, the archaeologist Sebastião Estácio da Veiga (1828-1891; Cardoso 2007). And there is a peculiarity that may explain this exception in such a conservative society as the Portuguese, by the end of the nineteenth century: She came from a foreign military family with strong cultural interests. But mostly archaeology was not a woman's job.

Not even the Republican regime would change this scenario, despite the role played by women during and after the First World War. Women went into nursing or teaching primary school. Eventually, they could also become secretaries. But, once again, we are talking about the elites, since most women worked at home or in the fields and factories. But even for the elites, almost the only way for a woman to be able to travel and participate in scientific research was for her to get married to a scientist liberal enough to take his wife with him. That was the case for the botanist and professor at the University of Coimbra, Luís W. Carriço (1886-1937), who went with his wife to Angola at the end of the 1920s (Martins 2014a; 2014b). It is not known what her real role was during this 'scientific mission', besides being his wife. The known photographs of her during their travels do not show a woman really prepared for fieldwork.

What I do know for sure is that, between 1946 and 1947, the Anthropological and Ethnological Mission to Guinea – organised by the Board for Overseas Geographic Missions and Scientific Research (BOGMSR), supervised by the physician, anthropologist, prehistorian, politician, and professor at the University of Porto António Augusto Esteves Mendes Correia (1888-1960) (Martins 2011b), and headed by one of his foremost disciples, the zoologist Amilcar Mateus – included a female zoologist, Mateus's wife, Emília de Oliveira Mateus (Martins 2014b; 2016b), who, as a scientist, played a role in the mission additional to that of being a wife, wearing male clothing more suitable to fieldwork, which she also carried out. Additionally, she collaborated in an archaeological excavation in Guinea and published papers together with her husband after returning to the metropolis. And her case was not the only one of its kind.

Other research couples were already identified in the history of science in Portugal, some of them working on the same BOGMSR. There were other examples, from universities, and even women who always signed their presentations, papers, and monographs with their unmarried surnames. Most of them were botanists and zoologists, and they worked mainly in gardens, herbariums, zoos, and laboratories. A minority, though, stayed away from home, sometimes in the middle of nowhere surrounded by unknown people and – what was more – by men. Others healed strangers. The human sciences seemed to be the exception to this pattern: history, languages, literature, philosophy, and geography, although especially physical geography was not particularly desirable for young women. What about the arts? They were complicated for women during the extremely conservative and moralistic Estado Novo. Nonetheless, women and men worked together, for instance, in the same laboratories, museums, or libraries, a fact that can help us to understand why women did not feel particularly gender discriminated against, and why it became apparently so easy for them to join their male companions during the Primavera Marcelista ('Marcelo's Spring') and the post-revolutionary period (see below).

Women in archaeology in Portugal until the 1950s (another brief vision)

In addition to learning about the woman designer and watercolourist mentioned above and about the scarce female attendees at scientific meetings and female members of erudite societies, I can also use postcards to identify the link between women and archaeology, mainly representing dolmens – a central topic in Western archaeological debate between the end of the 19th century and the middle of the 20th century – where men and women, usually peasants, were used as a scale. This method of using humans for scale was also applied by foreign archaeologists, such as Georg Leisner (1870-1957), who came to Portugal to study the megaliths thanks to the support of the German Archaeological Institute (Deutsches Archäologisches Institut; DAI, founded in 1829). Precisely one of his photographs from the 1930s (<arachne.uni-koeln.de/item/objekt/176173>, photo: D-DAI-MAD-LEIG-LEI-03-006_176173, retrieved 5 May 2019) shows his wife, Vera Leisner (1885-1972), seated to indicate the scale of a megalithic monument (Anta de Melriço, Castelo de Vide), who was a much-respected archaeologist, excavating, presenting, and publishing together with Portuguese archaeologists (Bohrer 2011).

In the meantime, the country hosted conferences from foreign experts, including women, as was the case for Jacquetta Hawkes (1910-1996; Cooke 2013), invited to give presentations in Lisbon about the Roman period, her academic speciality. Probably there are more examples such as this one, but finding them will require 'excavating' many more archives, as will finding out about their work and the purpose of their voyage.

José Leite de Vasconcelos (1858-1941), the mastermind and first director of what is nowadays called the Museu Nacional de Arqueologia (National Archaeological Museum, founded in 1893), hired Rosa Capeans (1894-1985), a former student at the Faculty of Arts, University of Lisbon, where he taught philology, epigraphy, numismatics, and archaeology, to work with him, mostly in the museum's library. Both a museum and a library could be considered perfect professional spots for women. Gradually, though, she began to accomplish other duties, especially under the supervision of the second museum director, Manuel Heleno (1894-1970), who seemed to make no distinction between proficient female and male students. More than that, he was able to hire Irisalva Moita (1924-2009) as an assistant professor at the beginning of the 1950s. In addition, Heleno encouraged his students – both male and female – to write their undergraduate thesis on materials stored in the

museum, in order to have them studied. He incentivised students to present oral papers and to publish, especially within the Instituto de História, Arqueologia e Etnografia (Institute for History, Archaeology and Ethnography), founded by him at the beginning of the 1930s to compete with the prestigious Associação dos Arqueólogos Portugueses (Association of Portuguese Archaeologists [AAP], founded in 1863). Other female students worked there as volunteers, cleaning, cataloguing, inventorying, and exhibiting collections (Bugalhão 2013).

Oddly, as far as we know, Heleno never recommended that his female students go abroad for specialisation. This endorsement came from other professors and experts. This was the case for Maria de Lourdes Costa Artur (1924-2006), belonging to a wealthy liberal family, who alone decided to become a major specialist in the Roman period and museum studies. This paper is not about her and her story, which is already partially published, based on previously unknown archival material (Martins 2016b). Nevertheless, she is the inspiration for the exercise I intend to undertake here. So, let's begin.

Semiotic and semantic analysis I (one more brief insight)

Costa Artur worked with other archaeologists besides Heleno. Manuel Afonso do Paço (1895-1968) was one of them. And it was thanks to him that she obtained a grant from the Instituto para a Alta Cultura (Institute for High Culture; 1936-1952) to go to Madrid (Martins 2016b).

Together with Paço and Eugénio Jalhay (1891-1950), Costa Artur excavated the chalcolithic site of Vila Nova de São Pedro, near Azambuja, northern Lisbon (Cardoso and Ribeiro 2013), a site that is well known in Portugal.

Some of the photographs taken during the fieldwork allow researchers to analyse them from a semiotically and semantically (= heuristically and hermeneutically/iconographically and iconologically) point of view, according to coeval social parameters (Ruck and Slunecko 2008). I will apply the Panofsky method of image interpretation (Panofsky 1939), analysing the chosen photographs (= objects) separately at three levels: (1) first (= *primary* or *natural*), the factual description of what we see; (2) second (= *secondary* or *conventional*), the recognition of the events taking place in the images; and (3) third (= *intrinsic*), the disclosing of the inherent historical contexts.

As I did with the Mission to former Portuguese Guinea mentioned above, I will scrutinise these photographs not just as mere illustrations or complements of a certain written narrative. On the contrary, I will examine them exactly as they are, as a primary source, an imagetic narrative, 'written' in a specific historical context. This means that photographs (= images) are much more than 'mere' bi-dimensional objects. In fact, they are more than random sources. Just like any other depiction and audio-visual material photographs were created with a specific purpose in mind (sometimes unconsciously), and that is why they must be considered by historians, in general, following the methodology of historians of art, visual culture, and museum studies, not to mention anthropologists and ethnographers (Bergstein 2010; Pinney 2011; Sheehan 2015), or even archaeologists, and historians of archaeology (Smiles and Moser 2008).

Each photograph can tell us a lot about several aspects of individual and collective daily life. They just must be questioned by people searching for specific data; by people capable of making them talk, of transforming their supposed static, iconographic narrative into a written language. Photographs allow distinctive polysemic analyses, while their immateriality can unveil an emotional palimpsest. Furthermore, it is an imagetic narrative that (re)creates reality. That is why, as with any



Figure 1. Vila Nova de São Pedro (Portugal). Excavation team, beginning of the 1950s (photograph: unknown; Archive Ana C. Martins).

other kinds of record, we should not decontextualise them. Otherwise, we will never grasp their real sense and purpose, and we will never totally understand their paratext. In addition to the identification of the inherent contexts and actors, we should recognise the text and the pretext, as every image generates a narrative, whether oral or written (Joly 2000). Nevertheless, we should never forget that such analysis is always individual, and therefore full of subjectivities, especially because, most of the time, we do not know who took the photographs and for which purpose.

So, in almost every photograph I have selected to point up my own ‘narrative’ I am dealing with a discursive, interdiscursive, and metadiscursive material – material full of its own scenarios and language codes (= body language and spots). This is the case for local people, peasants, seasonally hired for archaeological work. Women, however, earned half the money men did, because they were women, because they were not supposed to do as much of the hard physical labour, or both. But this discrepancy was common – and even accepted – in those times. On the other hand, analysing the existing photos and other archive material, I can conclude that there were more female than male fieldworkers. Women busy with a main task: identifying and putting aside even the smallest pieces of hypothetical artefacts while sifting the soil excavated by their male companions.

Whether by a female complicity (resulting from the acceptance of different roles played by each sex in society, or from the establishment of an unofficial sex solidarity), or by various kinds of fieldwork duties, there are women’s and men’s groups in the first photograph I have chosen (Fig. 1). Looking at them, I have the feeling that I should envision different common narratives and narrative communities, or even social bias behind these same narratives. It is interesting though that the excavation’s leaders, Costa Artur (a woman) and Paço (a man), are standing closer to the women’s group. Does this reflect personal sympathy? A paternalistic attitude? I do not know.

But the photograph (Fig. 1) tells us much more than this. For instance, it speaks about (local, rural) poverty (Luís 2000). Poverty – realistic, mental, and psychological – disclosed, in this case, not only by their clothes and their shoes (or the absence of shoes), but also by the way they stand, look into the camera, and avoid the camera.

Even if I did not already know who they were, I could immediately recognise the excavation leaders. Costa Artur, the only female graduate in the field, stands in front of all the other women, looking confident, and smiling almost as if she did not care about the camera. And she is the only person with the hands in the jacket pockets

and – what is more – she is the only woman wearing trousers. A woman wearing working trousers was still quite unusual in a conservative society such as Portugal's, where there was a significant divide between how each sex should behave (Policarpo 2011). Her clothing should signify that she was mentally free – a freedom attained thanks to the liberal education she received at home to the point that she could work with men and stand beside them. In addition, by the end of the 1950s, the urban elites, who were less Catholic, began to be influenced by the prevalent foreign – especially Hollywoodian – aesthetics, thanks to the media, particularly television (Ferreira 2011, 259), and the example of extraordinary (still uncommon...) foreigner women (Cooke 2013).

What about Paço? He does not seem to be a fieldworker, at least in that moment, even though he is in a short-sleeved shirt. Apart from this, he is the only one on one knee, in an attitude of a true team leader. An attitude he probably adopted from his time in the military.

Regarding the other actors in this photograph (Fig. 1), we see how some women stand shyly and uncomfortably, as it was their first time in front of a camera. Others – the minority – seem not care about the camera, nor about the situation itself. One young man exhibits his tool, a tool that symbolises his collaboration in the excavation, a tool with a double function: excavate to produce, excavate to discover (= produce knowledge). This fieldwork tool is a unique sign with multiple significations depending on the working object and purpose.

Only one man is seated, perhaps the oldest one. Close to him stands a child. Another child is in a woman's arms, a situation that induces us to ponder how children were admitted to the excavation area. Was it because their relatives were not able to leave them with anyone else and they were too small to go to school? Usually this excavation took place during summertime, that is, during school holidays.

Summarising, there are obvious dissonances in the photograph (Fig. 1; but coherent in those times) in terms of social status, economic status, age, and leadership. But were local workers aware of those differences? Some of them appear to be, judging by the way they try not to look into the camera, as if they are ashamed of their own economic and social condition. Others, younger, seem not to care that much. On the contrary, they stand with a smile, apparently proud and relaxed, a mix of feelings that could be related to the fact that, in addition to providing extra money – though not that much – they would earn with this activity, hence helping their families economically, this novel fieldwork could be seen as a way of being temporarily freed from some restrictive social conventions and norms; it could be a way of subvert the monotony of their country lives once in a while. And this was no ordinary fieldwork. Not at all. It was special fieldwork, scientific work. So, from a social point of view, it could help them to reach some kind of local status, even if just psychological, especially considering that most of them were illiterate. Illiterate and generally not taken account of by the local powers. Or perhaps it had nothing to do with gaining status, since locals did not pay much attention to these activities, as they seemed not to contribute much to the improvement of their individual and collective lives. A situation to clarify with the survivors.

The second chosen photograph was almost certainly taken on the same day (mostly because of Paço's clothes) and witnesses another narrative construction (Fig. 2). Intentionally or not, there is always a narrative, as unconscious as it may have been. Unlike the first photograph, where, excepting for the oldest local man and Paço, all appear to stand in the same way as in the previous one, this photograph seems to have resulted from a hierarchical approach to the team, using the typical pyramid principle: men on the top or beyond the women, in a paternalistic/patriarchal/Victorian social vision. But there is a substantial difference this time: The two leaders, Costa Artur and Paço, are kneeling, side by side, as if they were



Figure 2. Vila Nova de São Pedro (Portugal). Excavation team, beginning of the 1950s (photograph: unknown; Archive Ana C. Martins).

equals – almost in the same way that Tessa Wheeler (1893-1936) was photographed (Carr 2012, frontpage). And there is something more in the photograph (Fig. 2) that elucidates country life: the three children – who had nowhere else to go or who were there just for the fun – are not wearing any shoes (we must remember that shoes were an expensive item for many people).

What about archaeological excavation in the city during the same period?

First, urban archaeology was introduced in the country by the already mentioned Moita, who, as director of the city of Lisbon museum, among other tasks, supervised archaeological activities (Leite 2013). When construction for the Lisbon underground began, in the city centre, workers found ancient structures and artefacts. Called to the site, Moita attributed them to the 16th-century Hospital de Todos-os-Santos (Hospital of all Saints), destroyed by the severe earthquake of 1755. It was a brand-new situation for archaeology in Portugal, as Moita had to deal with several interests: modernisation of urban public transport; reinforcement of dominant public policies; and safeguarding Lisbon's heritage and memories. It was essential to find a compromise between these three visions and needs, and it was Moita who achieved it thanks not only to an outstanding personal charisma, resilience, and diplomacy, but also to a deep and strong sense of public duty.

The interesting thing is that, because it was not just an urban situation, but a central Lisbon situation, combining the needs and expectations of people from different local sectors, from politics to culture, Moita appears in this photograph, taken in 1960, almost alone among men, most of them playing relevant and ultimate roles in their own jobs, and whose final words could condemn or support Moita's archaeological and museological project for the site and the excavated artefacts. Looking to the photograph to illustrate this momentum (Fig. 3), I see very clearly that the context is urban, not rural. Moita is guiding a group of men and a woman among the ruins. I do not hear her, but I can imagine her explaining the importance of what was being found, and the need to safeguard it. She is wearing bright colours, with a skirt, short-sleeve shirt, wide belt, and high heels, looking very 'feminine' and coquettish, despite her not wearing a hat. It is a way of dressing that says much about her personality, but also about the urban context and the purpose of the visit. She



Figure 3. Hospital of All Saints, Lisbon (Distrito de Lisboa, Portugal). Irisalva Moita at the excavation (photograph: unknown; Nogueira 2015).

was a woman of strong personality reinforced by serious research, rich academic experience, and dense scientific knowledge.

Moita was an extraordinary exception in the general thematic of women in archaeology in the country by the end of the 1950s, a special case that resulted from a series of factors, one of the most relevant being her notorious competence as a museologist and archaeologist. And it was an exception that inspired others to emerge all over the country, until they became almost the rule: women archaeologists as museologists and even directors of local and regional museums, some of which included archaeological collections. It was a phenomenon to which the organisation of the Course of Museum, Palaces and National Monuments Directors, hosted by the Museu Nacional de Arte Antiga (National Museum of Ancient Art, founded in 1884), considerably contributed, with the direct involvement of other national museums and their directors (Ferreira 2017). It was the very beginning of museum studies in Portugal, a two-year course including an internship and a public dissertation defence¹.

Semiotic and semantic analysis II (more brief insights)

The beginning of the 1960s was a turbulent time in Portugal. In 1961, the colonial war (which lasted until 1974) began and India reannexed the Portuguese possessions of Diu, Daman, and Goa (Pélissier 2000; Perez 2000). It was the beginning of the end of the Portuguese Empire. Having been recruited to a non-understandable, anachronical, and unwanted war in Overseas Provinces unknown to much of the Metropolitan population, some younger people objected more clearly to the dominant

1 On 9 and 10 May 2019, Moita was remembered during a special colloquium co-organized by the Lisbon City Museum and the archaeology of the Lisbon Geographic Society, by her surviving colleagues and many disciples, emphasising her many contributions to the development of urban archaeology and heritage studies in Portugal, especially in Lisbon, based on different unpublished archival materials, including her own book notes and working diaries. Ana Cristina Martins is one of the invited speakers, as she has obtained access to previously unknown documents from the time when Moita taught at the university and benefitted from governmental scholarships to do archaeological research.

political regime. Predictably, these protests infiltrated the university, where some of the most enlightened Portuguese intellectuals taught and studied. Even during the totalitarian regime, the university was an autonomous territory, where no one – not even the police – risked entering without authorisation. And it was precisely at the University of Lisbon that, in 1962, the first big public/student demonstration was organised against the prevailing anachronical political regime, led by students from the faculties of Law and Letters (Almeida 2000). They were unshakeable in their demand for better curricula, to the most recent Western standards (mainly French and Anglo-Saxon), and longed for individual freedom and freedom of association, echoing the Beat Movement and the Beatniks in spite of the censorship directed at these movements (Pappámikail 2011, 214-216; Thébaud *et al.* 1995).

What about archaeology in this transition period?

Some episodes contributed to the need to update theories and practices in the country: the creation of the Fundação Calouste Gulbenkian (Calouste Gulbenkian Foundation; FCG, founded in 1956), which financed archaeological projects and attributed a prize for the best annual archaeological work; the 1st National Congress of Archaeology (Lisboa, 1958) (Martins 2016a); and the 1st Archaeological Colloquiums of Oporto (Porto and Guimarães 1961), this one held one year before the first public protests against the political regime, planned by Lisbon students. These were institutions and meetings searched and attended by dozens of people intending to become archaeologists, seeking to listen to foreign experts, looking for new approaches, both theoretical and methodological. All this happened while the country failed in democratising its political system, with deceitful presidential elections in 1958 (Raby 2000). However, that feeling toward archaeology was reiterated during the first centenary of the AAP (see above) celebrated in 1963 in several Lisbon cultural and scientific places, including the Faculty of Letters of the University of Lisbon (Martins 2016a).

But, were there any women attending these sessions, presenting papers, and publishing in its book proceedings, resulting from fieldwork and – more likely (we will see why) – lab work? Yes, there were, and in growing numbers. Some of them (very few by then) even went abroad, incentivised by museum directors, university professors, and independent researches recognising the need to innovate and modernise archaeology in Portugal.

One of the first events that helped a new generation of future archaeologists to be engaged with new theories and field methods began to take place in 1964 (Sangmeister *et al.* 1969). It was then that a group of experts from the DAI Madrid (department founded in 1943) came to Torres Vedras (northern Lisbon) to excavate a Chalcolithic hill fort². Obligated by national legislation to include Portuguese archaeologists, this German project became an unofficial practical archaeological school for national students, and it encouraged some of them to go abroad in search of archaeological specialisation in Germany, where they were immersed in a true multi-disciplinary approach.

Looking at some photographs taken during these excavations, I can come to some conclusions. The photograph with the German team (which included Spanish colleagues) was carefully prepared, with a well-defined theme and a clear superstructure, exemplified by the pyramidal distribution of the actors, with the German members in the most prominent position (Fig. 4). This is a logical decision, as it was their project both scientifically and financially. And what do we see in this photo-

2 This archaeological site obtained an international relevance precisely with this project coordinated between 1964 and 1973 by Edward Sangmeister (University of Freiburg), Hermanfrid Schubart (DAI), and Leonel Trindade (Municipal Museum of Torres Vedras), with the collaboration of several experts – both male and female –, and students, namely from the Universities of Berlin, Göttingen, Granada (Spain) and Lisbon, among others (Sangmeister *et al.* 1968).



Figure 4. Zambujal (Distrito de Lisboa, Portugal). German team at the Chalcolithic hill fort during the 1960s (photograph: DAI Madrid, printed with kind permission of the DAI).



Figure 5. Zambujal (Distrito de Lisboa, Portugal). Excavation team at the Chalcolithic hill fort during the 1960s (photograph: DAI Madrid, printed with the kind permission of the DAI).

graph? An accurate, clean scenario composed by field material – mostly camping equipment – they brought from abroad. Front of stage we identify team members, four of them women and all of them wearing trousers. The social and cultural context allows them to do so, and they are also justified by the kind of fieldwork they had to accomplish. But looking more judiciously at this photograph, we have the feeling that nothing was done spontaneously. Besides the fact that the team appears to be pyramidally (= hierarchically) distributed, the photograph is reminiscent of some late-19th-century to beginning of the 20th-century images taken to illustrate travel adventures.

Analysing further, I recognise that the photograph's composition (Fig. 4) resembles that of a painting, with its alignment of three layers of representation, each with its own signification. From top to bottom, like a pyramid – truncated or not – or to a Victorian family portrait, we identify a first layer/record where four older men (team leaders?) stand looking serious, together with a young woman (the exception) in a much more informal position. The second or intermediate layer/record includes one boy and one girl both with one knee on the ground, as if they were heraldic tenants. Finally, the third layer/record has one girl and one boy, also lying down, as if they were a heraldic pedestal, holding the composition motto (illegible) with their hands. A motto somehow supervised by another person, a girl with both knees on the ground, as if she were one of the composition's vanishing points, even though she is standing in the same above-mentioned intermediate layer/record.

The next photograph (Fig. 5) is quite different. Apparently, there is no real perception of team hierarchy, maybe because it depicts an international team, with German, Spanish, and Portuguese archaeologists, and students, and local people (Fig. 5). Some of them are standing and others are seating on the ground, and almost all are chatting lively with each other. There is one peculiarity in this photograph: Nearly all of the women are sitting together, on the ground, in the right side of the picture (= excavation), and they are not looking into the camera – surely not out of shyness or shame, but perhaps because it was a spontaneous photograph, taken with no preparation.

Semiotic and semantic analysis III (a brief look to the end of the 1960s)

Slowly, belatedly, but firmly, urban and university people, and people from the arts and letters, became more aware of the country's problems and needs, conscious that the political regime was obsolete in every sense of the word. Not only the regime, but society itself. There were some attempts to change some of society, mainly in what concerned women's desires, ambitions, and needs, with the publication of such papers as *Carta a uma jovem Portuguesa (Letter to a young Portuguese lady)* (Coimbra, April 1961), and even with the commercialisation of the contraceptive pill, repudiated by the long-term alliance maintained between church and state (Policarpo 2011, 54-57).

Something would have to be done; something would have to happen to modernise Portugal. The pretext was unexpectedly and involuntarily provided by the regime's leader. In 1968, while Paris was emerging into a hierarchical subversion (Vincent 1995, 134-136), Oliveira de Salazar (1889-1970) suffered a stroke that disallowed him from ruling the country. The man chosen to occupy his place was a law professor from the University of Lisbon, Marcelo Caetano (1906-1980), considered by many to be a democrat. He began what is historiographically known as the 'Marcelo's Spring' (1968-1970) aimed at the economic and social modernisation of the country, as well as at a moderate political liberalisation, nourishing expectations toward true regime reformation (Rato 2000). But, surrounded by technocrats loyal to Salazar, Caetano accomplished much less than was predicted. For instance, he was unable even to put an end to the colonial war.

This process began in the year of the events of May 1968 in France. In Portugal, it consolidated most of the internal demands students had been making since 1962 (see above), and built on the events of 1965, when the political police arrested 50 students for being alleged communists. More than 50 others were expelled by the university, and an equal number suspended. It was an unprecedented political challenge to the university's autonomous status, a status that students and many professors could not stand. Here was an opportunity to shout out their requirements, intellectual, cultural, ideological, political, and economic. This time, however, it was the Univer-

sity of Coimbra that headed the process, whether due to its historical role and international prestige or due to its geographic distance from Lisbon and the country's main persecutory mechanisms. The student protests took place in 1969, when it was already clear that 'Marcelo's spring' was more a 'Marcelo's autumn' (Almeida 2000). Aesthetically inspired by the demands made in Paris in 1968 (for social equality and sexual freedom, for instance), and additionally by the desire to see an end to the totalitarian regime and the colonial war, this was the generation responsible for most of the changes that occurred in Portugal subsequent to the revolution of April 1974.

However, disappointed with 'Marcelo's spring', this generation grew in its conviction, in its attitude, in its desire to innovating the country from every point of view, mainly political, social, cultural, and mental. Even so, its leaders – just as happened in Paris – were, with very few exceptions, male students, though females appeared more and more side by side with their male colleagues, holding posters and allowing themselves to be photographed, as they were no longer fearful. Yet, there were efforts to change this status quo. One of them was the book *Novas cartas Portuguesas (New Portuguese letters; Lisboa 1972)*, forbidden by the censors, in which the authors, Maria Teresa Horta, Maria Isabel Barreno, and Maria Velho da Costa, wrote without restriction about sexuality, adultery, abortion, and what was more, the female body, desire, and pleasure (Policarpo 2011, 56).

It was impossible to go back. Besides, the international political context was not that friendly toward the internal political regime. The only solution was to bring more people to the cause, to reaffirm demands, and to act as if the future – built in that momentum – was theirs, aided by a 'transition generation' subscribing to and supporting their projects.

Semiotic and semantic analysis IV (looking briefly to the 1970s)

The entire above briefly characterised internal scenario was also clear for science in general and for archaeology most particularly, as it is the core of this paper.

Observing the photographs, I have chosen, I identify, not just a wish, but a mix of hunger for freedom of being and of doing, with representatives from both sexes hand in hand, side by side, claiming a new way of looking at the past, of identifying, inventorying, analysing, safeguarding, and divulging its remains. It was time for a new generation, with the support of the 'transition generation', to open up new theoretical horizons and to apply new fieldwork methods, without which Portuguese archaeology would remain as outdated in its most general aspects as it had been. Or perhaps it was the other way around, and it was thanks to the young strength that the 'transition generation' was able to accomplish some of its scientific schemes, now supported by such institutions as the FCG and the recently founded (1971) delegation of the DAI in Lisbon. Or maybe it was a very happy and successful officious joint venture of two generations looking forward to innovating in a period that, both generations felt, even if unconsciously, was transitional. It was an in between period, but not as much as one might think, since very soon the entire national picture would be modified both rapidly and deeply, like in a vortex, a much awaited and wanted vortex – at least by most of the country.

In the first photograph related to the study of the Tagus Valley engravings, I identify young female and male students, standing side by side next to the team car, with fashionable hairstyles and clothing (all in trousers) and holding some fieldwork materials (Fig. 6). But my focus goes to the photograph's centre. Here, one of the female team members is consciously photographed in a pose that would have been unthinkable until very recently: standing with one foot on a box, in a very masculine manner, as if inspired by the 'flower power' depictions. And there is no



Figure 6. Vila Velha de Ródão (Portugal). Some members of the 'Tagus River generation' in the summer of 1973 (photograph: unknown; Baptista 2008).



Figure 7. Penedo do Lexim (Portugal). Excavation team in the 1970s (photograph: José Morais Arnaud; Silva 2015).

need to 'compose' the photograph's scenario, as it seems there was no instinctive or institutional imperative to cluster the women and the men. It is almost totally a spontaneous camera shot. The subjects all had the same project and the same purpose, and they were going to accomplish these together without any kind of prejudice, as they – and I must emphasise this – belonged to an intellectual elite, and sometimes a social and economic one (Nelson 2004).

The second photograph taken during the post-revolutionary period, at Penedo do Lexim, not only restates this assertion, it underlines and enlarges it (Fig. 7). But this photograph involved an intentional camera shot; consequently, there was a need for a certain composition/visual narrative, although not as formal and aprioristic and the photograph of the German team (Fig. 4). After all, this was a Portuguese team acting during a euphoric political momentum, when women could finally behave as they wanted (Ferreira 2011, 260-266), still inspired by the echoes from Paris 1968 (Vincent 1995, 138-141), and anxiously waiting for a left-wing political and social change – a composition/narrative that should have included almost everyone and everything related (directly and indirectly) to the excavation campaign. If we look more closely, we recognise 'invisible' records/layers, this time analysed from the

bottom up. In the first record/layer, central to the picture, we see some of the tools used by archaeologists during fieldwork.

The second and last record/layer shows team members standing up or sitting informally and almost carelessly, with females and males mixed. All of them are wearing clothes suitable for fieldwork and seem confident and relaxed. So comfortable that four of them, two women and two men, are seated on the top of the team's Land Rover (a national modernisation and symbol of empowerment). Additionally, we see in the left side of the photograph (Fig. 7) a woman, the landowner, and three children wearing shoes and watches, a different picture from the one observed at Vila Nova de São Pedro (Fig. 1), more than 20 years before, presumably thanks to the National Development Plans (between 1953 and 1974) and the Interim Development Plan (1965-1967) (Murteira 2000).

The local scenario includes a small, 18th-century house used by the excavation team and the landowner's house above it. What strikes us in this image is the unusual, prominent position of one of the team's women, as she stands above everyone else, with her hands on a boy's and a man's shoulders, facing the camera with a charismatic look. We are watching a leader, or at least someone who looks like one. And she is a woman. Yes, something was changing. The campaign leader was a man, however, university professor J. Morais Arnaud (b. 1946), absent from the picture because he was taking the photograph.

But perhaps a female in a leadership attitude was still an exception, even if the DAI delegation in Portugal (which was based in Lisbon) had been led by a female prehistorian, Philine Kalb (b. 1940), from 1973 to 1980 – a circumstance that surely must have inspired her Portuguese women colleagues. Colleagues who, such as the ones I have selected for this research-historical contribution, dedicated their work almost exclusively to pre- and protohistoric societies mainly because of their mentor's entourage, and for other reasons we will scrutinize.

Other photographs from the same decade³ show how men were frequently in charge of supervising the excavation (even at Penedo do Lexim) while women excavated. That is what can be seen in other pictures I have selected, where men stand holding the excavation diary, plan, and sketchbook. The picture gradually changed in the past four decades, as more women who had completed undergraduate and graduate degrees in archaeology were hired as university professors and, more recently, began to occupy key positions in national heritage management and private archaeological enterprises (Sheffield 2006).

Some final remarks

The field was always a place for women and a place of women, at least since Neolithic times. It has been a place for working women, peasant women, women walking across their land as its owner, riding horses, or being transported by carriage, or even walking the gardens surrounding their properties. But, when talking about science, I must acknowledge that the field has been above all a male territory and an elite territory – Western elite – since (almost) only elites had the opportunities to dedicate themselves to scientific research and technology. It is an occupation that demands time to read, to do fieldwork and lab work, to think, to write, and to publish. And in societies that do not finance these kinds of activities, it can be accomplished only by those who have the opportunity, by having money and social and political family influence. Otherwise, it would be/is almost impossible for someone to devote their life to research.

3 Photos that I have already identified in both public and private institutional and personal archives.

This was/is the general picture. In what concerned/concerns women, this picture was/is even more difficult – if not impossible – in any case until second-wave feminism and the establishment of a Western democratic world fighting together against social, economic, cultural, religious, sex, and gender inequality. A contest that must continue in face of the growing number of ultra-conservative parties that are emerging in Europe, and the EU, reminding us that nothing can be taken for granted, including human rights.

I will end with three observations. The first is that, according to this brief analysis, there was an understandable dominance of urban, upper class, and upper middle class women embracing this science. Women belonging to liberal families and wealthy enough to allow them to choose, if not a scientific career, at least a scientific activity to be accomplished as it should be (not a hobby, since it should and could not be that) – at least until they got married. And their contribution was much appreciated, as they helped with inventorying, lab work, drawing, the library, and exhibitions, and sometimes even fieldwork.

The second is that a growing number of women were dealing directly with archaeological activities, a circumstance that is certainly owing, in the first place, to their personal will and family support (even if sometimes intermittent) and, in the second place, to the encouragement of professors, directors, and fieldwork and laboratory supervisors – all men, except for Moita. That is why they began to co-work, co-present, and co-write with their male colleagues, regardless of their scientific and academic ranking. Gradually, though, some of them began to present oral papers and to publish as single authors, given the quality of their work and their self-confidence. Even so, they tended (unconsciously?) to reproduce their supervisors' narratives and research projects. And that is perhaps the main reason why they dedicated their research to the pre-, protohistoric, and Roman periods, being the ones studied by their supervisors. Additionally, some of these supervisors, directors, and/or professors encouraged women to go abroad in search of specialisation and/or to attend the first editions of the official course organised in the country on museology.

And here I come to my last observation (for now). Starting at the end of the 1960s and the beginning of the 1970s, an increasing number of women archaeologists decided to work in museums. Some of them were appointed director of important museums comprising archaeological collections. Why did this happen? Was it academically and professionally attractive? First, there were not that many professional offerings for those wishing to become archaeologists. Second, it wasn't until the 1990s that archaeologists began to work under the job title archaeologist. Before that, they could be anything (historians, museologists, economists, doctors, geologists, teachers, professors, *etc.*) but archaeologists. Archaeology was more a hobby than a profession, more a specialisation within historical, geographic, philosophical or even geological studies than a specific subject for graduation. This does not mean that archaeology was not recognised by universities, academies, and erudite societies. On the contrary. And its importance was acknowledged by people committed to the past.

So, in the 1970s, archaeology was not considered a profession, and therefore there were no places for archaeologists as such. The solution was to have, for instance, teachers dedicating their spare time (weekends and holidays) to archaeology. It was a picture common to many countries, and it was not that different from the general one known from the 19th century. A picture dominated by men, as it was socially more acceptable for them to do fieldwork and to stay away for longer periods from home and, if they had a family, their wife and, possibly, their children. For single women, doing fieldwork was almost impossible. For married women, there were basically three solutions: having an understanding husband, being married to an archaeologist, or giving up fieldwork to embrace museum activities, because museum jobs were more compatible with what society expected from women: to spend time with their family and take care of their husband, children, and older relatives (Vaquinhas

2011). Working in a museum, they could accomplish an everyday ritual with a short (not always, as we know) timetable, from 9 to 5. Moreover, they could reproduce there some housework tasks they were used to: inventorying, cataloguing, buying, arranging, taking notes, typing, selecting artefacts for temporary exhibitions, receiving and meeting people, or organising *vernissages*. Even if nobody thought so consciously, it was considered the kind of work that was ‘appropriate’ to women.

The situation has changed a lot since 1974, and we have now more female than male students, and more female than male archaeologists, but as I stated above, only now is the ‘revolution’ generation making way for the next one. Are we witnessing a substantial transformation of habits and behaviours? On the face of it, yes. But if we look more closely, we realise that the most important public archaeological courses and services are headed by men. This, of course, is not to say that women should be chosen just because they are women, to fulfil sex and gender equality commitments assumed by the government. On the contrary, women should be hired on merit. But I find it hard to believe that there are no highly qualified candidates in the female archaeological universe, that there are no women archaeologists good enough to satisfy at least some of the job requirements. Is it a case of women do not apply for these jobs? Yes, this occurs. But what is the reason?

Most recently, we are witnessing a somehow worrying phenomenon in Portuguese archaeology: talented young archaeologists – mostly women – giving up their jobs in some of the numerous private archaeological enterprises established during the past 20 years. They give up because of the extremely demanding everyday work, since they must prepare the excavations, coordinate them, supervise university internships, write reports, study artefacts, prepare oral and poster presentations, and write papers. And by the end of the day, there is almost nothing left for their personal life. This is perhaps why archaeology is one of the Portuguese professions where women, whether single or married, have no children or have them very late, closer to their 40s⁴. Additionally, their jobs are mainly temporary, which gives them almost no financial security to go ahead and plan to have a family. These findings match those of the transnational project DISCO – Discovering the Archaeologists of Europe, undertaken in 2014 with the support of the Lifelong Learning Programme of the European Union (Bugalhão 2017)⁵.

The problems of today are quite different from the ones lived by the Portuguese women pioneers, but they are still problems. It is time to have a serious discussion about this situation and how we might solve it – a discussion to be engaged in by the entire national archaeological community, as the situation affects all of them. And we must do it now if we really want to accomplish the 2030 Agenda for Sustainable Development, adopted by the United Nations, and especially its fifth goal: ‘*Achieve gender equality and empower all women and girls*’.

There are many other issues yet to be analysed. For instance, it would be interesting to compare these data to those gathered from other sciences. And it is important to find out whether women want to change the way they lead their careers. They seem to privilege careers in teaching, museum studies, and tourism, but is this a preference or a necessity to accommodate their personal life, especially when they become mothers? Does society respond adequately to their professional wishes and requests? Is it possible that, as before, women are bypassed and allowed to be bypassed by the people doing the hiring in the name of family? Or do men remain more adventurous and women more housewifely? Is this not a cultural construction and consequence?

Too many questions to be answered, demanding more inter- and transdisciplinary research, comparison, and reflexion, including from visual cultural studies.

4 See in general: <e-archaeology.org/doing-archaeology/projects/disco-discovering-the-archaeologists-of-europe/>; national report about Portugal: Costa *et al.* 2014.

5 *Ibidem*.

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References

- Almeida, Justino M. de 2000. Universidade de Coimbra. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal IX*, sup. P/Z. Porto: Figueirinhas, 559-563.
- Almeida, Justino M. de 2000. Universidade de Lisboa. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal IX*, sup. P/Z. Porto: Figueirinhas, 563-567.
- Baptista, Antonio Martinho 2008. Álbum históricos do Vale do Tejo 01. In: Baptista, Antonio Martinho (ed.). Webblog *Da Finiude do Tempo. Sobre Arte rubestre e artes da pré-história*. <dafinitudedotempo.blogspot.com/2008/08/lbum-histrico-do-vale-do-tejo-01.html>, e-published 01 August 2008; retrieved 13 November 2018.
- Barreto, António 2000. Salazar. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal IX*, sup. P/Z. Porto: Figueirinhas, 283-290.
- Bergstein, Mary 2010. *Mirrors of memory. Freud, photography, and the history of art*. New York: Cornell University.
- Bohrer, Frederick N. 2011. *Photography and archaeology*. London: Reaktion Books.
- Bugalhão, Jacinta 2013. As mulheres na arqueologia portuguesa. *Arqueologia em Portugal: 150 anos*. Lisboa: Associação dos Arqueólogos Portugueses, 19-23.
- Bugalhão, Jacinta 2017. O papel das mulheres na arqueologia portuguesa. *Ophiussa. Revista do Centro de Arqueologia da Universidade de Lisboa*, 1. Lisboa: Centro de Arqueologia da Universidade de Lisboa, 123-130.
- Burek, Cynthia V. and Higgs, Bettie 2007. *The role of women in the history of geology*. London: The Geological Society.
- Cardoso, João L. 2007. Vida e obras de Estácio da Veiga. *XELB 7. Encontro de Arqueologia do Algarve 4*, 2006. "Percursos de Estácio da Veiga: actas". Silves: Câmara Municipal de Silves, 15-72.
- Cardoso, João L., and Ribeiro, Maria 2013. Afonso do Paço e as escavações de Vila Nova de São Pedro (1937-1967): os contributos científicos possíveis e a sua projecção internacional. *Estudos Arqueológicos de Oeiras*, 20, 755-770
- Carr, Lydia C. 2012. *Tessa Verney Wheeler. Women and Archaeology before World War Two*. Oxford: Oxford University Press.
- Colletta, Lisa 2015 (ed.). *The legacy of the Grand Tour. New essays on travel, literature, and culture*, New Jersey: Fairleigh Dickinson University Press.
- Cooke, Rachel 2013. *Her Brilliant Career. Ten Extraordinary Women of the Fifties*. London: Virago.
- Costa, Cláudia, Duarte, Cidália, Tereso, João, Viegas, Catarina, Lago, Miguel, Grilo, Carolina, Raposo, Jorge, Diniz, Mariana, and Lima, Alexandra 2014 (eds). *DISCO. Discovering the Archaeologists of Portugal 2012-14*. <e-archaeology.org/wp-content/uploads/2016/06/PT-DISCO-2014-Portugal-national-report-english.pdf> e-published 2014; retrieved 21 May 2019.
- Díaz-Andreu, Margarita, and Sørensen, Marie-Louise S. 1998 (eds). *Excavating Women: A History of Women in European Archaeology*. London: Routledge.
- Ferreira, Emília 2017. *Antecedentes de um museu. Lisboa em Festa. A Exposição retrospectiva de arte ornamental portuguesa e espanhola, 1882*. Casal de Cambra: Caleidoscópio.

- Ferreira, Vítor S. 2011. Modas e modos: a privatização do corpo no espaço público português. In: José Mattoso (ed.). *História da Vida Privada. Os nossos dias*. Lisboa: Círculo de Leitores/Temas e Debates, 242-276.
- Frink, Lisa, and Weedman, Kathryn 2006 (eds). *Gender and hide production*. Lanham: AltaMira Press.
- Joly, Martine 2000. *L'image et les signes*. Nathan: Université.
- Jorge, Susana O., and Jorge, Vítor O. 1996. Women in Portuguese Archaeology. *Trabalhos de Antropologia e Etnologia*, 36, 159-167.
- Kristiansen, Kristian 2014. Towards a new paradigm? The Third Science Revolution and its possible consequences in archaeology. *Current Swedish Archaeology*, 22, 11-71.
- Leite, Ana C. 2013. Irisalva Moita e a arqueologia em Lisboa. *Rossio, Estudos de Lisboa*, 1. Lisboa: Câmara Municipal de Lisboa, 24-31.
- Luís, António S. 2000. Pobreza. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal IX*, sup. P/Z. Porto: Figueirinhas, 102-107.
- Lukitz, Liora 2006. *A quest in the Middle East. Gertrude Bell and the making of modern Iraq*. London/New York: I. B. Tauris.
- Martins, Ana Cristina 2011a. Colher plantas. Semear ideias. Luiz W. Carrisso (1886-1937) e a *Ocupação científica das colónias portuguesas* (1934). In: Fiolhais, C., Simões, C., and Martins, D. (eds.). *Atas do Congresso Luso-Brasileiro de História das Ciências*. Coimbra: Universidade de Coimbra. <www.uc.pt/org/historia_ciencia_na_uc/Textos/colher/colher>, e-published 2011; retrieved 22 November 2018.
- Martins, Ana Cristina 2011b (ed.). *Mendes Corrêa (1888-1960), entre a docência, a ciência e a política*. Lisboa: ACD.
- Martins, Ana Cristina 2014a. A Missão Antropológica e Etnológica à Guiné (1946-1947) entre o sagrado e o profano. In: Martins, Ana Cristina, and Santos, Ana Isabel (eds). *África reencontrada. O sagrado e o profano em duas coleções públicas portuguesas*. Lisboa: IICT, 20.23.
- Martins, Ana Cristina 2014b. Fotografias da Missão Antropológica e Etnológica da Guiné (1946-1947): entre a forma e o conteúdo. In: Filipa Lowdes, Vicente (ed.). *Império da Visão. Fotografia no contexto colonial português (1860-1969)*, Lisboa: Edições 70, 117-139.
- Martins, Ana Cristina 2016a. 'Mission': *modernize!* Portuguese archaeology in the 1960s (a preamble). In: Delley, Geraldine, Díaz-Andreu, Margarita, Djindjian, François, Fernández, Victor M., Guidi, Alexandro, and Kaeser, Marc-Antoine (eds). *History of Archaeology: International Perspectives Proceedings of the XVII UISPP World Congress (1-7 September 2014, Burgos, Spain)* 11. Oxford: Archaeopress, 179-187.
- Martins, Ana Cristina 2016b. Pioneiras da Arqueologia em Portugal: "another brick" against "the wall" of indifference. Maria de Lourdes Costa Arthur (1924-2003). *Clepsydra. Revista de Estudos del Género y Teoría Feminista*, 15, 77-100.
- Melo, Ana Á. de, and Cardoso, João Luís 2014. Virgínia Rau. Uma medievalista na pré-história. *Estudos Arqueológicos de Oeiras*, 21, 511-546.
- Murteira, Mário 2000. Planos de Fomento. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal IX*, sup. P/Z. Porto: Figueirinhas, 99-102.
- Nelson, Sarah M. 2004. *Gender in archaeology. Analyzing Power and Prestige* [2nd edition]. Lanham: AltaMira.
- Nogueira, Paulo 2015. O Hospital Real de Todos os Santos em Lisboa. In: Nogueira, Paulo, Weblog *Histórias com História*. <historiaschistoria.blogspot.com/2015/09/o-hospital-real-de-todos-os-santos-em.html>, e-published 22 September 2015, retrieved 13 November 2018.
- Otero, Paulo 2000. Cooperativismo político. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal VII*, sup. A/E. Porto: Figueirinhas, 425-431.

- Page, Judith W., and Smith, Elise L. 2011. *Women, Literature, and the Domesticated Landscape. England's Disciples of Flora, 1780-1870*. Cambridge: Cambridge University Press.
- Panofsky, Erwin 1939. *Studies in iconology: humanistic themes in the art of the Renaissance*. New York: Oxford University Press.
- Pappámikail, Lia 2011. Juventude: entre a fase da vida e o tempo de viver. In: José Mattoso (ed.). *História da Vida Privada. Os nossos dias*. Lisboa: Círculo de Leitores/Temas e Debates, 208-241.
- Pélissier, René 2000. Guerras Coloniais. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal*, v. VIII, sup. F/O. Porto: Figueirinhas, 159-163.
- Perez, Rosa 2000. Estado da Índia. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal VIII*, sup. F/O. Porto: Figueirinhas, 255-261.
- Pinney, Chistopher 2011. *Photography and anthropology*. London: Reaktion Books.
- Policarpo, Verónica 2011. Sexualidades em construção, entre o privado e o público. In: José Mattoso (ed.). *História da Vida Privada. Os nossos dias*. Lisboa: Círculo de Leitores/Temas e Debates, 48-79.
- Raby, David L. 2000. Humberto Delgado. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal VI*, sup. A/E. Porto: Figueirinhas, 497-500.
- Rato, Vasco 2000. Marcelismo. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal VIII*, sup. F/O. Porto: Figueirinhas, 421-427.
- Ruck, Nora, and Slunecko, Thomas 2008. A portrait of a dialogical self: image, science and the dialogical self. *International Journal for Dialogical Science*, 3, 261-290.
- Sangmeister, Edward, Schubart, Hermanfrid, and Trindade, Leonel 1968. Zambujal – 1968. *O Arqueólogo Português*, 3, 2, 71-114.
- Sangmeister, Edward, Schubart, Hermanfrid, and Trindade, Leonel 1969. Escavações no castro eneolítico do Zambujal, 1966. *O Arqueólogo Português* 3, 3, 71-114.
- Sheehan, Tracy 2015. *Photography, history, difference*. Hanover: Dartmouth College.
- Sheffield, Suzanne Le-May 2006. *Women and Science: Social Impact and Interaction*. Santa Barbara: Rutgers University Press.
- Silva, António Carlos 2015. Penedo do lexim (2). In: Silva, António Carlos, Webblog *Memórias das Pedras Talhas. Um blog pessoal para arquivo ocasional de mais de quatro décadas de militância pública ao serviço da memória*. <pedrastalhas.blogspot.com/search?q=lexim>, e-published 1 December 2015; retrieved 13 November 2018.
- Silva, António D. 2000. Descolonização. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal VII*, sup. A/E. Porto: Figueirinhas, 504-507.
- Smiles, Sam, and Moser, Stephanie 2008 (eds). *Envisioning the Past: Archaeology and the Image*. London: Blackwell.
- Sørensen, Marie-Louise S. 2000. *Gender Archaeology*. Cambridge: Polity.
- Thébaud, Françoise, Perrot, Michelle, and Duby, Georges 1995 (eds). *História das Mulheres no Ocidente 5. O século XX*. Lisboa: Edições Afrontamento.
- Torgal, Luís R. 2009. *Estados Novos. Estado Novo. Ensaios de História Política e Cultural*. Coimbra: Imprensa da Universidade de Coimbra.
- Vaquinhas, Irene 2011. A família, essa “pátria” em miniatura. In: José Mattoso (ed.). *História da vida privada em Portugal*. Lisboa: Círculo de Leitores, 118-151.
- Vicente, Ana 2000. Mulheres. In: Barreto, António, and Mónica, Maria Filomena (eds). *Dicionário de História de Portugal VIII*. Sup. F/O. Porto: Figueirinhas, 565-571.
- Vincent, Gérard 1995. Uma história do segredo? In: Ariès, Philippe, and Duby, Georges (eds). *História da vida privada 5. Da Primeira Guerra Mundial aos nossos dias*. Lisboa: Edições Afrontamento, 115-389.

Gendered and diversified fieldwork classes in prehistoric archaeology? An examination of and a perspective on Bachelor study programs of German universities

Doris Gutschmiedl-Schümann

Abstract

Topics for fieldwork and fieldwork classes are a regular part of undergraduate study programs in Germany. They are often seen as enhancing the future employability of graduate students, and they are emphasised in the advertising of those study programs. However, as fieldwork is only a small part of the archaeological working environment, other practical aspects, such as museum and collection work, are much less part of undergraduate study programs. Therefore, this paper examines if and how stressing fieldwork as an important part of archaeological training affects the composition and the diversity of the students of a study program, and how this contributes to shaping the academic discipline.

Keywords: *undergraduate study programs, Bachelor study programs, academic fieldwork, academic training, diversity of students*

Introduction

To certain academic disciplines, including archaeology, conducting research in field settings is an integral component of scholarship. The adventurous and ‘exotic’ aspects of fieldwork are often believed to attract many young and future researchers to the discipline, and are often seen as one reason for prospective students to get more involved in archaeology – and eventually to take a degree in an archaeological discipline.

As the call for papers to the conference ‘Gender transformations in prehistoric and archaic societies’ stated, ‘[...] *research about the past is always influenced by the*

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Table 1 (opposite page). List of Bachelor study programs that are on or that involve prehistoric archaeology. The numbers refer to the numbers on the maps in Figures 1-3; the names of the study programs and the subjects involved are indicated in German (for sources, see the list of examined study programs at the end of this article).

societal frame in which it is carried out'. Therefore, research and fieldwork are not only related and connected to each other, but also to the individual backgrounds of the people involved – directors, workers, researchers, teachers, and students alike.

Usually, fieldwork training is included from the beginning in Bachelor study programs in archaeology, and the future archaeologists are also usually doing fieldwork for the first time during their time at university. Therefore, this paper asks whether fieldwork classes and courses are teaching fieldwork methods in a gender- and diversity-sensitive way, and whether the circumstances of fieldwork classes are affecting the diversity of the students, for example, by excluding certain groups or persons, and therefore leading to inequality in the accessibility of mandatory parts of archaeological programs of study.

In this paper, I will first give a short introduction on the variety of study programs in prehistoric archaeology that are offered at the Bachelor level in Germany. Then I will look into the individual study programs and examine their fieldwork classes. In the third and last part of my paper, I will discuss the possible effects that the current way of organising fieldwork classes and other practical elements in the study programs could have, and I will show some examples and delve into the current discussion on how these effects can be minimised. Unfortunately, especially for the last part of my paper, only limited data are available, so that some questions have to remain unanswered and at least some of my conclusions have to be characterised as preliminary until further systematic research on fieldwork classes is conducted.

Archaeological study programs in Germany

In the so-called Bologna Process, the archaeology study programs at German universities were changed from the old Magister/Diplom system to the new Bachelor/Master system. It was mainly a political decision to change the study programs to a system that should – in theory – ensure comparability in the standards and quality of higher education throughout continental Europe. Some of the core elements of this change were to, on the one hand, create and design the study programs from

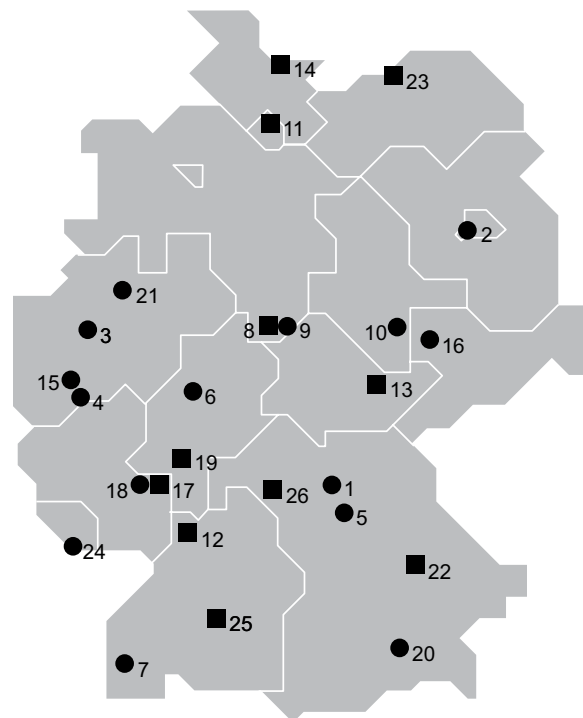


Figure 1. Spatial distribution of Bachelor study programs that are on or involve prehistoric archaeology. Squares: Bachelor study programs that are only on prehistoric archaeology; circles: multidisciplinary Bachelor study programs that involve prehistoric archaeology (for more details, see Table 1) (map: <www.kleinefaecher.de>, with additions by Doris Gutschmid-Schümann).

	University	Name of Bachelor study program	Single or multidisciplinary?	Involved subjects
1	Bamberg	Archäologische Wissenschaften	multidisciplinary	Archäologie des Mittelalters und der Neuzeit, Archäologie der Römischen Provinzen, Ur- und Frühgeschichtliche Archäologie, Informationsverarbeitung in der Gearchäologie, Islamische Kunstgeschichte und Archäologie
2	Berlin (FU)	Altertumswissenschaften	multidisciplinary	Ägyptologie, Altorientalistik, Klassische Archäologie, Prähistorische Archäologie, Vorderasiatische Altertumskunde
3	Bochum	Archäologische Wissenschaften	multidisciplinary	Klassische Archäologie, Ur- und Frühgeschichte, Archäometrie
4	Bonn	Archäologien	multidisciplinary	Ägyptologie, Christliche Archäologie, Klassische Archäologie, Vor- und Frühgeschichtliche Archäologie
5	Erlangen	Archäologische Wissenschaften	multidisciplinary	Prähistorische Archäologie, Klassische Archäologie, Christliche Archäologie
6	Frankfurt	Vor- und Frühgeschichte	single	Vor- und Frühgeschichtliche Archäologie
7	Freiburg	Archäologische Wissenschaften	multidisciplinary	Urgeschichtliche Archäologie, Vorderasiatische Archäologie, Klassische Archäologie, Provinzialrömische Archäologie, Christliche Archäologie und Byzantinische Kunstgeschichte, Frühgeschichtliche Archäologie und Archäologie des Mittelalters
8	Göttingen	Ur- und Frühgeschichte	single	Ur- und Frühgeschichtliche Archäologie
9	Göttingen	Antike Kulturen	multidisciplinary	Klassische Archäologie, Ur- und Frühgeschichte, Altorientalistik, Ägyptologie, Altes und Neues Testament, Koptologie, Griechische und Lateinische Philologie, Alte Geschichte
10	Halle-Wittenberg	Archäologien Europas	multidisciplinary	Klassische Archäologie, Prähistorische Archäologie, Archäologie des Mittelalters und der Neuzeit
11	Hamburg	Vor- und Frühgeschichtliche Archäologie	single	Vor- und Frühgeschichtliche Archäologie
12	Heidelberg	Ur- und Frühgeschichte	single	Ur- und Frühgeschichtliche Archäologie
13	Jena	Ur- und Frühgeschichte	single	Ur- und Frühgeschichtliche Archäologie
14	Kiel	Prähistorische und historische Archäologie	single	Ur- und Frühgeschichte
15	Köln	Archäologie	multidisciplinary	Ur- und Frühgeschichte, Klassische Archäologie, Archäologie der Römischen Provinzen
16	Leipzig	Archäologie der Alten Welt	single	Klassische Archäologie, Ur- und Frühgeschichte
17	Mainz	Vor- und Frühgeschichtliche Archäologie	single	Vor- und Frühgeschichtliche Archäologie
18	Mainz	Archäologien	multidisciplinary	Klassische Archäologie, Vor- und Frühgeschichte, Vorderasiatische Archäologie, Biblische Archäologie, Christliche Archäologie
19	Marburg	Archäologische Wissenschaften	multidisciplinary	Klassische Archäologie, Vor- und Frühgeschichtliche Archäologie
20	München (LMU)	Archäologie Europa und Vorderer Orient	multidisciplinary	Vorderasiatische Archäologie, Vor- und Frühgeschichtliche Archäologie, Provinzialrömische Archäologie, Spätantik-Byzantinische Kunstgeschichte, Klassische Archäologie, Archäozoologie, Anthropologie
21	Münster	Archäologie-Geschichte-Landschaft	multidisciplinary	Ur- und Frühgeschichte, Geographie, Geschichte
22	Regensburg	Vor- und Frühgeschichte	single	Vor- und Frühgeschichte
23	Rostock	Ur- und Frühgeschichte	single	Ur- und Frühgeschichte
24	Saarbrücken	Altertumswissenschaften	multidisciplinary	Klassische Archäologie, Klassische Philologie, Vor- und Frühgeschichte, Alte Geschichte
25	Tübingen	Ur- und Frühgeschichtliche Archäologie und Archäologie des Mittelalters	single	Ur- und Frühgeschichtliche Archäologie, Archäologie des Mittelalters
26	Würzburg	Vor- und Frühgeschichtliche Archäologie	single	Vor- und Frühgeschichtliche Archäologie

the perspective of the learning outcomes, that is, from the contents the students should know and what they should be able to do when they graduate and, on the other hand, provide more equal access to a university education for young people, whereby gender, social and cultural background, family and financial situation, and so forth should not matter (see, *e.g.*, Berlin Communiqué 2003). Equal access to higher education for all students, and therefore bringing social and cultural diversity to the lecture halls of the universities, is still one of the main aims of the Bachelor/Master system. In terms of gender, the efforts seem to have been successful, at least in archaeology study programs, as usually more women than men start an archaeology study program in Germany (Gutsmiedl-Schumann and Helmbrecht 2017, 167-169).

Archaeology as a discipline is divided in various subjects and specialisations, which are represented in different study programs at numerous universities in Germany. At the Bachelor level, some of these subjects are combined, either exclusively within archaeology, or with other ancient studies, but there are also Bachelor study programs on single archaeological subjects. For the subject prehistoric archaeology, currently (as of spring 2018), 12 universities offer Bachelor study programs on only this subject, while 14 universities offer multidisciplinary Bachelor study programs where prehistoric archaeology is combined with other archaeologies and/or with other humanities. Two universities offer both kind of Bachelor study programs (Fig. 1; Table 1).

According to the general study program recommendations, a Bachelor study program should last three years full-time and should be built on 180 ECTS credit points, where one ECTS credit point is earned for approximately 30 hours of working/studying time¹. During the entire study program, a certain amount of ECTS credit points should be awarded for classes and lectures that are on aspects of future work environments and that therefore increase the employability of the graduates. In Bachelor study programs, fieldwork is usually offered as a component of the future employability of the students.

Fieldwork in archaeology study programs

Fieldwork is part of all 26 examined study programs that are on or involve prehistoric archaeology. In examination regulations of those study programs, fieldwork is partly described as ‘archaeological excavations’ in the strict meaning of the term and partly described as ‘survey, prospection or excavation’ in a broader sense; in some programs it is mandatory and in some it is optional (Table 2; Fig. 2). Where fieldwork is mandatory, the students must prove that they have undertaken between 12 and 90 days² of fieldwork experience and they get between 1.5 and 33 ECTS credit points

1 ECTS stands for European Credit Transfer and Accumulation System; it is pan-European and expresses the volume of learning based on the defined learning outcomes and their associated workload. See, for example, <http://ec.europa.eu/education/ects/users-guide/key-features_en.htm#ectsTop> or <<https://www.hrk-nexus.de/glossar-der-studienreform/begriff/ectsectsecredits/>> (both retrieved 22 November 2018). One ECTS credit point, in general, equals between 25 and 30 hours of working/studying time (see Musterrechtsverordnung gemäß Artikel 4 Absätze 1-4 Studienakkreditierungsstaatsvertrag [Beschluss der Kultusministerkonferenz vom 07. Dezember 2017]. <<http://www.akkreditierungsrat.de/fileadmin/Seiteninhalte/KMK/Vorgaben/Musterrechtsverordnung.pdf>> (retrieved 22 November 2018); in most Bachelor study programs on prehistoric archaeology, however, one ECTS credit point equals 30 hours of working/studying time.

2 The length of required practical experience in the different study program descriptions is stated in either hours, days, or weeks. To make those specifications comparable, in this paper, the required length of practical experience is always stated in days. To convert required hours into required days, one working day is calculated as eight working hours; to convert required weeks into days, one working week is calculated as five working days.

University	Study program	Fieldwork				Museums and collection work			
		Mandatory?	Length (min-max)	ECTS (min-max)	Propaedeutica?	Mandatory?	Length (min-max)	ECTS (min-max)	
Bamberg	Archäologische Wissenschaften	yes	34-49 days	9-13	2 + 1 SWS				
Berlin FU	Altertumswissenschaften	yes	15-48 days	5-15	2 SWS	no	15 days	5	
Bochum	Archäologische Wissenschaften	no	max. 15 days	max. 5	2 SWS				
Bonn	Archäologien	no	max. 20 days	max.	none specified	no	not specified		
Erlangen-Nürnberg	Archäologische Wissenschaften	yes	38 days	10	none specified	yes	38 days	10	
Frankfurt	Ur- und Frühgeschichte	yes	56-86 days	15-23	none specified	no	30 days	8	
Freiburg	Archäologische Wissenschaften	yes	20-40 days	6-12	none specified	no	20 days	6	
Göttingen	Ur- und Frühgeschichte	no	max. 20 days	max. 6	none specified	no	not specified		
Göttingen	Antike Kulturen	no	12-34 days	4-10	28 h in total	no	10 days		
Halle-Wittenberg	Archäologien Europas	yes	20-50 days	10-20	30 h in total	no	30 days	10	
Hamburg	Vor- und Frühgeschichtliche Archäologie	yes	60-90 days	24-33	length not specified	no	not specified	12-21	
Heidelberg	Ur- und Frühgeschichte	yes	38 days	10	2 SWS				
Jena	Ur- und Frühgeschichte	yes	80 days	15	none specified	yes	20 days	10	
Kiel	Prähistorische und historische Archäologie	yes	12-30 days	1.5-6.5	2 SWS				
Köln	Archäologie	no	20-60 days	12-24	30 h in total	no	not specified		
Leipzig	Archäologie der Alten Welt	yes	19 days	10	none specified	no	not specified	max. 10	
Mainz	Archäologien	no	not specified	max. 15	none specified	no	not specified		
Mainz	Vor- und Frühgeschichtliche Archäologie	no	not specified	max. 9	none specified	no	not specified		
Marburg	Archäologische Wissenschaften	yes	20 days	6	none specified	yes	20 days	6	
München	Europa und Vorderer Orient	no	not specified	max. 6	2 SWS	no	not specified		
Münster	Archäologie-Geschichte-Landschaft	no	max. 23 days	max. 6	none specified	no	23 days		
Regensburg	Ur- und Frühgeschichte	no	not specified	max. 8	2-4 SWS	no	not specified		
Rostock	Ur- und Frühgeschichte	yes	11-24 days	6-12	2 SWS	no	not specified	12	
Saarbrücken	Altertumswissenschaften	no	not specified	max. 6	none specified	no	not specified		
Tübingen	Vor- und Frühgeschichtliche Archäologie	yes	10 days + 23 days	12	2 SWS				
Würzburg	Vor- und Frühgeschichtliche Archäologie	yes	30 days	10	none specified	no	20 days	5	

Table 2. Overview of fieldwork and museums work in Bachelor study programs that are or that involve prehistoric archaeology. The length of required practical experience is stated in hours, days, or weeks. To make the different study programs comparable, the required length is stated in days, where one working day equals eight hours and one working week equals five working days. SWS stands for 'semester periods per week'. The names of the study programs are indicated in German (for sources, see the list of examined study programs at the end of this article).

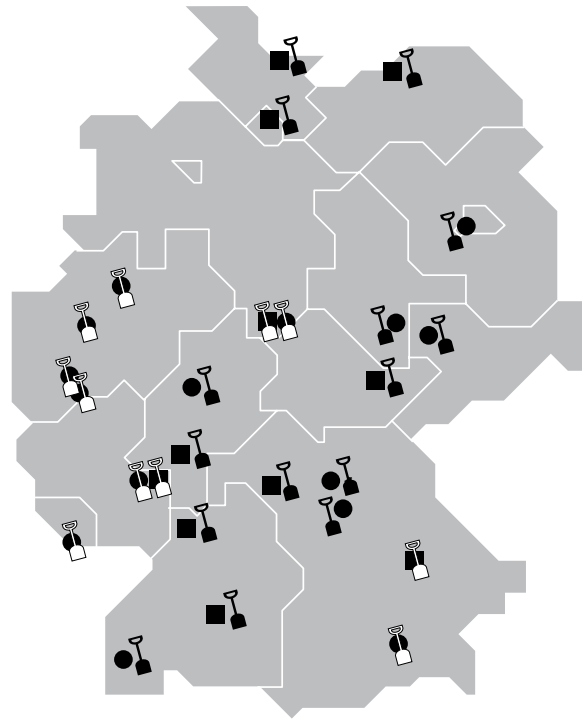


Figure 2. Map of Bachelor study programs where fieldwork is mandatory (black shovel symbols) or optional (open shovel symbols) (map: <www.kleinefaecher.de>, with additions by Doris Gutmiedl-Schümann; for sources, see the list of examined study programs at the end of this article).

for it in a 180 ECTS credit points Bachelor study program. In the study programs where fieldwork is only optional, it is usually highly recommended. In those study programs, up to 60 days of fieldwork and up to 24 ECTS credit points can be earned during fieldwork experience. It is usually not explicitly stated when fieldwork classes shall or will take place, during term or outside of term, but the way the time spans for expected fieldwork time are verbalised assume that it is expected that the students will take fieldwork classes outside of term time. It should be noted here that, because in some study programs students must collect a quite high number of credit points for fieldwork, there is not much time left for the students to get other practical experiences during their academic holidays, such as in museums and collection work, public outreach, publication, and other archaeology-related fields.

Judging by the relatively high number of ECTS credit points, and therefore to the relatively large amount of time students are required to spend in fieldwork classes, fieldwork seems to be an important aspect of the study programs that are on or that involve prehistoric archaeology. Therefore we should ask not only *How is fieldwork implemented in the study programs?* but also *Do the study programs prepare their students for this and other working environments, and if so, how?*

Surveys and excavations within a study program are often described as hands-on or practical experience and as vocational preparation for future work in the field of cultural heritage management (CRM) (in German: Denkmalpflege). However, this is a very narrow view on the field of CRM, where excavations are only a small part of the everyday work. Moreover, as Frank Nikulka (2016) pointed out, CRM and fieldwork classes have often contradictory aims: CRM seeks to protect archaeological sites, using archaeological excavation as a last resort if the site is somehow in danger and can no longer be protected effectively. Fieldwork classes, however, especially in Bachelor study programs, seek to teach field methods first-hand and therefore need to excavate. But as teaching field methods takes time, especially if there is no class or seminar planned in the curriculum to prepare students in the theory of fieldwork, fieldwork classes can usually not be conducted as rescue excavations at archaeological sites that are about to be destroyed, for example, because of construction work.

As each archaeological excavation is also a destruction of the archaeological site, study programs on archaeological subjects face a dilemma: On the one hand, they aim to teach fieldwork methods in the field, and on the other hand, CRM regulations and laws make it difficult to find suitable sites, at least in Germany. As Nikulka also pointed out, many archaeological study programs therefore provide fieldwork classes at sites abroad, and continue to excavate often complex sites over a longer period of time. This often also means that students as well as their academic teachers and other people involved in the excavation have to live for a certain time abroad, in the location where the fieldwork classes take place. To be able to take part in such kinds of fieldwork classes, students and teachers alike must be able to be away from home for longer periods, which cannot be expected from everyone. For example, some have to take care of children or of elderly relatives or of relatives otherwise in need of care, and some are in need of regular medical support. For those students, the study programs should state which alternatives they can choose to get ECTS credit points that are meant for fieldwork classes or similar. Unfortunately, among the examined undergraduate study programs descriptions, there is only one example, from the university of Kiel, where this has been done. Furthermore, some may live a way of life that is incompatible with fieldwork classes abroad or makes it difficult to attend, for example, members of religious or ethnic minorities that are following certain rules in every-day life, or individuals following a particular diet for personal, health or religious reasons. This would, of course, not necessarily exclude them from fieldwork classes, but it can lead to discriminatory situations or exclusion (see also below). In general, it seems that fieldwork classes abroad are aimed at independent, young, single students without restrictions, ignoring the actual diversity of lifestyles and daily routines among the student population.

To undertake survey and excavation within a study program should also increase the employability of the graduates. 'Employability' in Bachelor study programs, however, was and is widely discussed. The implementation of practical experience into the curriculum and the possibilities that are given to students to develop their own set of practical experiences, in particular, have been researched throughout different subjects and disciplines. In general, as Brigitte Petendra, Katja Schikorra, and Rudi Schmiede (2012) pointed out, internships and practical training play a minor part in Bachelor study programs in the humanities and are often not connected to other parts of the study programs, such as other modules, lectures, or seminars. This is also the case for Bachelor study programs about prehistoric archaeology: Only 13 of the 26 examined study program descriptions mention lectures or seminars that are dedicated to the introduction to fieldwork, excavation, prospection methods, and/or CRM; they are usually offered in the same module in which the fieldwork takes place. These modules are usually without entrance requirements, and they are themselves usually not required as a prerequisite for other modules. Therefore, it might be difficult for academic teachers to connect fieldwork aspects with other teaching activities, as they can never be sure how many if any, of the participants in their class actually finished the module on fieldwork. Furthermore, what students should learn in particular, and which skills they should acquire during fieldwork classes, is often not specified. Remarkably, only one study program description, in this case from the university of Leipzig, not only mentions the technical and scientific aspects than can be learned during fieldwork, but also emphasises the social skills the students will gain during fieldwork. In the other study program descriptions, no specific details for professional or archaeological preparation for fieldwork are mentioned. That does not, of course, necessarily mean that is not conducted at all, but as it is not part of the curriculum, it seems to be valued less than other learning activities.

Museums work and other practical experiences in archaeology study programs

As mentioned, it is expected, based on the study program descriptions, that fieldwork courses shall provide students a view into one of the main fields of their possible future archaeological work. Therefore, it could be expected that other main fields of possible future archaeological work would, equally, be part of the Bachelor study programs. Surprisingly, they are not. The broad area of museums and collection work provides an example. In only 3 of the 26 study programs is museum work mandatory, and in only 18 of the 26 study programs it is mentioned as optional (Table 2; Fig. 3). In five study programs, museums work is not stated as part of the study program at all. And even in the three study programs where fieldwork and museums work are both mandatory, only at two universities is an equal amount of fieldwork and museums experience requested from the students (38 days of practical work at the university of Erlangen, 20 days of practical work at the university of Marburg). Where museums work is an optional part of the curriculum, students can get between 5 and 21 ECTS credit points for practical museums work and are expected to work between 10 and 60 days in museums and exhibitions.

Moreover, different pedagogical approaches to fieldwork and excavation, on the one hand, and to museums work, on the other hand, can be found in the study program descriptions. Where fieldwork is mandatory, fieldwork methods are usually taught by participating in fieldwork, whereby students have to excavate or conduct archaeological surveys themselves. Fieldwork methods are therefore perceived as methods that can only be learned by *doing* fieldwork. Museums and collection work, however, is usually taught by visiting museums and collections, and therefore by looking at and examination *how others do* museums work. In the examined study program descriptions, one exception to this trend can be found: At the university of Munich, both, museums work and fieldwork are taught by seminars and single-day excursions.

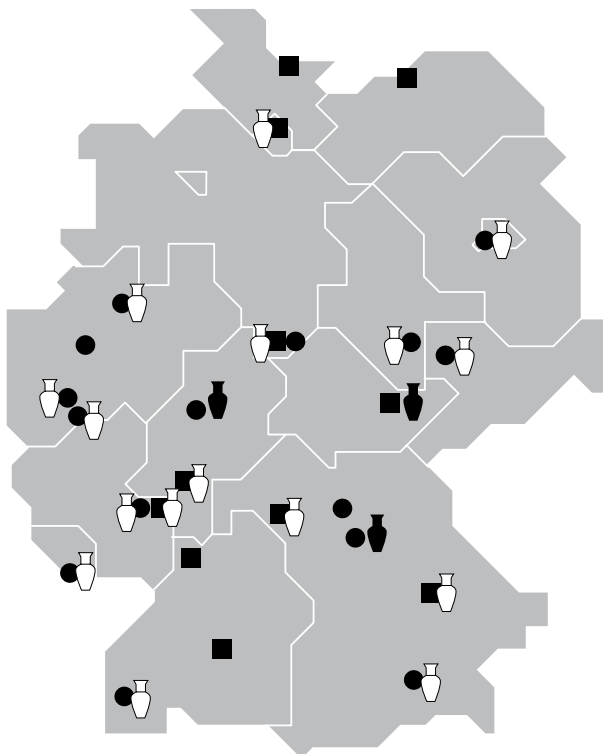


Figure 3. Map of Bachelor study programs where museums work is mandatory (black vase symbols) or optional (open vase symbols) (map: <www.kleinefaecher.de>, with additions from Doris Gutsmiedl-Schumann; for sources, see the list of examined study programs at the end of this article).

If the examined undergraduate study programs are compared with each other, fieldwork and excavation are much more often part of the study programs than are museums and exhibitions, while the possibilities to explore other possible future working environments are usually missing in the practical parts of the study programs – or they can be chosen instead of museums work, but not instead of fieldwork. In the end, the picture of their future job options that students get during their study programs is quite a narrow one.

Discussion of the practical training in undergraduate study programs

One main question that emerges from the discussion above is *Why are excavation and fieldwork so much more often part of undergraduate study programs than are other possible future working areas?* Unfortunately, there is not much research and investigation study programs has been undertaken so far, so I can only try to argue for possible explanations. One explanation could be that the study programs try to meet public expectations of ‘what archaeologists do’. Cornelius Holtdorf, for example, in his work about archaeology in contemporary popular culture, has collected data from various polls and surveys in which the interviewees were asked to describe, in their own words, what they think when they hear the term *archaeology* or *archaeologist* (Table 3). In four of the six studies, ‘digging’ or ‘going on excavations’ was the most common perception; in the remaining two studies, these answers were among the top three (Holtdorf 2016, pos. 1210-1212; see also Fries in this volume). The other answers to this open-ended interview question can be summarised as ‘research’, such as studying the past using ancient objects, or similar. But museums work – such as preserving the excavated objects, displaying some of them, and informing the general public about the past – was not mentioned by any of the interviewees (Holtdorf 2016, pos. 1210-1212).

Maybe the emphasis of fieldwork can therefore be considered as some kind of self-fulfilling prophecy, as students, when they start university, most likely have the same ideas and expectations about archaeology as do members of the general public. Students expect to do fieldwork, so they choose study programs where the aspect of fieldwork is prominently placed, which might then become a criterion for a successful – because popular – study program.

It should be remembered, however, that even in those study programs where comparatively much fieldwork is expected from the students, they get only up to 33 ECTS credit points for it, in a study program that requires 180 ECTS credit points in total. So, of the total number of ECTS points garnered for lectures, seminars, and

Table 3. Public perceptions of archaeology (after Holtdorf 2016, pos. 1246).

Survey	Most common answer	2nd most common answer	3rd most common answer
Merriman 1991	the past (26%)	ruins or objects (53%)	digging (45%)
Mackinney 1994	digging (32%)	past (28%)	ancient civilisations / cultures (24%)
Pokotylo & Guppy 1999	study the past using archaeological record / methods (21%)	study the past, ancient society / civilisations (20%)	excavations (17%)
Pokotylo 2002	excavations / digs (39%)	sites / ruins / artefacts (29%)	dinosaur bones / fossils (21%)
Ramos & Duganne 2002	digging (22%)	history, heritage, and antiquity (12%)	digging artefacts / things / objects from the past
Högberg 2004	excavation / excavation tools (26%)	finding ancient artefacts (16%)	ancient cultures (9%)

activities that are part of a study program, fieldwork classes are still quite a small part. Nevertheless, it is often a major part of the advertising for a study program³.

Does emphasis on fieldwork affect the diversity of students?

Based on this survey of study program descriptions, I will discuss whether and how this focus on prospection and excavation in the practical aspects of Bachelor study programs affects the diversity of students, and which possible effects it has on gender equality and/or other (in)equalities. Unfortunately, not much research has been done to date on this or similar topics, especially not in connection with the current study programs at German universities. However, some papers on gender and fieldwork published from the 1980s onward may help inform the discussion. Those were mostly written by women, often in English-speaking archaeological environments, and usually from a personal perspective and with a focus on working situations – and therefore with a focus on already graduated archaeologists (e.g. Perry 2018; Shipley 2018, with further references). Publications and surveys that focus on students and study programs are rare (e.g. Cobb and Croucher 2016).

The first publications addressed mainly fieldwork and gender. Joan Gero (1985), for example, in her paper ‘Socio-Politics and the Woman-at-Home Ideology’, examined field-based research projects and non-field-based projects in Meso-American archaeology. She describes that many more men than women worked on fieldwork-based projects, while more women than men conducted non-fieldwork-based research. She concludes, also using data from other surveys, that ‘[...] *these figures suggest that archaeological field research, fulfilling a male stereotype and indeed associated with male archaeologists, is heavily emphasized [...]*’ (Gero 1985, 347). Fieldwork and field-based projects seem to be perceived as both more prestigious and ‘male’, non-field-based projects, often focusing on artefacts and therefore the necessary research after excavation, seem to be perceived as less prestigious as well as ‘female’: ‘*The woman-at-home archaeologist must fulfill her stereotypic feminine role by specializing in the analysis of archaeological materials, typologizing, seriating, studying wear or paste or iconographic motifs. She will have to do the archaeological housework*’ (Gero 1985, 344). In publications from the 1990s, Sybille Kästner described a similar situation for Germany (Kästner 1999), as did Roberta Gilchrist (1991) for British field archaeology and Stephanie Moser (1996) for Australian archaeology. These surveys thus describe a gendered division of archaeological work. It is notable that that this kind of gendered division of labour (men doing the digging, women taking care of the artefacts) is, according to recent discussions on social media, still a topic during fieldwork classes, and is perceived by male and female students alike as discriminatory, as both groups are reduced to only a few skills and activities. Unfortunately, systematic surveys to explore the perception of labour divisions in fieldwork classes according to gender or other personal features of the participating students, as well as further research, are still lacking.

Furthermore, as Hannah Cobb and Karina Croucher pointed out few years ago by comparing various studies conducted in English-speaking countries on professional archaeology with the survey ‘Digging Diversity’, which focused on the situation of

3 See, for example, the leaflets advertising the Bachelor study programs B.A. Vor- und Frühgeschichtliche Archäologie (Goethe-Universität Frankfurt am Main), at <http://www.uni-frankfurt.de/60033944/SSC_Flyer_DIN_A4_Vor_und_Fr%C3%BChgeschichtliche_HF_web.pdf>; B.A. Archäologien (Rheinische Friedrich-Wilhelms-Universität Bonn), at <https://www.uni-bonn.de/studium/vor-dem-studium/faecher/archaeologien/at_download/info_attachment>; and B.A. Ur- und Frühgeschichte (Universität Rostock), at <https://www.altertum.uni-rostock.de/fileadmin/uni-rostock/Alle_PHF/PHF/Studium/02_BA-Zweifaecher/Ordnungen_2017/Ur_und_Fruegeschichte/Ur-_und_Fruegeschichte_BA_2017.pdf> (all retrieved 9 January 2019).

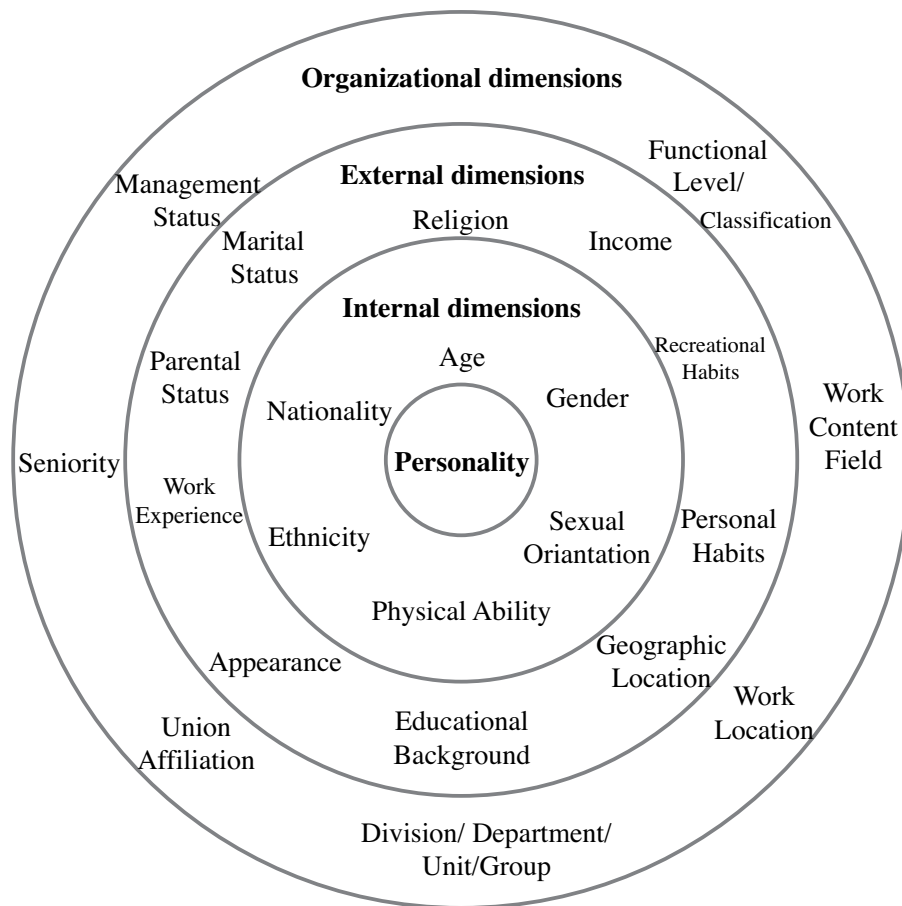


Figure 4. Four layers of diversity (Maj 2015, Fig. 3, which is adapted from Gardenswartz and Rowe 2003, with modification).

students as well as that of professionals (Cobb and Croucher 2016; Cobb 2015), not all archaeologists categorise themselves into ‘male’ or ‘female’. *Digging Diversity* showed that just under one in five respondents (professional and student) were not heterosexual and, most worryingly, that when sexuality and professional role were correlated, those in positions of power were exclusively heterosexual’ (Cobb and Croucher 2016, 953). Interestingly, the number of ‘other’ genders were higher among the students, as were the numbers of participants with varying disabilities or different ethnicities (Cobb and Croucher 2016, 953-955; see also Rocks-Macqueen 2013). Cobb and Croucher concluded that ‘[...] this disparity in diversity figures between students and professionals indicates, therefore, is that there are clearly still a series of barriers that are preventing a more diverse profession’ (Cobb and Croucher 2016, 956). Being part of a minority might therefore also be a reason for difficult situations during fieldwork, and in the long term a reason for quitting archaeology. These studies also demonstrate that gender is only one aspect of the diversity that can be assumed to exist among archaeologist and archaeology students⁴. So, the crucial point is to anticipate the many levels of diversity (Fig. 4) and how those may affect students and other personnel during fieldwork.

Fieldwork classes often last several days and bring a group of mostly very different people – such as students, instructors, workers, and researchers, both male and female – from different social and cultural backgrounds closely together to work and live in an often remote place. Participants should be made aware that

4 The many levels of diversity in working environments are, for example, shown by the project ‘Charta der Vielfalt’ (diversity charter) <<https://www.charta-der-vielfalt.de/diversity-verstehen/diversity-dimensionen/>>, retrieved 1 December 2018.

fieldwork classes are not only physically demanding, with their long and physical labour-filled days, but also socially demanding, in that they take place in often unique social settings. This has the potential to provide students with opportunities to gain social skills, but it also entails the danger of unwanted interactions.

Social skills that can be gained during fieldwork, and the personal challenge that living and working in a remote place with a small group of fellow students as well as with workers and academic teachers and under often quite special conditions means, are two sides of the same coin. As about 20 per cent of undergraduate students in Germany nowadays still live with their parents, mainly due to the increasing rents and other cost of living in university cities⁵, this adds even for typical students extra challenge to 'being in the field', as the everyday support they might experience at home is of course missing in the field setting. Therefore, pointing out the possibilities for personal development and the gaining of social skills during fieldwork seems all the more important. Furthermore, living on a special diet, living with disabilities, or depending on regular medical services, which might not be a problem in everyday life or during normal holidays, might suddenly become a real challenge. Therefore, students should be made aware of that, and for those who are among these groups, it should be made clear by academic teachers or those who are in charge of the fieldwork class whether there will be any support for them during a fieldwork class. In summary, it is important that academic teachers learn in advance of a fieldwork class, not only who the students are, but also from which backgrounds they come, what they expect from taking part in fieldwork, and whether they need special support. For example, to meet as many different food requirements in the regular field kitchen and at the same time restrict the cost of food and labour for the daily cooking, the archaeologist Eleanor Scott and the The Inclusive Archaeology Project collected nutrient-rich, tasty, and easy-to-cook recipes based on usually quite cheap ingredients that are also vegan and diabetic friendly, but suitable to any participant of the fieldwork class⁶. This way, none of the students is excluded during the daily meals. Still, not every student might be aware that being in the field also involves give-and-take on everyday matters, such as when and what to eat.

Especially hidden disabilities could become a real challenge during fieldwork. To increase awareness of disability issues in archaeology and to improve the integration of disability in fieldwork teaching, the Inclusive, Accessible, Archaeology project was started by the University of Reading, UK. To see how many students might actually be affected, issues surrounding disability and current practices related to disability⁷ and archaeological fieldwork were evaluated through questionnaires. The project argues that all individuals have limitations and areas of greater ability, no matter whether they are embodied or otherwise. Therefore, beginning by realistically assessing skills and playing to the strengths of each participant on a fieldwork campaign provides a productive, non-discriminatory way of practicing and of training students in the field (Phillips *et al.* 2007). Other exclusionary elements that regularly appear in excavation settings were also addressed, for example, by Stephanie Moser (2007, 24) and Karina Croucher and Wendelin Romer (2007, 12-14), such as the emphasis on drinking in the evenings or the lack of segregated sleeping arrangements, which can be exclusionary to specific groups for various reasons.

5 Results of the latest student census can be found at <<http://www.sozialerhebung.de/archiv>>, retrieved 1 December 2018.

6 The collection of recipes by Eleanor Scott can be found at her 'Dig Food Blog' at <<https://eleanorscottarchaeology.com/dig-food-blog/>>, retrieved 1 December 2018.

7 Disability was in this project seen in a social model, which '*... shifts the emphasis from what is "wrong" with a disabled person, to the "barriers" in society (physical, social, economic and attitudinal) that exclude them from participating in everyday activities ...*'. It was therefore '*... attempting to remove barriers that exclude some members of society from participating in archaeological fieldwork training. In this, it is promoting inclusiveness*' (Phillips and Gilchrist 2005, 7).

Therefore, it is important to put in place lectures, seminars, or workshops that prepare students for fieldwork experiences and that aim to sensibilise them as well as the academic teachers and others involved to the risk of marginalising certain groups because of their needs, and that encourage communication about possible issues and what can be done about it – *before* the fieldwork starts.

No discussion on gender, diversity, and fieldwork situations is complete without also talking about unwanted personal interactions, bullying, and harassment. Occasionally cases are reported, and some small surveys have been conducted, but systematic research taking wider perspective on this unpleasant topic, especially in connection with archaeology study programs and fieldwork classes, is still missing. In 2014, the results of the Survey of Academic Field Experiences (SAFE): Trainees Report Harassment and Assault, which was open to all disciplines with fieldwork aspects, were published by Kathryn Clancy and her co-authors. Many more women than men responded to this poll, and unfortunately, quite a number of unwanted contacts and interactions were reported (Clancy *et al.* 2014, esp. Fig. 3). A survey that was done in Spanish archaeology and presented at the 24th Annual Meeting of the European Association of Archaeologists⁸ yielded quite comparable results. Here, it was also pointed out that unwanted interactions, bullying, and harassment usually also involve hierarchies and power relations. Many more cases were collected by the cultural anthropologist Karen Kelsky, who started a crowdsourced survey of sexual harassment in academia⁹. By April 2018, 2438 individual cases were reported anonymously to this survey, and these are accessible through a public spreadsheet. The archaeologist Doug Rocks-Macqueen found by searching through this document that 91 of these stories involve archaeologists (Rocks-Macqueen 2018). These cases might, in the first place, seem like unconnected, single stories, but the next step should be to discuss if there are structures or periodic events that favour unwanted interactions of this or any other kind, and how that can be changed – to make studying and working in archaeology safe and secure for everyone.

How do we create diversity-sensitive fieldwork classes?

In general, there are two kinds of longer-lasting special situations that archaeology students usually experience during their time at university, namely, excursions or field trips of several days' duration, and fieldwork or excavations. Both excursions and excavations require preparation, primarily in a scientific, but also in an organisational and social way. But while it is quite common to prepare students for excursions with some kind of lecture, seminar, or course, for which some time is set aside in the study program description, it is less common to provide time for preparation for excavations and fieldwork, as was shown above. Nevertheless, not only students, but also academic teachers, instructors, workers, and researchers – in short, anyone who might be involved in fieldwork – should be aware of the special nature of the upcoming situation. To bring this to mind among the participants, the archaeologist Sara Perry designed a 'code of conduct for teams on field projects', which any participant has to sign before the actual fieldwork starts. This code of

8 It can still be followed on Twitter by searching for the hashtags #EAA2018, #s744 (for 'session 744: The women dimension in archaeology'), #stopharassmentinarchaeology and #stopviolenceinarchaeology. See also <<https://pbs.twimg.com/media/DmeTqo7XgAEZ8hO.jpg>> (retrieved 29 November 2018). Some Spanish newspapers, such as *El País* from 7 September 2018 (<https://elpais.com/cultura/2018/09/07/actualidad/1536347632_264117.html> [retrieved 10 January 2019]), also wrote about it.

9 <<https://theprofessorisin.com/2017/12/01/a-crowdsourced-survey-of-sexual-harassment-in-the-academy/>>.

conduct was built on six fieldwork expectations, which include the various perspectives of the fieldwork participants as well as the perspectives of the local people. Each expectation is explained in detail, and persons whom the fieldwork participants can approach in the case of problems are named. The headlines of this code of conduct are mentioned below (Perry 2018):

1. *We are committed to working as a team*
2. *We are committed to prioritising and championing the people and communities that host us*
3. *We are committed to the working hours, professional expectations, and responsibilities defined by the overall project directors*
4. *We are representatives and extensions of the University of York and its staff, and of the professional bodies to which we and our project leaders are subscribed*
5. *We recognise that fieldwork can be intense, emotional, and tiring*
6. *We have the right to a safe, secure, and non-threatening working and living environment*

It seems crucial that archaeology study programs should be able to create a safe working and living environment during fieldwork classes. If the individuals and groups involved are working and living together in a respectful and appreciative way and are aware of the different needs of different individuals and groups, the creation of inequalities can be avoided. Therefore it is important to raise awareness about the special circumstances of fieldwork classes in advance, and to offer lectures and workshops that prepare the persons involved archaeologically and otherwise for the upcoming fieldwork campaign.

Furthermore, to provide more equality in fieldwork classes and courses, it could be helpful to make explicit what students should learn there, how this will be achieved, and what mechanisms are in place to ensure that each participant will have the same opportunities. To make sure that students and other participants in fieldwork classes keep an eye on their own learning progress, the Inclusive, Accessible, Archaeology Project created a questionnaire for self-evaluation (Phillips *et al.* 2007, esp. 12-15), which is still available for use¹⁰. To structuralise diversity-sensitive and equality-aware fieldwork classes in the discipline, the discussion presented in this paper should also be incorporated in undergraduate study program descriptions.

Finally, I want to express the hope that students who have experienced empowering fieldwork classes and who were encouraged by their study programs to look not only into fieldwork as a possible future working area, but also into other aspect of archaeology, will themselves act in a gender- and diversity-sensitive way when they are one day in charge of students and fieldwork classes themselves.

10 The Archaeological Skills Self-Evaluation Tool kit (ASSET) can be found online at <www.britarch.ac.uk/accessible/abouttoolkit.php>.

Appendix: List of examined study programs¹¹

University of Bamberg: Otto-Friedrich-Universität Bamberg, study program B. A. Archäologische Wissenschaften

Official documents and study program descriptions:

Allgemeine Prüfungsordnung für Bachelor- und Masterstudiengänge der Fakultäten Geistes- und Kulturwissenschaften sowie Humanwissenschaften und für Modulprüfungen im Rahmen der Ersten Lehramtsprüfung an der Otto-Friedrich-Universität Bamberg vom 30. September 2010.

Online available at <http://www.uni-bamberg.de/fileadmin/uni/amtliche_veroeffentlichungen/2010/2010-39.pdf>

Studien- und Fachprüfungsordnung für den Bachelorstudiengang 'Archäologische Wissenschaften/Archaeology' und das im Rahmen von Mehr-Fach-Bachelorstudiengängen wählbare Fach 'Archäologische Wissenschaften/Archaeology' an der Otto-Friedrich-Universität Bamberg vom 17. Oktober 2012.

Online available at <http://www.uni-bamberg.de/fileadmin/uni/amtliche_veroeffentlichungen/2012/2012-74.pdf>

Modulhandbuch Bachelorstudiengang 'Archäologische Wissenschaften/Archaeology'.

Online available at <https://www.uni-bamberg.de/fileadmin/uni/fakultaeten/ggeo_professuren/fruehgesch_archaeologie/Dateien/Endfassung_Modulhandbuch_Stand_08.04.2013.pdf>

University of Berlin: Freie Universität Berlin, study program B. A. Altertumswissenschaften, Schwerpunkt Prähistorische Archäologie

Official documents and study program descriptions:

Rahmenstudien- und Prüfungsordnung der Freien Universität Berlin. Amtsblatt der Freien Universität Berlin 32/2013 vom 22. August 2013, 260-269.

Online available at <<http://www.fu-berlin.de/service/zuvdocs/amtsblatt/2013/ab322013.pdf>>

Studienordnung des Fachbereichs Geschichts- und Kulturwissenschaften der Freien Universität Berlin für den Bachelorstudiengang Altertumswissenschaften, die 60- und 30-Leistungspunkte-Modulangebote Klassische Archäologie, Altorientalistik, Ägyptologie und Prähistorische Archäologie sowie die 30-Leistungspunkte-Modulangebote Ägyptische Philologie, Ägyptische Archäologie und Vorderasiatische Archäologie im Rahmen anderer Studiengänge. Amtsblatt der Freien Universität Berlin 85/2012 vom 15. September 2012, 1938-2036.

Online available at <<http://www.fu-berlin.de/service/zuvdocs/amtsblatt/2012/ab852012.pdf>>

Prüfungsordnung des Fachbereichs Geschichts- und Kulturwissenschaften der Freien Universität Berlin für den Bachelorstudiengang Altertumswissenschaften, die 60- und 30-Leistungspunkte- Modulangebote Klassische Archäologie,

¹¹ Last reading of all internet documents in the appendix was 9 January 2019.

Altorientalistik, Ägyptologie und Prähistorische Archäologie sowie die 30-Leistungspunkte-Modulangebote Ägyptische Philologie, Ägyptische Archäologie und Vorderasiatische Archäologie im Rahmen anderer Studiengänge. Amtsblatt der Freien Universität Berlin 85/2012 vom 15. September 2012, 2037-2056.

Online available at <<http://www.fu-berlin.de/service/zuvdocs/amtsblatt/2012/ab852012.pdf>>

Studien- und Prüfungsordnung für den Studienbereich Allgemeine Berufsvorbereitung in Bachelorstudiengängen des Fachbereichs Geschichts- und Kulturwissenschaften der Freien Universität Berlin. Amtsblatt der Freien Universität Berlin 35/2014 vom 27. August 2014, 697-747.

Online available at <<http://www.fu-berlin.de/service/zuvdocs/amtsblatt/2014/ab352014.pdf>>

University of Bochum: Ruhr-Universität Bochum, study program B. A. Archäologische Wissenschaften

Official documents and study program descriptions:

Gemeinsame Prüfungsordnung für den 2-Fächer-Bachelor-Studiengang an der Ruhr-Universität Bochum vom 21.10.2016. Amtliche Bekanntmachung Nr. 1186, 3.11.2016.

Online available at <<http://www.uv.ruhr-uni-bochum.de/dezernat1/amtliche/ab1186.pdf>>

Studienordnung für das 1-Fach B. A.-Studium Archäologische Wissenschaften an der Ruhr-Universität Bochum (Entwurf).

Online available at <<http://www.ruhr-uni-bochum.de/archaeologie/mam/content/ba1fach.pdf>>

Studienordnung (Entwurf) für das B. A.-Studium Archäologische Wissenschaften an der Ruhr-Universität Bochum.

Online available at <<http://www.ruhr-uni-bochum.de/archaeologie/mam/content/ba2fach.pdf>>

Modulhandbuch 1-Fach-Bachelor 'Archäologische Wissenschaften'.

Online available at <http://www.ruhr-uni-bochum.de/archaeologie/mam/content/modulhandbuch_ba_arwi_1_020315.pdf>

Modulhandbuch 2-Fach-Bachelor 'Archäologische Wissenschaften'.

Online available at <http://www.ruhr-uni-bochum.de/archaeologie/mam/content/modulhandbuch_2-ba-arwi.pdf>

University of Bonn: Rheinische Friedrich-Wilhelms-Universität Bonn, study program B. A. Archäologien

Official document and study program description:

Prüfungsordnung für die Bachelorstudiengänge der Philosophischen Fakultät der Rheinischen Friedrich-Wilhelms-Universität Bonn vom 5. August 2013. Amtliche Bekanntmachungen Jg. 43, Nr. 52, 30. August 2013.

Online verfügbar <<http://hdl.handle.net/20.500.11811/326>>

University of Erlangen-Nürnberg: Friedrich-Alexander-Universität Erlangen-Nürnberg, study program B. A. Archäologische Wissenschaften

Official documents and study program descriptions:

Allgemeine Studien- und Prüfungsordnung für die Bachelor- und Masterstudiengänge der Philosophischen Fakultät und Fachbereich Theologie der Universität Erlangen-Nürnberg (ABMStPO/Phil) vom 27. September 2007, geändert durch Satzungen vom 3. Dezember 2007, 5. August 2008, 1. September 2009, 4. September 2009, 3. März 2010, 1. Juni 2010, 6. Juli 2010, 5. November 2010, 8. März 2011, 5. August 2011, 18. Januar 2012, 8. Oktober 2012, 19. Februar 2014, 21. Juli 2014, 6. August 2015, 2. August 2016.

Online available at <http://www.zuv.fau.de/universitaet/organisation/recht/studiensatzungen/PHIL1/StuO_PrO_Allg_%20BA_%20Phil.AUG2016.pdf>

Fachstudien- und Prüfungsordnung für das Fach Archäologische Wissenschaften im Ein-Fach-Bachelorstudiengang an der Philosophischen Fakultät und Fachbereich Theologie der Friedrich-Alexander-Universität Erlangen-Nürnberg (FPO Archäol. Wiss. Ein-Fach) vom 9. Oktober 2007, geändert durch Satzungen vom 5. November 2010, 8. März 2011, 21. Juli 2014, 6. August 2015.

Online available at <http://www.zuv.fau.de/universitaet/organisation/recht/studiensatzungen/PHIL1/FachStuOPRO_ArchaeolWiss.AUG2015.pdf>

Fachstudien- und Prüfungsordnung für das Fach Archäologische Wissenschaften im Zwei-Fach-Bachelorstudiengang an der Philosophischen Fakultät und Fachbereich Theologie der Friedrich-Alexander-Universität Erlangen-Nürnberg (FPO Archäol. Wiss. Zwei-Fach) vom 18. Juli 2014, geändert durch Satzung vom 11. August 2015.

Online available at <http://www.zuv.fau.de/universitaet/organisation/recht/studiensatzungen/PHIL1/2FachBA_ArchaeologischeWissenschaften_AUG2015.pdf>

University of Frankfurt am Main: Johann Wolfgang-Goethe Universität Frankfurt am Main, study program B. A. Vor- und Frühgeschichte

Official documents and study program descriptions:

Allgemeine Bestimmungen für Bachelor- und Masterstudiengänge der Johann Wolfgang Goethe-Universität Frankfurt am Main vom 16.04.2008 in der Fassung vom 13.04.2011. Genehmigt vom Präsidium der Johann Wolfgang-Goethe Universität Frankfurt am Main am 10.05.2011. UniReport Satzungen und Ordnungen vom 20.05.2011.

Online available at <https://www.uni-frankfurt.de/40802831/Allgemeine_Bestimmungen_fuer_Bachelor-_und_Masterstudiengaenge.pdf>

Ordnung für den Bachelorteilstudiengang Vor- und Frühgeschichtliche Archäologie mit dem Abschluss Bachelor of Arts (B. A.) im Hauptfach an der Johann Wolfgang Goethe-Universität Frankfurt am Main vom 6. Juli 2011 in der Fassung vom 17. Juli 2013. Genehmigt durch das Präsidium am 23. September 2014. UniReport Satzungen und Ordnungen vom 20.10.2014.

Online available at <https://www.uni-frankfurt.de/54721150/BA_VFG-HF_V2014.pdf>

Ordnung für den Bachelorteilstudiengang Vor- und Frühgeschichtliche Archäologie mit dem Abschluss Bachelor of Arts (B. A.) im Nebenfach an der Johann Wolfgang Goethe-Universität Frankfurt am Main vom 6. Juli 2011 in der Fassung vom 13.

Juli 2013. Genehmigt durch das Präsidium am 23. September 2014. UniReport Satzungen und Ordnungen vom 20.10.2014.
Online available at <https://www.uni-frankfurt.de/54720368/BA_VFG-NF_V2014.pdf>

University of Freiburg: Albert-Ludwigs-Universität Freiburg, study program B. A. Archäologische Wissenschaften

Official documents and study program descriptions:

Prüfungsordnung der Albert-Ludwigs-Universität für den Studiengang Bachelor of Arts (B. A.) vom 25.11.2011, zuletzt geändert am 30.09.2016.
Online available at <<https://www.geko.uni-freiburg.de/studiengaenge/bachelor/bachelor2011/allgbest.pdf>>

Prüfungsordnung der Universität Freiburg für den Studiengang Archäologische Wissenschaften, Bachelor of Arts (B. A.) vom 25.11.2011 in der Fassung der fachspezifischen Bestimmungen vom 30.09.2014.
Online available at <<http://www.geko.uni-freiburg.de/pruefungsordnungen/bachelor/po-bachelor2011/HFArchaeologie300914.pdf>>

University of Göttingen: Georg-August-Universität Göttingen, study program B. A. Ur- und Frühgeschichte

Official documents and study program descriptions:

Allgemeine Prüfungsordnung für Bachelor- und Master-Studiengänge sowie sonstige Studienangebote an der Universität Göttingen (APO). Veröffentlicht in den Amtlichen Mitteilungen Nr. 39 vom 12.11.2010, Änderungen in den Amtlichen Mitteilungen vom 19.08.2013, 24.03.2015, 11.11.2015 und 05.10.2016.
Online available at <<https://www.uni-goettingen.de/de/version-am-i-5205102016/82941.html>>

Prüfungs- und Studienordnung für den Zwei-Fächer-Bachelor-Studiengang der Georg-August-Universität Göttingen. Veröffentlicht in den Amtlichen Mitteilungen vom 08.12.2011, Änderungen in den Amtlichen Mitteilungen vom 31.01.2012, 04.04.2012, 05.05.2012, 02.08.2012, 08.08.2012, 14.11.2012, 27.05.2013, 23.09.2013, 17.03.2014, 16.05.2014, 22.10.2014, 30.03.2015, 23.10.2015, 22.04.2016 und 16.11.2016.
Online available at <<https://www.uni-goettingen.de/de/version-am-i-6016112016/553371.html>>

Prüfungs- und Studienordnung für den Zwei-Fächer-Bachelor-Studiengang der Georg-August-Universität Göttingen, Anlage II.45 Fachspezifische Bestimmungen – Studienfach ‘Ur- und Frühgeschichte’. Veröffentlicht in den Amtlichen Mitteilungen vom 23.09.2013.
Online available at <<https://www.uni-goettingen.de/de/version-am-i-4123092013/447947.html>>

Georg-August-Universität Göttingen, Zwei-Fächer-Bachelor-Studiengang – Studienfach ‘Ur- und Frühgeschichte’: Modulhandbuch ‘Ur- und Frühgeschichte’.
Online available at <<https://www.uni-goettingen.de/de/version-am-ii-2801102013/447948.html>>

University of Göttingen: Georg-August-Universität Göttingen, study program B. A. Antike Kulturen

Official documents and study program descriptions:

Prüfungs- und Studienordnung für den Bachelor-Studiengang 'Antike Kulturen' an der Universität Göttingen. Veröffentlicht in den Amtlichen Mitteilungen vom 25.11.2011, Änderungen in den Amtlichen Mitteilungen vom 05.10.2012, 13.09.2013, 30.09.2015 und 11.11.2016.

Online available at <<https://www.uni-goettingen.de/de/version-am-i-5811112016/551509.html>>

Modulverzeichnis zu der Prüfungs- und Studienordnung für den Bachelor-Studiengang 'Antike Kulturen'. Amtliche Mitteilungen I Nr. 18/2011, zuletzt geändert durch Amtliche Mitteilungen I Nr. 58/2016.

Online available at <<https://www.uni-goettingen.de/de/version-am-ii-2011112016/551510.html>>

University of Halle-Wittenberg: Martin-Luther-Universität Halle-Wittenberg, study program B. A. Archäologien Europas

Official documents and study program descriptions:

Studien- und Prüfungsordnung für das Studienprogramm Archäologien Europas (90 Leistungspunkte) im Zwei-Fach-Bachelor-Studiengang der Martin-Luther-Universität Halle-Wittenberg vom 12.07.2006. Amtsblatt 17. Jg, Nr. 5 vom 3. April 2007.

Online available at <<http://wcms.itz.uni-halle.de/download.php?down=27944&elem=2643303>>

Modulhandbuch für das Studienprogramm (90 LP) Archäologien Europas im Bachelor (2-Fach) – Studiengang (Modulversionstand vom 12.10.2015).

Online available at <<http://wcms.itz.uni-halle.de/download.php?down=39892&elem=2643304>>

University of Hamburg: Universität Hamburg, study program B. A. Vor- und Frühgeschichtliche Archäologie

Official documents and study program descriptions:

Prüfungsordnung der Fakultät für Geistes- und Kulturwissenschaften für Studiengänge mit dem Abschluss Bachelor of Arts / Baccalaurea Artium bzw. Baccalaureus Artium (B. A.) vom 23. November 2005. Amtlicher Anzeiger 32, 25. April 2006, 770-777.

Online available at <<https://www.fbkultur.uni-hamburg.de/studium/ba-studiengaenge/ba-studiengaenge-ab-ws-12-13/materialien/rpo-und-fsb-ab-ws-12-13/rpo-ba-231105-mit-aenderung-050706.pdf>>

Änderung der Prüfungsordnung der Fakultät für Geistes- und Kulturwissenschaften für Studiengänge mit dem Abschluss 'Bachelor of Arts/ Baccalaurea Artium bzw. Baccalaureus Artium' (B. A.) vom 11. Juli 2012. Amtliche Bekanntmachung 73 vom 21. September 2012.

Online available at <<https://www.geschichte.uni-hamburg.de/studium/pruefungsordnungen/aenderung-po-ba-2012.pdf>>

Fachspezifische Bestimmungen für den Bachelorstudiengang Vor- und Frühgeschichtliche Archäologie vom 4. April 2012. Amtliche Bekanntmachung 59 vom 13. September 2012.

Online available at <<https://www.fbkultur.uni-hamburg.de/vfg/studium/bachelor-studiengang/bachelorpopneu.pdf>>

Fachspezifische Bestimmungen für den Bachelorstudiengang Vor- und Frühgeschichtliche Archäologie vom 4. April 2012 – Berichtigung. Amtliche 131 vom 19. Dezember 2014.

Online available at <<https://www.fbkultur.uni-hamburg.de/studium/ba-studiengaenge/ba-studiengaenge-ab-ws-12-13/materialien/rpo-und-fsb-ab-ws-12-13/berichtigung-fsb-ab-1213-ba-vor-und-fruehgeschichtliche-archaeologie.pdf>>

Modulübersicht Hauptfach BA Vor- und Frühgeschichtliche Archäologie.

Online available at <<https://www.fbkultur.uni-hamburg.de/studium/ba-studiengaenge/ba-studiengaenge-ab-ws-16-171/materialien/moduluebersicht-hf/vfga-hf-moduluebersicht-ab-ws-1617.pdf>>

University of Heidelberg: Ruprecht-Karls-Universität Heidelberg, study program B. A. Ur- und Frühgeschichte

Official documents and study program descriptions:

Prüfungsordnung der Universität Heidelberg für den Bachelor-Studiengang Ur- und Frühgeschichte vom 14. April 2011.

Online available at <http://www.uni-heidelberg.de/md/studium/download/ur_fruehgeschichte_po_bachelor.pdf>

Modulhandbuch des Bachelor-Studiums: BA-Studiengang 'Ur- und Frühgeschichte'.

Online available at <http://www.ufg-va.uni-hd.de/md/zaw/ufg/ba-ufg_modulhandbuch.pdf>

University of Jena: Friedrich-Schiller-Universität Jena, study program B. A. Ur- und Frühgeschichte

Official documents and study program descriptions:

Prüfungsordnung der Philosophischen Fakultät für den Studiengang mit dem Abschluss Bachelor of Arts mit Kern- und Ergänzungsfach vom 17. Juli 2013.

Verkündungsblatt 7/2013, 197-211.

Online available at <https://www.uni-jena.de/unijenamedia/Downloads/einrichtungen/dez1/verb/vb_2013_7/v74_43_57.pdf>

Studienordnung der Philosophischen Fakultät für das Fach Archäologie der Ur- und Frühgeschichte in Studiengängen mit dem Abschluss Bachelor of Arts vom 05.

Januar 2009 (Verkündungsblatt der Friedrich-Schiller-Universität Jena Nr. 10/2009

S. 1015), geändert am 22. Mai 2013 (Verkündungsblatt der Friedrich-Schiller-

Universität Jena Nr. 6/2013 S. 129), geändert am 19. Februar 2015 (Verkündungsblatt

der Friedrich-Schiller-Universität Jena Nr. 3/2015 S. 45), geändert am 18. Februar

2016 (Verkündungsblatt der Friedrich-Schiller-Universität Jena Nr. 2/2016 S. 36).

Online available at <https://www.uni-jena.de/unijenamedia/Bilder/einrichtungen/dez1/ordnungen/Philo/StO+BA+UrFr%C3%BChgeschichte+KF_EF.pdf>

Modulkatalog Bachelor of Arts 548 Ur- und Frühgeschichte.

Online available at <https://friedolin.uni-jena.de/download/modulkataloge/de/68_548_ufg_kf.pdf>

University of Kiel: Christian-Albrechts-Universität Kiel, study program B. A. Prähistorische und historische Archäologie

Official documents and study program descriptions:

Prüfungsverfahrensordnung (Satzung) der Christian-Albrechts-Universität zu Kiel für Studierende der Bachelor- und Masterstudiengänge vom 21. Februar 2008. Veröffentlichung vom 25. Februar 2016.

Online available at <<http://www.studservice.uni-kiel.de/sta/pruefungsverfahrensordnung-bachelor-master.pdf>>

Fachprüfungsordnung (Satzung) der Philosophischen und der Mathematisch-Naturwissenschaftlichen Fakultät der Christian-Albrechts-Universität zu Kiel für Studierende der Ein-Fach-Studiengänge Prähistorische und Historische Archäologie mit den Abschlüssen Bachelor of Arts (B. A.), Bachelor of Science (B.Sc.), Master of Arts (M. A.) und Master of Science (M.Sc.) und der Zwei-Fächer-Studiengänge Prähistorische und Historische Archäologie mit den Abschlüssen Bachelor of Arts (B. A.) und Master of Arts (M. A.) (Fachprüfungsordnung Prähistorische und Historische Archäologie [Ein-Fach, Zwei-Fächer]) vom 10. Juni 2015. Veröffentlichung vom 14. Juli 2015.

Online available at <<http://www.studservice.uni-kiel.de/sta/fachpruefungsordnung-praehistorische-und-historische-archaeologie-bachelor-master-1-fach-und-2-faecher.pdf>>

Praktikumsordnung (Satzung) für die Durchführung der Praxismodule im Rahmen des Profils Fachergänzung der Zwei-Fächer-Bachelor-Studiengänge und des Ein-Fach-Bachelor-Studienganges Prähistorische und Historische Archäologie vom 29. November 2007. Veröffentlichung vom 13. Februar 2014.

Online available at <<http://www.uni-kiel.de/sy/verzeichnis-2014.shtml>>

University of Köln: Universität zu Köln, study program B. A. Archäologie

Official documents and study program descriptions:

Prüfungsordnung für das Bachelorstudium an der Philosophischen Fakultät der Universität zu Köln vom 04.08.2015. Amtliche Mitteilungen 151/2015.

Online available at <http://am.uni-koeln.de/e15791/am_mitteilungen/@150/AM_2015_151_BPO_PhilFak.pdf>

Prüfungsordnung für das Bachelorstudium an der Philosophischen Fakultät der Universität zu Köln vom 15. Oktober 2015.

Online available at <http://phil-fak.uni-koeln.de/sites/phil-fak/lehre_studium/bachelor/Pruefungsordnungen_PO2015/PO-2015-Bachelorstudiengaenge.pdf>

Modulhandbuch 1-Fach-Bachelor Archäologie, Version 10.2.2016.

Online available at <http://philtypo3.uni-koeln.de/sites/phil-fak/lehre_studium/bachelor/modulhandbuecher/2015BA1FArch.pdf>

Modulhandbuch 2-Fach-Bachelor Archäologie, Version 10.2.2016.

Online available at <http://philtypo3.uni-koeln.de/sites/phil-fak/lehre_studium/bachelor/modulhandbuecher/2015BA2FArch.pdf>

University of Leipzig: Universität Leipzig, study program B. A. Archäologie der Alten Welt

Official documents and study program descriptions:

Prüfungsordnung für den Bachelorstudiengang Archäologie der Alten Welt an der Universität Leipzig vom 15. April 2011, in Verbindung mit der ersten Änderungssatzung zur Prüfungsordnung für den Bachelorstudiengang Archäologie der Alten Welt an der Universität Leipzig vom 6. Juni 2012.

Online available at <http://www.zv.uni-leipzig.de/universitaet/profil/entwicklungen/amtliche-bekanntmachungen.html?kat_id=533>

Studienordnung für den Bachelorstudiengang Archäologie der Alten Welt an der Universität Leipzig vom 15. April 2011, in Verbindung mit der ersten Änderungssatzung zur Studienordnung für den Bachelorstudiengang Archäologie der Alten Welt an der Universität Leipzig vom 6. Juni 2012.

Online available at <http://antik.gko.uni-leipzig.de/fileadmin/antik/media/Studium/Dokumente/Bachelor/2013/B_SO_2011.pdf>

Modulbeschreibungen BA Archäologie der Alten Welt, Ur- und Frühgeschichte, Stand: 23.2.2012.

Online available at <http://db.uni-leipzig.de/bekanntmachung/dokudownload.php?dok_id=2673>

University of Mainz: Johannes Gutenberg-Universität Mainz, study program B. A. Archäologien

Official documents and study program descriptions:

BA Archäologien (Ein-Fach/Verbundstudiengang), neu ab SoSe2016.

Online available at <<https://www.bachelormaster.archaeologie.uni-mainz.de/files/2017/12/1-PO-Anhang-BA-2015-Archaeologien-FINAL.pdf>>

Modulhandbuch BA Archäologien (Ein-Fach / Verbundstudiengang, 180 LP), neu ab SoSe 2016.

Online available at <<https://www.bachelormaster.archaeologie.uni-mainz.de/files/2017/12/MHB-BA-2015-Archaeologien.pdf>>

University of Mainz: Johannes Gutenberg-Universität Mainz, study program B. A. Vor- und Frühgeschichtliche Archäologie

Official documents and study program descriptions:

BA Vor- und Frühgeschichtliche Archäologie (Kernfach), neu ab SS 2016.

Online available at <<https://www.blogs.uni-mainz.de/fb07-klass-arch-bm/files/2017/12/3-PO-Anhang-BA-2015-Kernfach-VFG-FINAL.pdf>>

Modulhandbuch Kernfach Vor- und Frühgeschichtliche Archäologie, neu ab SoSe 2016.

Online available at <<https://www.blogs.uni-mainz.de/fb07-klass-arch-bm/files/2017/12/MHB-BA-2015-Kernfach-VFG-2015.pdf>>

University of Marburg: Philipps-Universität Marburg, study program B. A. Archäologische Wissenschaften

Official documents and study program descriptions:

Studien- und Prüfungsordnung für den Studiengang 'Archäologische Wissenschaften' / 'Archaeology' mit dem Abschluss Bachelor of Arts (B. A.) an der Philipps-Universität Marburg vom 08. Dezember 2010, in der Fassung vom 22. Juni 2016. Veröffentlicht in den Amtlichen Mitteilungen der Philipps-Universität Nr. 101/2010 am 16.12.2010, mit der ersten Änderung, veröffentlicht in den Amtlichen Mitteilungen der Philipps-Universität Nr. 40/2016 am 05.09.2016. Online available at <<http://www.uni-marburg.de/administration/recht/studoprueo/stpo-archwiss-ba-erste-aend-22062016.pdf>>

University of Munich: Ludwig-Maximilians-Universität München, study program B. A. Archäologie: Europa und Vorderer Orient

Official documents and study program descriptions:

Prüfungs- und Studienordnung der Ludwig-Maximilians-Universität München für den Bachelorstudiengang Archäologie: Europa und Vorderer Orient vom 2. März 2010. Online available at <https://www.uni-muenchen.de/aktuelles/amtl_voe/0400/486-12ar-180-10-ps00.pdf>

University of Münster: Westfälische Wilhelms-Universität Münster, study program B. A. Archäologie – Geschichte – Landschaft

Official documents and study program descriptions:

Rahmenordnung für die Bachelorprüfungen an der Westfälischen Wilhelms-Universität innerhalb des Zwei-Fach-Modells vom 6. Juni 2011. Online available at <https://www.uni-muenster.de/imperia/md/content/wwu/ab_uni/ab2011/ausgabe11/beitrag_05.pdf>

Prüfungsordnung für das Fach Archäologie-Geschichte-Landschaft zur Rahmenordnung für die Bachelorprüfungen innerhalb des Zwei-Fach-Modells an der Westfälischen Wilhelms-Universität Münster vom 30.06.2014. Online available at <https://www.uni-muenster.de/imperia/md/content/wwu/ab_uni/ab2014/ausgabe28/beitrag01.pdf>

University of Regensburg: Universität Regensburg, study program B. A. Vor- und Frühgeschichte

Official documents and study program descriptions:

Bachelorprüfungs- und Studienordnung für die Philosophischen Fakultäten der Universität Regensburg vom 21. Juli 2008, geändert durch Satzung vom 24. Juli 2009, 27. Juli 2010, 28. Juli 2010, 10. Februar 2011, 14. April 2011, 1. Juni 2011, 25. August 2011, 1. März 2012, 14. März 2012, 20. Juli 2012, 23. November 2012, 27. Februar 2013, 11. September 2013, 10. März 2014, 24. Juli 2014, 30. Juni 2015 und 25. April 2016.

Online available at <http://www.uni-regensburg.de/studium/pruefungsordnungen/medien/bachelor-master/baphilfak__7_voll.pdf>
Modulhandbuch

online available at <<http://www.uni-regensburg.de/studium/modulbeschreibungen/medien/ba/vfg-ba-neu.pdf>>

University of Rostock: Universität Rostock, study program B. A. Ur- und Frühgeschichte

Official documents and study program descriptions:

Rahmenprüfungsordnung für die Bachelor- und Masterstudiengänge der Universität Rostock (RPO-Ba/Ma). Mitteilungsblatt des Ministeriums für Bildung, Wissenschaft und Kultur Mecklenburg-Vorpommern Nr. 8/2012 vom 9. Juli 2012. Online available at <https://www.altertum.uni-rostock.de/fileadmin/uni-rostock/Alle_PHF/PHF/Studium/01_Allgemeine_Ordnungen_Fristen_etc/RPO-BaMa.pdf>

Studiengangsspezifische Prüfungs- und Studienordnung für den Zwei-Fach-Bachelorstudiengang der Philosophischen Fakultät der Universität Rostock vom 4. April 2018; mit Fachanhang Anlage 4.17: Ur- und Frühgeschichte (EF/ZF). Online available at <https://www.altertum.uni-rostock.de/fileadmin/uni-rostock/Alle_PHF/PHF/Studium/02_BA-Zweifaecher/Ordnungen_2018/BA_SPSO_2018_inkl_Diploma.pdf> and <https://www.altertum.uni-rostock.de/fileadmin/uni-rostock/Alle_PHF/PHF/Studium/02_BA-Zweifaecher/Ordnungen_2018/Ur-_und_Fruehgeschichte/Fachanhang-UFG-SPSO2018.pdf>

Praktikumsordnung für den Zwei-Fach-Bachelorstudiengang und Masterstudiengänge der Philosophischen Fakultät der Universität Rostock vom 14. Januar 2016. Online available at <https://www.altertum.uni-rostock.de/fileadmin/uni-rostock/Alle_PHF/PHF/Studium/01_Allgemeine_Ordnungen_Fristen_etc/Praktikumsordnung_BA-MA.pdf>

Saarland University: Universität des Saarlandes, study program B. A. Altertumswissenschaften

Official documents and study program descriptions:

Prüfungsordnung der Fakultät 3 (Philosophische Fakultät I – Geschichts- und Kulturwissenschaften) und der Fakultät 4 (Philosophische Fakultät II – Sprach-, Literatur- und Kulturwissenschaften) der Universität des Saarlandes für Bachelor- und Master-Studiengänge, sowie Zertifikate vom 5. Juni 2014. Dienstblatt der Hochschulen des Saarlandes 80/2014 vom 9. September 2014. Online available at <https://www.uni-saarland.de/fileadmin/user_upload/Campus/Service/Recht_und_Datenschutz/Recht_der_Universitaet/Ausbildungs-_Pruefungs-_Studienordnungen/StudO_PO_2011_12_13/DB11-357.pdf>

Studienordnung für den Kernbereich-Bachelor-Studiengang Altertumswissenschaften vom 28. Oktober 2010.

Online available at <https://www.uni-saarland.de/fileadmin/user_upload/Campus/Service/Recht_und_Datenschutz/Recht_der_Universitaet/Ausbildungs-_Pruefungs-_Studienordnungen/StudO_PO_2011_12_13/DB11-068.pdf>

Modulhandbuch des Kernbereich-Bachelor-Studiengangs Altertumswissenschaften. Online available at <https://www.uni-saarland.de/fileadmin/user_upload/studium/angebot/ba/bachelor/Altertumswiss-BA-Modulhandbuch.pdf>

University of Tübingen: Eberhard Karls Universität Tübingen, study program B. A. Ur- und Frühgeschichtliche Archäologie und Archäologie des Mittelalters

Official documents and study program descriptions:

Studien- und Prüfungsordnung der Universität Tübingen für den Studiengang Ur- und Frühgeschichtliche Archäologie und Archäologie des Mittelalters mit akademischer Abschlussprüfung Bachelor of Arts (B. A.) vom 26.7.2012.

Online available at <<https://www.ufg.uni-tuebingen.de/studium/bachelor.html>>

Modulhandbuch

Online available at <<https://www.ufg.uni-tuebingen.de/studium/bachelor.html>>

University of Würzburg: Julius-Maximilians- Universität Würzburg, study program B. A. Vor- und Frühgeschichtliche Archäologie

Official documents and study program descriptions:

Allgemeine Studien- und Prüfungsordnung (ASPO) für die Bachelor- (6-semesterig) und Masterstudiengänge (4-semesterig) an der Julius-Maximilians-Universität Würzburg vom 28. September 2007.

Online available at <<https://www.uni-wuerzburg.de/studium/pruefungsamt/rechtliches-und-satzungen/allgemeine-studien-und-pruefungsordnung/aspo-ba-6-semesterigma-4-semesterig/>>

Fachspezifische Bestimmungen für das Bachelor-Hauptfach Vor- und Frühgeschichtliche Archäologie mit dem Abschluss Bachelor of Arts (Erwerb von 120 ECTS-Punkten) vom 28. September 2015.

Online available at <http://www.uni-wuerzburg.de/amt_veroeffentlichungen/2015-151>

Fachspezifische Bestimmungen für das Bachelor-Hauptfach Vor- und Frühgeschichtliche Archäologie (Erwerb von 75 ECTS-Punkten) vom 28. September 2015.

Online available at <http://www.uni-wuerzburg.de/amt_veroeffentlichungen/2015-150>

Fachspezifische Bestimmungen für das Bachelor-Nebenfach Vor- und Frühgeschichtliche Archäologie (Erwerb von 60 ECTS-Punkten) vom 28. September 2015.

Online available at <http://www.uni-wuerzburg.de/amt_veroeffentlichungen/2015-149>

References

Berlin Communiqué 2003, *Den Europäischen Hochschulraum verwirklichen. Communiqué der Konferenz der europäischen Hochschulministerinnen und -minister am 19. September 2003 in Berlin*. Online available at <europass.cedefop.europa.eu/sites/default/files/berlin.pdf> (German) and <www.ehea.info/media/ehea.info/file/2003_Berlin/28/4/2003_Berlin_Communique_English_577284.pdf> (English), retrieved 30 October 2018.

- Clancy, Kate, Nelson, Robin, Rutherford, Julianne, and Hinde, Katie 2014. Survey of Academic Field Experiences (SAFE): Trainees Report Harassment and Assault. *PLoS ONE* 9, 7, Article e102172. doi: <10.1371/journal.pone.0102172>.
- Cobb, Hannah 2015. A diverse profession? Challenging inequalities and diversifying involvement in British archaeology. In: Everill, Paul, and Irving, Pamela (eds.), *Rescue Archaeology@40*. Hereford: RESCUE, 232-251.
- Cobb, Hannah, and Croucher, Karina 2016. Personal, Political, Pedagogic. Challenging the Binary Bind in Archaeological Teaching, Learning and Fieldwork. *Journal of Archaeological Method and Theory*, 23, 3, 949-969.
- Croucher, Karina, and Romer, Wendelin 2007. *Inclusivity in teaching practice and the curriculum*. Guides for Teaching and Learning in Archaeology 6. Higher Education Academy. <www.heacademy.ac.uk/system/files/number6_teaching_and_learning_guide_inclusivity.pdf>, e-published 1 March 2008; retrieved 25 February 2019.
- Gardenswartz, Lee and Rowe, Anita 2003. *Diverse Teams at Work: Capitalizing on the Power of Diversity*. Alexandria, VA: Society of Human Resource Management.
- Gero, Joan 1985. Socio-Politics and the Woman-at-Home Ideology. *American Antiquity*, 50, 2, 342-350.
- Gilchrist, Roberta 1991. Women's archaeology? Political feminism, gender theory and historical revision. *Antiquity*, 65, 495-501.
- Gutsmiedl-Schumann, Doris, and Helmbrecht, Michaela 2017. Geschlechtergerechtigkeit vom Archäologiestudium bis zum Arbeitsalltag. *Blickpunkt Archäologie*, issue 3, 168-174.
- Holtdorf, Cornelius 2016. *Archaeology Is a Brand! The Meaning of Archaeology in Contemporary Popular Culture*. Walnut Creek: Taylor and Francis.
- Kästner, Sybille 1999. Über den Tanz auf dem Eis. Eine Einführung zur Geschlechterforschung in der deutschen Ur- und Frühgeschichte. In: Vorgeschichtliches Seminar (ed.). *Frauenbilder – Frauenrollen. Frauenforschung in den Altertums- und Kulturwissenschaften?* Symposion des Vorgeschichtlichen Seminars Marburg am 31.10.1998. *Kleine Schriften aus dem Vorgeschichtlichen Seminar Marburg* 49. Marburg: Philipps Universität, 1-19.
- Maj, Jolanta 2015. Diversity management's stakeholders and stakeholder's management. *Proceedings of the International Management Conference*, 9, 1, 2015, 780-793.
- Moser, Stephanie 1996. Science, stratigraphy and the deep sequence: Excavation vs regional survey and the question of gendered practice in archaeology. *Antiquity*, 70, 813-823.
- Moser, Stephanie 2007. On disciplinary culture: archaeology as fieldwork and its gendered associations. *Journal of Archaeological Method and Theory*, 14, 235-263.
- Nikulka, Frank 2016. "Zwei Seelen...": Denkmalschutz und universitäre Forschung – Gegner oder Partner? *Jahresschrift des Tübinger Vereins zur Förderung der Ur- und Frühgeschichtlichen Archäologie*, 15, 47-54.
- Perry, Sara 2018. Six Fieldwork Expectations: Code of conduct for teams on field projects. In: Perry, Sara (ed.). *Webblog The Archaeological Eye*. <saraperry.wordpress.com/2018/05/04/fieldwork-code-of-conduct/>, e-published 4 May 2018, revised 1 June 2018; retrieved 25 February 2019.
- Petendra, Brigitte, Schikorra, Katja, and Schmiede, Rudi 2012. Praxisphasen in unterschiedlichen Fächerkulturen. In: Schubarth, Wilfried (ed.). *Studium nach Bologna: Praxisbezüge stärken?! Praktika als Brücke zwischen Hochschule und Arbeitsmarkt*. Wiesbaden: Springer VS, 101-112.
- Phillips, Tim, and Gilchrist, Roberta 2005. *Inclusive, Accessible, Archaeology (HEFCE FDTL5), Phase 1. Disability and archaeological fieldwork. Summary of a report based on a questionnaire survey of Archaeology Subject Providers, Disability Support Services in HEIs and Archaeological Employers*. <<http://archaeologyuk.org>>.

- org/accessible/docs/IAA_Phase1Summary.doc>, e-published June 2005; retrieved 25 February 2019.
- Phillips, Tim, Gilchrist, Roberta, Hewitt, Iain, Le Scouiller, Stephanie, Booy, Darren, and Cook, Geoff 2007. *Inclusive, accessible, archaeology: good practice guidelines for including disabled students and self-evaluation in archaeological fieldwork training*. Guides for Teaching and Learning in Archaeology 5. Higher Education Academy. <www.heacademy.ac.uk/system/files/number5_teaching_and_learning_guide_inclusive_accessible_archaeology.pdf>, e-published June 2007; retrieved 25 February 2019.
- Rocks-Macqueen, Doug 2013. Archaeologists, the Whitest People I Know. In: Rocks-Macqueen, Doug (ed.). Webblog *Doug's Archaeology. Investigating the Profession and Research*. <dougsarchaeology.wordpress.com/2013/10/15/archaeologists-the-whitest-people-i-know/>, e-published 15 October 2013; retrieved 25 February 2019.
- Rocks-Macqueen, Doug 2018. 91 Stories of Archaeology. In: Rocks-Macqueen, Doug (ed.). Webblog *Doug's Archaeology. Investigating the Profession and Research*. <dougsarchaeology.wordpress.com/2018/04/14/91-stories-of-archaeology/>, e-published 14 April 2018; retrieved 25 February 2019.
- Shiple, Lucy 2018. Let me just google that for you: a shout into the void. In: Shipley, Lucy (ed.). Webblog *lucyshipleywritesthepast*. <lucyshipleywritesthepast.wordpress.com/2018/02/08/let-me-just-google-that-for-you-a-shout-into-the-void/>, e-published 8 February 2018; retrieved 25 February 2019.

***‘Fieldwork is not the proper preserve of a lady’*. Gendered images of archaeologists from textbooks to social media**

Jana Esther Fries

Abstract

Among the general public and in the popular media, archaeology has a quite positive image, but one that is far from the realities of the everyday work of professional archaeologists. In this paper, I explore how that biased image was established and what role media professionals and archaeologists play in maintaining it. I further discuss what effect the image of excavation as the central, if not the unique, aspect of archaeology has and has had on the careers of female archaeologists. Finally, I argue for self-reflection about our professional identities and the way we present our work.

Keywords: *gender archaeology, media, images, professional identity*

Introduction

In addition to discussing the contents of their discipline, archaeologists have also been discussing their methods and theoretical frameworks for many decades. A great deal of debate has been conducted on classification, rituals, innovation, symbolism, and cultural evolution, to name just a few. Yet we archaeologists have rarely considered how non-archaeologists see us, what they know about our activities, and how they use and value our results (Smith 2004; Holtorf 2012). And we have even more rarely discussed how we see ourselves and what the essentials of our professional identity are.

In recent years, a number of studies and books have focused on the perception of archaeology in the popular media (*e.g.* Gehrke and Samida 2010; Huhtamo and Parikka 2011; Kircher 2012; Solometo and Moss 2013; Myers Emery and Reinhard 2016; Mol *et al.* 2017; Fries *et al.* 2017; Reinhard 2018; for more bibliography, see Gehrke and Samida 2010, 10). Other publications have dealt with the public or the

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	Archaeology	Archäologie	Archéologie
Archaeologist(s) working on an excavation	75	66	42
Archaeologist(s) next to a site, not working	4	2	1
Find or feature	8	24	14
Archaeological site only	8	4	4
Artistic representation, playmobil®	0	0	14
Excavation tools	0	0	4
Indiana Jones	1	0	1
Other	1	0	9

Table 1. Motifs compiled from the results of picture searches on google.co.uk, google.de, and google.fr. with the keywords archaeology, Archäologie, and archéologie, respectively, in October 2018, first 100 results per language.

media image of archaeologists (Stern and Tode 2002; Felder *et al.* 2003; Holtorf 2005; 2007a; 2008; Endlich 2007; Samida 2010; 2012; Winkelmann 2012; Hiscock 2014; Champion 2017). Up to now, the debate on popular images, stereotypes, and tropes started by these publications does not seem to have had a noticeable influence, neither on how archaeology is presented to the media by us professionals, nor on how the media portray the discipline and its members.

The public image

When we research the public image of archaeologists, we have to differentiate between representations in news reports or documentaries; the characteristics of fictional archaeologists in movies, books, video games, and so on; and what the general public knows and thinks about professional archaeologists. A first glimpse of the popular image may be gained by googling the term *archaeology*¹. I used this Internet search as a first approach and examined the first 100 pictures in the Google results for English, German, and French, using the British, German, and French versions of the search engine, respectively (Table 1). While there are some interesting differences between the languages, the clearly dominating picture is that of the excavating archaeologist. Other workplaces or occupations are extremely rarely shown.

A huge number of photos within the category of excavation came from press reports. Archaeology and history have been very popular fields of journalism since at least the 1980s (Samida 2010; Kircher 2012, 87-89; Hömberg 2012; Arnold 2012). Journalists working for regional newspapers are in many cases rather interested in reporting on excavations. Documentaries on archaeology are a common (and successful) feature of many TV networks (Samida 2010, 32, 41-43; 2012, 219-221; Winkelmann 2012; Holtorf 2007b, 52; 2008), and special interest magazines on history and archaeology are published in various European countries. All of them are necessarily influenced by what we archaeologists present to the media and how we do that. But the pictures, scenes, and texts are created by media professionals, and for the most part these reflect their ideas of archaeology – and the needs of their business.

In order to get closer to the popular image of archaeology professionals, I did another Google search in the three languages, examining only press photos (Table 2). Again, photos of excavations formed a very clear majority within the 100 first results

1 I used *archaeology* and its German and French equivalents as a keyword instead of *archaeologist* because the German term *Archäologe* is used as both a gender-neutral term and as a term to refer to a male archaeologist specifically. German has a separate word to refer to a female archaeologist specifically.

	Archaeology	Archäologie	Archéologie
Fieldwork	84	79	67
No fieldwork	16	22	33
Group of archaeologists working on excavation	48	31	39
Field technician on the ground, working on a single feature	20	27	11
Group of archaeologists or single portrait	7	8	18
Find or feature of an excavation	10	5	4
Find not in an excavation setting	5	4	4
Excavation director pointing to a feature	2	6	4
Guided tour on an excavation	0	4	4
Museum	0	5	3
Lecture	1	2	3
Geophysical survey	1	2	0
Book	0	0	2
Other	6	7	8

per language (67-84 per cent). On excavations, the most popular scene for press photographers seems to be a group of people working in a trench (39-58 per cent of all excavation photos), followed by a technician kneeling or sitting on the ground, working on a feature, in most cases with a trowel or a brush (16-34 per cent). In third place is a single find or feature without a person, or with only a person's hand holding it or working on it. Any other situations or occupations are rarely (<5 per cent) shown in press photos. So, if we were to only look at those photos, we would conclude that archaeologists work on excavations most of the time, inform the public of their results on only rare occasions (by means of tours, museums, or lectures), but never work in a lab, heritage office, or library.

Table 2. Motifs and settings compiled from the results of picture searches on google.co.uk, google.de, and google.fr with the keywords archaeology, Archäologie, and archéologie, respectively, in October 2018, press photos only, first 100 results per language. Fieldwork settings are indicated in boldface type.

TV documentaries

Stefanie Samida, Barbara Winkelmann, and Georg Koch (Samida 2012; Winkelmann 2012; Koch *et al.* 2013; Willner *et al.* 2014; Koch 2017) investigated British and German TV documentaries on prehistory. In these programmes, archaeologists can often be seen as experts, explaining details of prehistoric times or results of single excavations. They are shown on excavations, surveys, or sites; with finds, models of prehistoric houses; using prehistoric techniques; or simply as talking heads against a neutral background. In most cases, their expertise is stressed, but their everyday work and workplaces are rarely shown in detail. The presentation often focuses on excavation directors organising and checking their co-workers or explaining results, while teamwork is rarely displayed (Endlich 2007, 202; Winkelmann 2012, 106-109). Archaeological work often is reduced to a long search for sites or finds, excavation, and often sensational discoveries (see also Holtorf 2007b, 45; Samida 2012, 222-239; Winkelmann 2012, 109-111; Stern and Tode 2002). Since the 2000s, the presence of archaeologist in documentaries has been reduced in favour of re-enactment and living history scenes (Koch 2017, 73-78; Glaser *et al.* 2012).

Similar results could probably be found for children's non-fiction books. In general, media professionals often seem to fall back onto a small number of stereotypical scenes, representative actions, and typical objects when reporting on archaeology².

Fictional archaeologists

In a second step, in order to get closer to the core of the popular image of archaeologists and beyond the results for single excavations, I concentrated on fictional characters. In children's books, comics, movies, TV series, and digital games, archaeologists are relatively common characters. I used the same simple process as before and googled the terms *archaeologist* combined with *movies*, *comics*, *video games*, *children's books*, and *TV series* (in English only). The pictures I saw in the results are too inhomogeneous to be summed up in a table as before, but archaeologists surprisingly often wear hats and sun helmets. Their everyday work takes place on excavations and surveys, in caves and pyramids, and rarely in a museum and hardly ever in a library, lab, heritage office, or university. They all seem to do physically demanding work and face climatic hardship. Even if they are not portrayed excavating dinosaurs (especially common in images for children), archaeologists are clearly more treasure hunters and adventurers than scientists, and many are involved in shootouts or fist fights from time to time. In many ways, they resemble a mixture of colonial officers and cowboys.

Video games ...

In digital games, archaeology is a rather common task, especially in adventure and strategy games (Felder *et al.* 2003, 170-174; Reinhard 2018). In several major role-play games, the player's character is an archaeologist, in others the characters do archaeological work (e.g. <www.giantbomb.com/archeology/3015-2075/games/>, retrieved 2 October 2018; Reinhard 2018, 64-70). Other games mix archaeology with forensics or science fiction or include archaeology as a technique/skill that can be acquired as part of a developing civilisation.

A majority of archaeologist characters in digital games quite closely resemble Indiana Jones in appearance (Felder *et al.* 2003, 171 f.; Reinhard 2018, 64). In the great majority of games, archaeology means to search for archaeological sites and to excavate artefacts; to loot ancient temples, tombs, and cities for treasure and mythical objects; to solve extra-terrestrial puzzles; or to fight Nazis, mobsters, or monsters (Felder *et al.* 2003, 170-174; Myers Emery and Reinhard 2016; Champion 2017; Reinhard 2018, 64-74; Meyers 2011).

For example, in the popular strategy game franchise *Sid Meyer's Civilization*, the player can design an archaeologist. In the sixth edition of the game, released in October 2016, having an archaeological museum in one of the player's towns is required to do so (<civilization.wikia.com/wiki/Archaeologist> [Civ6], retrieved 15 September 2018). The depiction of the archaeologist shows a physically strong, white male with glasses, white whiskers, a sun helmet, who is dressed for fieldwork (see also Holtorf 2007b, 86-88; Reinhard 2018, 63 f.). In the gameplay, he can be sent to land-based sites or shipwrecks in order to extract artefacts. Those will be added to the museum's collection.

In many cases, archaeologists in video games are not much more than a variation of the usual adventurer protagonist, and archaeology is part of exploring the

2 The same is true for several other professions, e.g. chemists are rarely shown without lab coat and test tube.

landscape, mining, or looting. A small but rising number of major games include not only artefacts but also a cultural landscape that has to be researched, and knowledge of it is necessary to fulfil the game’s quests (Klages 2005, part 3). But only a very limited number of non-major games give even a somewhat realistic idea of archaeological work or teach the players about the prehistory of the real world (e.g. <www.ancient-cities.com/>, retrieved 14 September 2018; Reinhard 2018, 66 f., 75-86).

... and other popular media

Lara Croft and Indiana Jones are clearly the most popular fictional ‘archaeologists’. Several studies (e.g. Stern and Tode 2002; Felder *et al.* 2003, 174-177; Endlich 2007) have investigated how they and a few other archaeologists are portrayed in movies. As we may have expected, all found the topoi of adventures, treasures, mythic artefacts, and exotic places, as mentioned above, but hardly any of the everyday tasks of real archaeologists.

Peter Hiscock has outlined how the stereotype of adventurous, treasure-seeking archaeologists in the motion picture industry developed from the western and horror movies of the 1930s (Hiscock 2009; 2014; see also Stern and Tode 2002, 71; Felder *et al.* 2003, 165-168). Other popular media – such as novels, comics, or children’s fictional books – have rarely been investigated, but in general these seem to offer a similar image of archaeologists³. Compared with press reports and documentaries, in fiction, archaeologists seem to be even more restricted to fieldwork and are hardly ever seen beyond excavations and surveys – if they even do any work a real archaeologist would to. The tropes and stereotypes surrounding archaeology seem to be even stronger in fictional works than in media reporting.

In general, archaeology in the media seems to be mainly made up of puzzles, treasures, and discoveries (see also Holtorf 2005, 44-53; Clack and Brittain 2007, 13-15; Samida 2010, 31-34). It is closely linked to tough conditions and exotic places; adventures; and long, frustrating searches. Finds are central and are often ‘mysterious’. Archaeology is presented as an exciting, adventurous profession and fieldwork as the essential kind of occupation.

The general public’s idea of archaeologists

But how do the media, their reporting, and stories on archaeology influence the popular image and reputation of the discipline and its representatives? Research on this question is extremely rare in Europe⁴. In the late 1990s, Anke Bohne and Markus Heinrich conducted an opinion poll on archaeology in two German cities with a rich Roman heritage (Bohne and Heinrich 2000). They asked 1402 persons for their opinions and sources of information. An overwhelming majority (approx. 90 per cent) saw excavations of ancient objects as the main task of archaeologists. The search for hidden treasures was judged to be part of the job description by 20 per cent of those interviewed.

In 2014, the French national institute of preventive archaeology (Inrap) commissioned a study on the knowledge and opinions of Europeans on archaeology (Martelli-Banégas *et al.* 2015; Marx *et al.* 2017). More than 4500 persons from nine countries were interviewed during the investigation. The question ‘What do archaeologists do?’ was answered as ‘They carry out archaeological excavations’ by 98 per cent of the participants. Providing artefacts to museums and discovering treasures were

3 The studies on children’s textbooks, e.g. by Miriam Sénécheaud, Silvia Scharl and Brigitte Röder, concentrate on images of the prehistoric past instead of those of archaeologists.

4 A list of polls and surveys, mostly from the USA, can be found in Holtorf (2005, 98).

seen as archaeologists' tasks by 92 per cent and 87 per cent, respectively. Writing books and teaching were selected by 84 per cent and 81 per cent, respectively, while researching in libraries and organising exhibitions were seen as part of the profession by less than 70 per cent the respondents. Besides those concrete aspects of archaeology, more abstract duties – such as 'interpreting the traces of the past' (96 per cent), 'contribute to knowledge about civilisations' (95 per cent), or 'help to protect remains from the past' (92 per cent) – were selected by a high number of participants as well.

This hints at a more balanced knowledge about archaeology and archaeologists among the general public than the representations in the popular media may suggest. Nevertheless, in the general public's conception of archaeology, fieldwork clearly takes centre stage, and little or no light is shed on other workplaces and occupations. Working on excavations or surveys seems to be the embodiment of archaeology, or even the only relevant way of doing archaeology, for a strong majority of non-archaeologists. As a result, archaeology in the public understanding seems to be a very particular academic subject, a subject that is carried out mostly beyond academies and by methods very different from those of other fields.

Close up

But there is more to say about the public image of archaeologists. The bold adventurers and determined treasure hunters, the physically fit excavators and persistent researchers are distinctly more male than female. The simple Google picture search with the keyword *archaeology* mentioned above revealed some interesting imbalances (Table 3). The share of men in those pictures ranges from 57 per cent (google.fr) to 69 per cent (google.de)⁵. The numbers derived from the search in press photos only are insignificantly higher (59-70 per cent). In the clearly dominating category of fieldwork within the press photos (Table 4), we find the same imbalance (58-68 per cent men) while the other motifs show a wider range of relative male dominance (55-76 per cent). This may be caused by the smaller number of photos in that class.

In how far these proportions relate to different job situations within archaeology; the preferences of photographers, editor-in-chiefs, or lay-out people; or other reasons is unclear. In a few photos, the female excavator's physical attractiveness seems to be more of a focus than the results of the excavation (Fig. 1).

TV documentaries on archaeology have rarely been investigated using a gender focus (Felder *et al.* 2003; Endlich 2007; 202). But as a by-product of several studies (e.g. Tode and Stern 2002; Samida 2012; Winkelmann 2012), a dominance of male representatives of the disciplines shines through in many programmes. In 2009, the special interest magazine *Archäologie in Deutschland* presented 'the' eminent personalities of German archaeology (Fig. 2). All of them were male, and thus the male dominance within the image of our profession in Germany became very obvious. Press photos, documentaries, and other publications on archaeology play an important part in the public image of archaeology, and they help to maintain the idea of archaeology as a mostly male profession.

If documentaries on real archaeology present a majority of male professionals, the situation is even worse in fictional archaeology. A striking majority of archaeologists in movies, novels, TV series, children's textbooks, digital games,

5 It turned out to be rather difficult to determine the persons' gender, due to gender-neutral clothing and many people on excavations looking down instead of into the camera. When in doubt, I excluded these persons.

	Archaeology		Archäologie		Archéologie	
	m	f	m	f	m	f
All pictures	171	99	140	63	138	104
Press photos	173	101	134	58	142	97

Table 3. Number of men and women in results of picture searches on google.co.uk, google.de, and google.fr. with the keywords archaeology, Archäologie, and archéologie, respectively, in October 2018, first 100 results per language.

	Archaeology		Archäologie		Archéologie	
	m	f	m	f	m	f
Fieldwork	157	88	103	48	97	68
Group of archaeologists working on excavation	134	78	66	29	83	58
Field technician on the ground, working on a single feature	14	6	15	12	3	8
Find or feature of an excavation	6	4	8	2	3	2
Excavation director pointing to a feature	2	0	4	2	4	0
Guided tour on excavation	0	0	9	2	4	0
Geophysical survey	1	0	1	1	0	0
No fieldwork	16	13	35	11	44	27
Group of archaeologists or single portrait	13	10	16	2	35	18
Find beyond excavation	3	2	8	2	3	2
Museum	0	0	8	5	2	2
Lecture	0	1	3	2	4	3
Book	0	0	0	0	0	2

Table 4. Motifs, settings, and genders compiled from the results of picture searches on google.co.uk, google.de, and google.fr with the keywords archaeology, Archäologie, and archéologie, respectively, in October 2018, press photos only, first 100 pictures per language.

and so on is male (Felder *et al.* 2003, 174 f.; Reinhard 2018, 64) and an even proportion are white⁶.

An addition, some striking differences between the portrayals of male and female archaeologists have to be mentioned (Endlich 2007, 194-199, 202 f.; Felder *et al.* 174-177). While male protagonists are nearly always portrayed as fearless, capable adventurers⁷, women archaeologists, especially in movies, are often the love interest of the main character, damsels in distress, mousy booklovers, or ladies unfit for the tough life beyond 'civilised' cities (Felder *et al.* 174, 176). They are rarely the main character of a game, a series, or a movie, but mostly serve to highlight certain characteristics of the protagonist.

The one outstanding female character in fictional archaeology, Lara Croft – protagonist of one of the most eminent action-adventure game franchises since 1994 and of three movies – is very different from that scheme, as is TV series protagonist Sydney Fox (*Relic Hunter*) (Endlich 2007, 203 footnote 8; Felder *et al.* 175 f.). Like most of their male colleagues, they are clearly more treasure hunters than researchers. They do all the fighting, climbing, running, and shooting that is characteristic for

6 There are no numbers available in the literature, but I estimate that the ratio of male characters is higher than 80 per cent.

7 In older movies, male archaeologists are sometimes portrayed as a kind of mildly freaky scientist, not adapted to life away from civilisation (Hiscock 2009), but in these cases they are rarely main characters.



Figure 1 (left). Online report by the renowned German newspaper Welt on the discovery of a piece of Neolithic chewing gum (<www.welt.de/wissenschaft/article1120816/Studentin-entdeckt-5000-Jahre-alten-Kaugummi.html>, e-published 20 August 2007, retrieved 11 October 2018).

Figure 2 (right). Compilation of eminent personalities of German archaeology in the special interest magazine Archäologie in Deutschland (issue 6, 2009, 3).



these kinds of video games, movies, and TV series. Croft and Fox solve their quests by martial skills, physical fitness, and cleverness, sometimes even with the help of their knowledge of ancient cultures or languages. Both have male assistants who are less skilled and less daring. Especially Fox has to rescue her assistant, Nigel Bailey, on a regular basis.

But two differences from the portrayal of male archaeologists in fiction make it clear that gender still matters. Both Croft and Fox are regularly seen in clothes fitting neither the climate nor the task, but obviously chosen in order to display their physical attractiveness (Endlich 2007, 198). In the early versions of the video game, Croft's body shape was clearly beyond realism, resembling a comic version of sexy women (Sycamore 2017, 90 f.). Male archaeologists are very rarely shown in less than full clothing that suits the situation – Indiana Jones seems to wear his characteristic fedora in literally every situation.

A second difference is the absence of current love interests of Fox and Croft. Former lovers are mentioned, and sometimes we even met them, but in the story the protagonists never fall in love or have sex. In contrast, nearly every male archaeologist serving as a protagonist in movies and TV series has a love interest – or a new one in every other episode – and several heroes of digital games do as well. Many are presented, if not as great seducers, then at least as being attractive to women.

So, in many aspects Lara Croft, Sydney Fox, and all their male colleagues simply follow the usual portrayal of genders by the entertainment industry. If we merge all these images of real and fictional archaeologists from various sources, we may say without too much exaggeration that the general image of archaeology is extremely dominated by fieldwork, especially excavation, and to a little lesser extent by men. The archetypical archaeologist is male, and his work is done out in the field.

Images with a history

It fits very well with that archetype that fieldwork is the one section of archaeology from which women were excluded the longest. During the past 25 years, several volumes on early female archaeologists have been published in different countries (Claassen 1994; Díaz-Andreu and Sørensen 1998; Koch and Mertens 2002; Nicotra 2004; Cohen and Sharp Joukowsky 2004; Fries and Gutschmidl 2013). When comparing their biographies, all editors found that it was clearly easier for these pioneers to gain access to archaeological museums and universities than to fieldwork. Many of them were confronted with open or hidden reservations against women doing fieldwork or going abroad. The quote in the title of my paper (Picazo 1998, 2002), which was addressed at Jane Harrison, is only one of many similarly worded objections.

Most early female archaeologists came from middle-class families and the gentry (Fries and Gutschmidl 2013, 18). Colleagues and families considered it out of place for them to take part in surveys and excavations. Researchers and excavation directors judge women to be incapable of carrying out the necessary work. As late as 1979, women were not allowed to work on excavations in the German federal state of Bremen⁸. Only with a lot of persistence and cleverness did our early female colleagues manage to do as they wished and work in the field.

Today, decades after the female pioneers, things clearly have changed and women on digs are a common image, as they are in other sectors of archaeology. The two DISCO (*Discovering the archaeologist of Europe*) studies of the European Union have provided us with statistics on archaeologists from 12 and 21 European countries, respectively (Aitchison 2009; Aitchison *et al.* 2014). The data for the first one were collected from 2006 to 2008, those for the second from 2012 to 2014. While the first study revealed a slight majority of men in the profession (54.1 per cent) (Aitchison 2009, 10), the second showed a tiny predominance of women (50.7 per cent) (Aitchison *et al.* 2014, 30 Table 11)⁹. Unfortunately, these statistics are based on numbers much smaller than the estimated or calculated total of archaeologists¹⁰. But if they give a correct impression of the share of the genders in the profession, the public's image of archaeology lags enormously behind reality, not only concerning the methods and aims of archaeology, but also concerning gender aspects.

Besides being a partly tiring, partly amusing aspect of an archaeologist's life, the biased perception of archaeology by the general public raises several questions. First, is the idea of archaeologists as adventurers and treasure hunters helpful or hindering? Do we profit from being seen as Indiana Joneses or Lara Crofts (Clack and Brittain 2007, 15; Holtorf 2008, 65; Samida and Eggert 2013, 10-15; Reinhard 2018, 62 f.)? Do we silently enjoy it?

Second, what role do we professionals play in creating the image of archaeologists? What aspects of our work do we show or stress in our press releases, exhibitions, or websites? Do we help to maintain the concept of archaeology as adventure by the way we inform the media on our work and our results? Are our public

8 Personal communication, Michael Wesemann, Oldenburg.

9 Of course, balanced numbers of genders in professional archaeology do not necessarily mean equal opportunities. In Germany, there always has been a moderate majority of female students in prehistory since 1983 (Bräuning 2009). As prehistory is the most important division of archaeology in Germany, the numbers from the DISCO studies at least give us a glimpse into the employment situation for this majority of female prehistorians. In 2012-2014, only 43 per cent of the persons working as archaeologists in Germany were female, and only within the group younger than 31 years did women form a majority (Aitchinson *et al.* 2014, 26 Table 6).

10 They numbered 6424 out of an estimated total of 24,740 archaeologists overall in the study conducted in 2012-2014 (Aitchison *et al.* 2014, 18 Table 1). They numbered 9109 out of a total of 16,657 archaeologists overall in the study conducted in 2006-2008 (Aitchison 2009, 12).

relations activities suited to correcting this image and giving a more realistic idea of archaeology?

Marc-Antoine Kaeser (2010) has pointed out how, from the very beginning of their discipline, archaeologists have shaped their (various) popular and internal image(s), be it as adventurers, time detectives, or keepers of cultural heritage (Holtorf 2005). At least for German language archaeology, Heinrich Schliemann played an eminent and very active role in establishing the image of archaeologists as excavators, tough adventurers, persistent seekers, and clever solvers of ancient riddles (Samida 2010, 35-38; 2018). These perceptions of archaeology have been nurtured and fostered by the media for many decades, and were the beginning of important stereotypes on archaeology that are often stronger than anything archaeologists report in personal communication on their everyday work (Felder *et al.* 2003, 163; Samida 2018, 23).

And finally: To what extent do we as professionals have a responsibility for our public image (Brittain and Clack 2007, 13; Holtorf 2007a, 140; Kaeser 2010; Reinhard 2018, 73-75)? May we leave it to journalists, authors, or game developers how they portray us? Or should we interfere to correct not only distorted images of the past but of our profession as well?

And the professionals?

One central aspect of these questions is our own, more or less conscious idea of what archaeologists are made of. What is our image of archaeology? What does our archetypal archaeologist do? What is at the centre of our professional identity?

Kaeser (2010) stated that the media image of archaeologists has much in common with and is fed by our more or less conscious, denied self-perception. If he is right, many of us complain regularly about the public 'Indiana Jones image' while silently wishing we were more of an Indie or a Lara than we in fact are. Some presentations of 'sensational finds' for the media or exhibitions of 'Treasures of the xyz' might support his thesis.

To find a reliable, methodological impeccable, and statistically solid answer to the question of the (unconscious) self-image of archaeologists, a long-term research program involving several disciplines would be necessary. In order to get at least a first impression of how we see and how we present our profession, I did another web search, this time using Instagram. This photo and video platform is mainly a means of self-expression and, often, of self-promotion. I used that medium because it allows every individual and every institution to upload photos and short videos of their own choice, avoiding the filters of professional journalism and the media business.

In my search, I again used the terms *archaeology*, *Archäologie*, and *archéologie* and examined the 100 first photos in each of the three languages. Pictures without persons were eliminated in order to capture the self-understanding of archaeologists. I tried to exclude tourist/visitor photos and photos uploaded by intuitions, so as to examine only photos made by archaeologists and archaeology students. This turned out to be rather difficult¹¹. An additional challenge was that photos with the keyword in French or German keyword often labelled in English as well.

Again, clearly the most frequent setting of the photos is excavation (Table 5). Group photos and single portraits (rank 2) are a very common motif on Instagram, although this is not specific to archaeology. In the results, the presentation of archaeological finds ranks third, and in many of those cases only a hand or other part

11 To decide whether a person in a photo is an archaeologist or a tourist/visitor turned out to be difficult in several cases. Especially with the English keyword, the majority of results seemed to be tourist photos, uploaded by non-native speakers. Some of the results showed fictional archaeologists. When in doubt, I excluded these photos.

	Archaeology	Archäologie	Archéologie
Excavation	24	43	37
Group or single portrait	28	28	23
Presentation of a find	28	6	7
Museum, guided tour	12	1	10
Leisure time, party	2	8	10
Workshop or laboratory	4	7	7
Person in front of a site	1	2	3
Others	2	5	3

Table 5. Setting of Instagram photos with the hashtags archaeology, Archäologie, and archéologie in October 2018, first 100 results per language.

of the person’s body is visible. Again, compared with excavations, photos taken in museums, workshops, or laboratories are very rare. Archaeologists at work in libraries, archives, or heritage offices can hardly be found. So, even if we archaeologists are in control of what we present and how we do that, excavation is clearly the most important setting in how we present ourselves and our work.

Only a small proportion of archaeologists really spend most of their working hours on excavations. One likely reason for the dominance of dig pictures is that excavation provides us with interesting and specific motifs. A library, lab, office, or lecture hall may be the setting for many academic disciplines, but excavations are specific to archaeology. Instagram is used mostly by young adults, and a very clear majority of users is under the age of 35¹². As many of the authors of the excavation photos are probably students, some may have less access to museums or heritage offices as workplaces than to excavations.

But another reason seems to be our conviction that ‘real archaeologists’ have to do (at least some) fieldwork, that excavating is at the very core of our profession and an essential part of our identity. Nearly everybody in the archaeological community can, and sometimes does, tell tales of their digging experience. For many of us, that experience is linked to our student years or field trips abroad. Those times often stand out from the everyday professional routine, including being far from home; doing physical work; dealing with climatic hardship, dirt, and simple quarters; working together as a group of researchers; spending the evenings with co-workers; and forming important memories. For other colleagues, excavation was and is their daily work. In both cases, digging is often seen as the essential part of our professional identity. In other words: Fieldwork is at the very core of our self-perception as archaeologists, and we all see ourselves as excavators – even if we have not been actively excavating for years. While all archaeologists are very aware that excavating is not treasure hunting, the differences between the popular image and our own, unspoken concept of our profession are probably smaller than we think.

And this may hold true for gender aspects as well. Is fieldwork (and all the adventurous aspects of digging) an important part of the professional identity of today’s female archaeologists as well? Or does the male image of excavating keep female archaeologist from identifying fully with their profession?

12 The numbers vary according to date and source, but the general trend seems clear. A statistic of June 2018 states that 71 per cent of users worldwide are under the age of 35 (<blog.hootsuite.com/instagram-demographics>, <www.statista.com/statistics/246199/share-of-us-internet-users-who-use-instagram-by-age-group/%20%5bacessed>, both retrieved 8 October 2018).

I used Instagram again and simply counted men and women in photos with the hashtag *archaeology*¹³. I did not use the French and German terms, in order to avoid duplications. In the photos I analysed, men and women are working side by side in the field. I saw both genders scratching, drawing, brushing, and shovelling; showing around visitors; or working in labs. Only a few authors brought up gendered topics, such as physical strength or the conflict between female beauty and archaeological dirt.

The number of men (116) depicted in the photos was slightly higher than that of women (100). This moderate majority seems surprising if we take into account that Instagram is mainly used by younger people. The clear majority of persons depicted seem to be in their twenties, so probably they are mostly students and young professionals – the age group in which the share of women is higher than that of men in European archaeology (Aitchison 2014, 26 Table 9). And it is astonishing if we consider as well that Instagram is used more often by women than by men (e.g. <www.statista.com/statistics/246195/share-of-us-internet-users-who-use-instagram-by-gender/>, <sproutsocial.com/insights/new-social-media-demographics/>, <de.statista.com/statistik/daten/studie/809703/umfrage/instagram-nutzer-nach-alter-und-geschlecht-weltweit/>, all retrieved 6 October 2018). As the selfie is probably the most common motif on Instagram, we should expect more women than men in archaeology photos.

These statistics can only be a first entry into differences in the professional identity of male and female archaeologists. They point to a certain gap between the image of archaeologists within the discipline and the self-concept of (young) female archaeologists. They seem to identify less with the archetype of ‘excavator’ and therefore to fit less with the popular image of archaeologists. Whether this is an obstacle for women’s professional self-esteem and careers in archaeology is still to be discussed.

But it has become clear that the popular images, our own understanding of our discipline, and gender aspects of professional archaeology are interlinked. To complain about the unrealistic portrayals of archaeologists in the media is an approach that is too simple. We need to become more aware of our professional identity, research our media history, and review our ways of communication with the public. A realistic portrayal of archaeologists – in terms of gender or other aspects – seems possible, but can only be gained through a long quest full of training, efforts, and pitfalls.

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13 As a number of photos show no person or only a person’s hands and as on others the gender of the person(s) was not recognisable, I counted to at least 100 persons of each gender.

References

- Aitchison, Kenneth 2009. *Discovering the Archaeologists of Europe: Transnational Report Reading: Institute for Archaeologists*. <www.discovering-archaeologists.eu/DISCO_Transnational_Report.pdf>, e-published January 2009; retrieved 3 October 2018.
- Aitchison, Kenneth, Alphas, Efthymia, Ameels, Vera, Bentz, Martin, Borş, Corina, Cella, Elisa, Cleary, Kerri, Costa, Cláudia, Damian, Paul, Diniz, Mariana, Duarte, Cidália, Frolík, Jan, Grilo, Carolina, Initiative for Heritage Conservancy, Kangert, Nele, Karl, Raimund, Kjærulf Andersen, Anette, Kobrusepp, Viire, Kompare, Tina, Krekovič, Eduard, Lago da Silva, Miguel, Lawler, Andre, Lazar, Irena, Liibert, Katheriin, Lima, Alexandra, MacGregor, Gavin, McCullagh, Niamh, Mácálová, Michaela, Mäesalu, Ain, Malińska, Magdalena, Marciniak, Arkadiusz, Mintaurs, Mārtiņš, Möller, Katharina, Odgaard, Ulla, Parga-Dans, Eva, Pavlov, Doris, Pintarić Kocuvan, Vesna, Rocks-Macqueen, Doug, Rostock, Jette, Pedro Tereso, João, Pintucci, Alessandro, Prokopiou, Elena S., Raposo, Jorge, Scharringhausen, Karin, Schenck, Tine, Schlaman, Marjo, Skaarup, Jeanette, Šnē, Andris, Staššiková-Štukovská, Danica, Ulst, Ingrid, van den Dries, Monique, van Londen, Heleen, Varela-Pousa, Rocío, Viegas, Catarina, Vijups, Armands, Vossen, Nathalie, Wachter, Tobias, and Wachowicz, Ludwika 2014. *Discovering the Archaeologists of Europe 2012-14: Transnational Report*. York: York Archaeological Trust. <www.discovering-archaeologists.eu/national_reports/2014/transnational_report.pdf>, e-published 2014; retrieved 5 October 2018.
- Arnold, Klaus 2012. Geschichtsjournalismus – ein Schwellenressort? Arbeitsweisen, Themen und Selbstverständnis von Geschichtsjournalisten in Deutschland. In: Arnold, Klaus, Hömberg, Walter, and Kinnebrock, Susanne (eds). *Geschichtsjournalismus. Zwischen Information und Inszenierung*. Kommunikationsgeschichte 21 [2nd edition]. Berlin: Lit, 87-107.
- Bohne, Anke, and Heinrich, Markus U. 2000. Das Bild der Archäologie in der Öffentlichkeit. Eine Befragung in Bonn und Köln. *Archäologie im Rheinland*, 163-165.
- Bräuning, Andrea 2009. Wider das Vergessen. Professorinnen in der Archäologie (Vor- und Frühgeschichte). In: Bagley, Jennifer M., Ettl, Christiana, Neumann, Daniel, and Schefzik, Michael (eds). *Alpen, Kult und Eisenzeit. Festschrift für Amei Lang zum 65. Geburtstag*. Internationale Archäologie – Studia honoraria 30. Rahden: Leidorf, 3-24.
- Champion, Erik M. 2017. Single White Looter: Have whip, will travel. In: Mol, Angus A.A., Ariese-Vandemeulebroucke, Csilla E., Boom, Krijn H.J., and Politopoulos, Aris (eds). *The Interactive Past: Archaeology, Heritage, and Video Games*. Leiden: Sidestone, 107-122.
- Claassen, Cheryl 1994 (ed.). *Women in Archaeology*. Philadelphia: University of Pennsylvania Press.
- Clack, Timothy, and Brittain, Marcus 2007 (eds). *Archaeology and the Media*. Walnut Creek: Left Coast Press.
- Cohen, Getzel M., and Sharp Joukowsky, Martha 2004 (eds). *Breaking Ground. Pioneering Women Archaeologists*. Ann Arbor: University of Michigan Press.
- Díaz-Andreu, Margarita, and Sørensen, Marie Louise S. 1998 (eds). *Excavating women. A history of women in European archaeology*. Oxford: Routledge.
- Endlich, Corinna 2007. Lara Croft und Indiana Jones. Forscherinnen und Forscher zwischen Hollywood und Wissenschaft. In: Fries, Jana Esther, Rambuscheck, Ulrike, and Schulte-Dornberg, Gisela (eds). *Science oder Fiction? Geschlechterrollen in archäologischen Lebensbildern*. 2. Sitzung der AG Geschlechterforschung Tagung Frankfurt (Oder) 2005. *Frauen – Forschung – Archäologie* 7. Münster: Waxmann, 193-205.

- Felder, Kathrin, Hammer, Isabelle, Lippok, Julian, and Wulf, Mareile 2003. Erkenntnisgewinn und Unterhaltungswert: eine Analyse von Archäologiebildern in den Unterhaltungsmedien. *Ethnographisch-Archäologische Zeitschrift*, 44, 161-182.
- Fries, Jana Esther, and Gutmiedl-Schumann, Doris 2013 (eds). *Ausgräberinnen, Forscherinnen, Pionierinnen. Ausgewählte Portraits früher Archäologinnen im Kontext ihrer Zeit*. Frauen – Forschung – Archäologie 10. Münster: Waxmann.
- Fries, Jana Esther, Gutmiedl-Schumann, Doris, Zalea Matias, Jo, and Rambuscheck, Ulrike 2017 (eds). *Images of the Past. Gender and its Representations*. EAA annual meeting Istanbul 2014. Frauen – Forschung – Archäologie 12. Münster: Waxmann.
- Gehrke, Hans-Joachim, and Sénéchau, Miriam 2010 (eds). *Geschichte, Archäologie, Öffentlichkeit. Für einen neuen Dialog zwischen Wissenschaft und Medien. Standpunkte aus Forschung und Praxis*. Bielefeld: transcript.
- Glaser, Manuela, Garsoffky, Bärbel, and Schwan, Stephan 2012. Re-enactment in archäologischen Fernsehdokumentationen und ihr Einfluss auf den Rezeptionsprozess. In: Arnold, Klaus, Hömberg, Walter, and Kinnebrock, Susanne (eds). *Geschichtsjournalismus. Zwischen Information und Inszenierung*. Kommunikationsgeschichte 21 [2nd edition]. Berlin: Lit, 235-246.
- Hiscock, Peter 2009. Archaeology threatens the world! Representations of archaeologists in cinema. In: Lemaître, Serge, and Schall, Céline (eds). *Archaeologie et médias: quelles représentations, quelles enjeux?* [How do the media represent archaeology, what is at stake?]. Actes du Colloque. Musées royaux d'Art et d'Histoire Bruxelles. Brussels: ABSL Kineon, 71-90.
- Hiscock, Peter 2014. Keyword 'Film, Archaeology in'. In: Smith, Claire (ed.). *Encyclopedia of Global Archaeology*. Heidelberg: Springer, 2779-2781.
- Holtdorf, Cornelius 2005. *From Stonehenge to Las Vegas: Archaeology as Pop Culture*. Lanham: AltaMira.
- Holtdorf, Cornelius 2007a. An Archaeological Fashion Show: How Archaeologists Dress and How They Are Portrayed in the Media. In: Clack, Timothy, and Brittain, Marcus (eds). *Archaeology and the Media*. Walnut Creek: Left Coast, 69-88.
- Holtdorf, Cornelius 2007b. *Archaeology is a brand! The meaning of archaeology in contemporary popular culture*. Walnut Creek: Left Coast.
- Holtdorf, Cornelius 2008. Archäologie und ihr Bild in der Alltagswelt. *Archäologie in Deutschland*, H. 3, 64-65.
- Holtdorf, Cornelius 2012. *Search the Past – Find the Present. Qualities of Archaeology and Heritage in Contemporary Society*. Oxford: archaeopress.
- Hömberg, Walter 2012. Die Aktualität der Vergangenheit. Konturen des Geschichtsjournalismus. In: Arnold, Klaus, Hömberg, Walter, and Kinnebrock, Susanne (eds). *Geschichtsjournalismus. Zwischen Information und Inszenierung*. Kommunikationsgeschichte 21 [2nd edition]. Berlin: Lit, 15-28.
- Huhtamo, Erkki, and Parikkam, Jussi 2011 (eds). *Media Archaeology: Approaches, Applications, and Implications*. Los Angeles: University of California Press.
- Kaerer, Marc-Antoine 2010. ArchäologInnen und Archäologie in den Medien: ein störendes Spiegelbild? In: Gehrke, Hans-Joachim and Sénéchau, Miriam (eds). *Geschichte, Archäologie, Öffentlichkeit. Für einen neuen Dialog zwischen Wissenschaft und Medien. Standpunkte aus Forschung und Praxis*. Bielefeld: transcript, 49-61.
- Kircher, Marco 2012. *Wa(h)re Archäologie: die Medialisierung archäologischen Wissens im Spannungsfeld von Wissenschaft und Öffentlichkeit*. Historische Lebenswelten. Bielefeld: transcript.
- Klages, Daniel 2015. *Archäologie und digitale Spielkultur. Rekonstruktion und Simulation von Geschichte im Computerspiel. Ein Beitrag zur Computerspielarchäologie* [MA thesis Hamburg University]. <computerspielarchäologie.de/archaeologie-und-digitale-spielkultur/teil-iii-inhalt-und-spielbeschreibung/

- verwendung-von-archaeologie-in-spielen/>, e-published 2015; retrieved 8 October 2018.
- Koch, Georg 2017. "It has always been like that ..." How Televised Prehistory Explains what is Natural. In: Fries, Jana Esther, Gutsmedl-Schümann, Doris, Zalea Matias, Jo, and Rambuschek, Ulrike (eds). *Images of the Past. Gender and its Representations*. EAA annual meeting Istanbul 2014. *Frauen – Forschung – Archäologie* 12. Münster: Waxmann, 65-84.
- Koch, Georg, Samida, Stefanie, and Willner, Sarah 2013. Postmoderne Gegenwelten? Inszenierung der Ur- und Frühgeschichte im deutschen und britischen Fernsehen seit den 1970er Jahren. *Rundfunk und Geschichte* 1-2; 68-69.
- Koch, Julia K., and Mertens, Eva-Maria 2002 (eds). *Eine Dame zwischen 500 Herren. Johanna Mestorf – Werk und Wirkung*. Tagung Bad Bramstedt 1999. *Frauen – Forschung – Archäologie* 4. Münster: Waxmann.
- Martelli-Banégas, Delphine, Panhard, Isabelle, and Favré, Tiphaine 2015. *Image of archaeology in Europe – 2015. Summary report General Public: Europe results*. doi: <10.5284/1042734>, e-published 2015.
- Marx, Amala, Nurra, Federico, and Salas Rossenbach, Kai 2017. *Europeans & Archaeology. A survey on the European perception of archaeology and archaeological heritage*. Paris: NEARCH. doi: <10.5284/1043770>, e-published 2017.
- Meyers, Katy 2011: The Adventuring Archaeologist Trope. In: Roy, Gilles, and Christiansen, Peter, Webblog *Play the Past*. <www.playthepast.org/?p=1635>, e-published 28 June 2011; retrieved 21 September 2018.
- Mol, Angus A. A., Ariese-Vandemeulebroucke, Csilla E., Boom, Krijn H.J., and Poliotopoulos, Aris (eds). 2017. *The Interactive Past: Archaeology, Heritage, and Video Games*. Leiden: Sidestone Press.
- Myers Emery, Kathrin, and Reinhard, Andrew 2016. Trading Shovels for Controllers: A Brief Exploration of the Portrayal of Archaeology in Video Games. *Public Archaeology* 14, 2, 137-149.
- Nicotra, Laura 2004. *Archeologia al femminile. Il cammino delle donne nella disciplina archeologica attraverso le figure di otto archeologhe classiche vissute dalla metà dell'Ottocento ad oggi*. *Studia archaeologica* 129. Rome: Bretschneider.
- Picazo, Marina 1998. Fieldwork is not the proper preserve of a Lady. The first women archaeologists in Crete. In: Díaz-Andreu, Margarita, and Sørensen, Marie Louise S. (eds). *Excavating women. A history of women in European archaeology*. Oxford: Routledge, 198-213.
- Reinhard, Andrew 2018. *Archaeogaming: An Introduction to Archaeology in and of Video Games*. New York: Berghahn.
- Samida, Stefanie 2010. Schliemanns Erbe? Populäre Bilder von Archäologie in der Öffentlichkeit. In: Gehrke, Hans-Joachim, and Sénécheau, Miriam (eds). *Geschichte, Archäologie, Öffentlichkeit. Für einen neuen Dialog zwischen Wissenschaft und Medien. Standpunkte aus Forschung und Praxis*. Bielefeld: transcript, 31-48.
- Samida, Stefanie 2012. Stefanie, Ausgräber und Entdecker, Abenteurer und Held. Populäre Geschichtsvermittlung in archäologischen Fernsehdokumentationen. In: Arnold, Klaus, Hömberg, Walter, and Kinnebrock, Susanne (eds). *Geschichtsjournalismus. Zwischen Information und Inszenierung*. *Kommunikationsgeschichte* 21 [2nd edition]. Berlin: Lit, 219-233.
- Samida, Stefanie 2018. *Die archäologische Entdeckung als Medienereignis. Heinrich Schliemann und seine Ausgrabungen im öffentlichen Diskurs, 1870-1890*. *Historische Kulturwissenschaften* 3. Münster: Waxmann.
- Samida, Stefanie, and Eggert, Manfred K.H. 2013. *Archäologie als Naturwissenschaft? Eine Streitschrift*. *Pamphletliteratur* 5. Berlin: Vergangenheitsverlag.
- Smith, Laura Jane 2004. *Archaeological Theory and the Politics of Cultural Heritage*. Oxford: Routledge.

- Solometo, Julie, and Moss, Angus A.A. 2013. Picturing the Past: Gender in National Geographic Reconstructions of Prehistoric Life. *American Antiquity* 78, 123-146.
- Stern, Tobias, and Tode, Thomas 2002. Das Bild des Archäologen in Film und Fernsehen – eine Annäherung. In: Rieche, Anita, and Schneider, Beate (eds). *Archäologie virtuell*. Schriften zur Bodendenkmalpflege in Nordrhein-Westfalen 6. Bonn: Habelt, 71-80.
- Sycamore, Rachael 2017. Is it all Warfare and Treasure Hunting? Gender Roles and Representations in Video Games. In: Fries, Jana Esther, Gutmiedl-Schümann, Doris, Zalea Matias, Jo, and Rambuscheck, Ulrike (eds). *Images of the Past. Gender and its Representations*. EAA annual meeting Istanbul 2014. Frauen – Forschung – Archäologie 12. Waxmann: Münster, 85-101.
- Willner, Sarah, Samida, Stefanie, and Koch, Georg 2014. Archaeological Live Interpretations, Docu-Soaps, and Themed Walks: Similarities and Differences. *EXARC Journal* 2014, 2. <journal.exarc.net/issue-2014-2>, e-published 15 May 2014; retrieved 9 October 2018.
- Winkelmann, Barbara 2012. *Archäologie zwischen Wissenschaft, Medien und Öffentlichkeit: Archäologievermittlung in populären TV-Dokumentationen*. Hamburg: disserta.

2 Tracing gender transformations

2.1 In methodology

What is gender transformation, where does it take place, and why? Reflections from archaeology

Marie Louise Stig Sørensen

Transformation: ‘... *a marked change in form, nature, or appearance*’¹

Abstract

This paper understands *transformation* as referring to a particular kind of change in which there is still a recognisable connection to an earlier form despite substantial modification. In terms of gender transformation, it argues for a distinction, as well as potential tensions and dynamics, between gender as ideological expressions (social contracts, performative, citational) and as an experiential quality of individual lives. This tension allocates notions of change and instability differently between the social and the individual. The former tends to reflect understandings of gender that see it as permanent and stable, as normative conventions; the latter, in contrast, is constantly in the process of becoming and transforming. In this tension, we find two basic aspects of gender transformation. One is the potential for societal shifts in terms of ontologies or even apparently mundane aspects of social organisation, such as labour divisions, often enacted through challenges to and transformation of conventions. For this aspect of gender, it is possible to question what causes change and transformation, and what such changes look like. For the individual, however, transformation is due to the lifecycle that causes changes in bodies, their appearances and capacities. Discussions of these transformations often become engaged with questions about how gender is experienced, how it can be gained or lost. My concern will be how these two forms of transformation may be recognised when analysing past societies. I use examples from the European Bronze Age to indicate where transformation may be traced and how it may be discussed.

Keywords: *Bronze Age, transformation, lifecycles, social construction*

1 English Oxford living dictionaries: <en.oxforddictionaries.com/definition/transformation>, retrieved 5 March 2018.

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Introductory reflections

Change can take different forms – subtle, gradual, sudden – and can range in its consequences from hardly discernible modifications to a total altering of former conditions or appearances. This volume’s focus on gender transformation², therefore, asks us to consider gender from the perspective of a particular kind of change. In response, this paper aims to explore what we may understand by the term *transformation*, and how we may locate such changes within the archaeological record. It does not, however, focus on a particular dataset – it is not case-study driven, although it refers to observations from studies of the European Bronze Age to exemplify some arguments.

Transformation goes beyond the always ongoing re-affirmation, adjustments, and re-negotiation of different aspects of social systems and is rather about distinct modifications. Moreover, transformation means that the character of these modifications will retain some connections to previous forms. In this sense, it is less disruptive than, for example, revolutions while nonetheless introducing significant changes. That is why the transformation of the caterpillar into a butterfly is sometimes used as a metaphor for what transformation is about: although changed in appearance it is the same organism (Trinetti 2018). This connection to the previous form means transformations may appear as natural developments, and this in turn greatly benefits their legitimisation, and it also means that the pre-existing ways that things were done can be utilised and adapted, again greatly advancing the eventual success of the transformation.

The reasons for transformations within social contexts are many and complex, and, as regards gender transformations, it seems they occur both as deliberate processes set within larger concerns and according to specific aims and as less intentional processes stimulated by various pressures. The outcomes are, however, revised or reinvented forms of social practices and views. There are also risks associated with transformation, and in contemporary analyses of business development, for example, transformation, in contrast to change, is considered ‘... *much more unpredictable, iterative, and experimental. It entails much higher risk*’ (Trinetti 2018). This is because change may be attached to single elements, whereas transformations affect the whole.

Before proceeding further, it is important to stress that the assumption that we can analyse gender transformation is predicated on two agreements: that gender exists and that it is assigned to something that is not static. In the following, I shall briefly consider these ‘agreements’ and follow up on them by further arguing that, when considering gender transformation, we need to recognise two very different foci of change. One is the individual human body, due to life-cycles changes, whereas the other is the social agreements about gender, which are continuously challenged, negotiated, and reaffirmed. While interconnected there are nonetheless also different factors involved with gender transformation within these different contexts.

First, however, as stated, our discussion is predicated on the agreement that gender exists and, furthermore, that it will persist despite its transformation. Whatever the nature of change, it will only affect understandings and agreements about gender – its ideologies and representations – but not whether gender is

2 In many parts of the world, the concept of ‘gender transformation’ is now commonly used interchangeably with ‘gender reassignment’. Some forms of gender reassignment are distinct to the present because of their dependence on modern technologies, but other forms, based on other kinds of bodily performances and interventions, are known from the records of earlier societies and ethnographies. However, in this paper, I do use ‘gender transformation’ to focus on a more broadly based notion of change that takes place over time and as a term that can refer to individuals as well as communities.

present. Because people are different, have different bodies with different capacities and appearances, the construction of gendered categorisations, and the assignment of values and meanings to differences, is to be expected within any society, although its form is known to have ranged widely, from rigid binary classifications to fluid understandings of difference, or potentially even denial of difference. This tension between permanence in terms of presence and impermanence in terms of format is one of the reasons why gender has become such an insightful but also complicated lens upon past societies.

Second, as a construct, gender is unstable. To appreciate some of the causes of this instability, it is helpful to briefly return to common understandings of gender. It is now widely agreed that gender refers to the cultural or social construction of differences between people based on reflections on bodies, but not necessarily directly dictated by such bodies. Its relationship to sex and sexuality can actually be extremely varied. So, gender does not refer to a reality beyond its own construction, although it will always exist. Gender is about imposing regulations and agreements, about creating conventions for how people with different bodies should be understood and allowed, or expected, to behave. The construction of gender, therefore, is also always a mechanism of control and the exercise of power. It is within this existence as a construct that we find a main source of gender's instability, because, as such, it can be challenged, subverted, undermined, and changed. The nature of gender depends on agreements and on the ability to uphold such agreements. This means that, within the construction of gender, we immediately have a major source, or reason, for its change.

The foci of gender transformation

The observation that gender roles and ideologies are changeable, even unstable, is widely recorded, including in archaeological, ethnographic, and historical analyses of societies. The observation does not, however, by itself explain why and how changes happen and what these will be about. Finding the roots and consequences of specific gender transformations is, therefore, a challenge of some significance. It matters to our understanding of the nature of societies and the dynamic between people and structures, and it is important for our understanding of the workings of social power. Moreover, because these changes are not linear and cumulative, they are especially interesting within historical (including archaeological) analyses, as this characteristic sets them apart from the kinds of social changes that progress towards greater complexity. Gender transformations, rather than progressing towards a particular form, are changes that relate to a continuously ongoing reimagining and remaking of how we think about people and some of the differences between them. These transformations are not directional. So why do they happen?

Here we need to insert some reflections on the differences between understanding gender as an experiential quality of individual lives vs. as a social normative regulation. This difference not only allocates notions of change and instability differently between the two, it also references different kinds of changes.

Individual gender and transformation

For the individual, gender is constantly in the process of becoming and transforming, and of affirmation; it is part of lifecycle changes. Depending on the specific kind of bodily changes, such as the onset of menstruation or menopause, the notion of gender is affected in distinct ways. Such changes may be gradual or may take the form of more sudden transformations of the experience and performance of body and self. The changes may be easily recognised (by all) or more hidden within the

body, but the body will change through its life, and with it, the basis for the individual's gender reflection and experiences are transforming. Thus, for individuals, the experiences of gender are, at one level, shaped around their bodies and changes within them, including their capacities and appearances, and, at another level, shaped through socialisation (including self-socialisation). It is important to stress here that the reference to gender roles, common in archaeological gender research since the seminal arguments by Joan Gero and Margaret Conkey in 1991, is not about the individual in this same sense. 'Gender roles' usually refer to the *social* roles that individuals play, but its discussion does not comment on the bodies of those individuals beyond how bodies are subject to social articulations and regulations. To appreciate the dynamics of gender transformation, it is essential that we embrace the observation that bodies change in a manner that goes beyond social regulation, and that although bodies are socialised, they are not reducible to the social. The resulting tension between bodily transformation and the striving towards social regulation provides us with a very common cultural trope: the *rite de passage* (a term coined in 1909 by Arnold Van Gennep). This concept, referring to the cultural practices through which 'the passage' of individuals (or groups) from one stage to another is celebrated (and regulated), captures the social attempts at controlling the transformation that takes place in bodies. It does so by categorising them in socio-political terms that involve issues of rights and responsibilities, such as access to particular resources and activities.

Meanwhile, self-socialisation of gender is also a major influence, and it has been a central topic in sociological and psychological studies. Children, it is argued, become aware of gender as one of their first social categories, an awareness that is apparently influenced by biology, socialisation, and cognition. Discussion of the latter includes references to self-recognition or self-socialisation, at times referring to children being 'gender detectives', to indicate their active searching and sorting through social experiences (Martin and Ruble 2004, 67). They use '*the gender cues provided by society to help them interpret what they see and hear*' (*ibid.*).

Discussions of individual gender transformations have, therefore, often focussed on questions about how gender is experienced, including how it develops. This focus, for example, characterises so-called gender development research within sociology (for the location of this research within wider discussions, see Zosuls *et al.* 2011), including its long-standing nature-nurture debate. This kind of research, however, has mainly been applied to modern societies in which the flow of information (and thus the means of socialisation) are multi-varied and very complex, and in which the individual has multiple role models to compare against and be influenced by. When taking such arguments to prehistoric³ societies, we need to be aware/wary of the small scale of many prehistoric communities and of their very different means of social communication and interaction. In such societies, socialisation, including self-socialisation, would usually take place among fewer players than modern sociological studies take for granted.

In archaeology, the significance of lifecycle changes has been recognised particularly in discussions on the seminal importance of age, including, for instance, Joanna Appleby's arguments about the differences between biological and social age, who also stresses the importance of recognising how distinct the individual experience may be:

3 Although the core of my reflections is not specific to any particular kind of society, my examples are, throughout, drawn from European prehistory and from my own research on the European Bronze Age. The examples aim to reveal principles rather than provide detailed presentations – they are observations to 'think with'. All examples mentioned are well documented in publications.

'This biologically different experience of the life cycle may be important in the construction of differently gendered experiences of later life; however, it is also important to realize that biological differences may be differently acknowledged. ... Marking of the life cycle may thus either incorporate or ignore changes in biological status in moving people from one age-based category to the next. Whether or not it does so, age categories can often be differently gendered: men and women may pass through different numbers of age categories which may be marked in different ways' (Appleby 2010b, 154).

Recently, the interconnections between such factors have been wrapped together under the concept of intersectionality. In this analytical framework, attention is given to how different forms of power are interlocked and that, therefore, different identity axes, such as gender or age, do not exist in isolation and can only be properly understood through analysis of how they intersect with each other. In its focus on power, this perspective brings the individual and the social close, and its concern is how the social acts on the individual. This approach has provided a helpful concern with contextualising the person within their social and political networks, and it has interesting potentials for archaeology, as seen, for example, in the studies by Bettina Arnold (2016) and Fredrik Fahlander (2012). There are also, however, aspects of the approach that can be problematic – especially its tendency to consider all aspect of identity as being of equal significance and to potentially ignore the very distinct nature of the different mechanisms and forces acting on the individual. In the context of the argument pursued here, the tendency to bundle together socio-political and biological facets of individual lives may be a bit short-sighted.

Social norms

In contrast to individual lifecycle approaches, discussions of gender as social constructs tend to argue about society's tendency to understand gender in a manner that presents it as permanent and stable, as natural and given – in other words, as normative conventions. Some sociologists have referred to these kinds of norms as descriptive and injunctive, arguing that such norms help individuals to adhere to traditional gender roles because deviating from them is likely to produce unpleasant social interactions (Cialdini *et al.* 1990). Descriptive norms provide information about how similar people behave in similar situations, whereas injunctive norms provide expectations about how people are supposed to behave, and may be associated with disapproval, shame, or rejection (Cialdini *et al.* 1990). We may use these ideas when investigating, for example, the underlying mechanisms of tradition (seen as an exercise of normative conventions). An example of this would be the formation of burials rites, such as during the Early Bronze Age, when numerous cemeteries over a large part of central Europe were constructed in a manner that reveals shared, rigid 'rules' about appropriate treatment of 'male' and 'female' bodies. It can be argued that such a degree of similarity was the result of descriptive norms affecting burial construction. The existence of some kind of regulatory mechanism may also have been behind 'gender appropriate costumes', as seen in many regions during the European Middle Bronze Age (Sørensen 1997), and also known from various historical periods. Together, these and other mechanisms aim to ensure that people's conduct and appearance are gender appropriate.

We may further speculate about what mechanisms were in place to ensure that such norms directed people's action in terms of, for example, the performance of burials, and what, in turn, made their transformation possible. One core motivation behind normative conventions may be the desire for sociability, generated both from individuals and from the collective, and the resulting thriving towards behaviour that ensures one's recognition as a member of a group, a tradition, or other forms of solidarities. Simultaneously, such conventions may also generate conflict in terms of

challenges to those who act as gatekeepers, or it may generate other forms of social power. From this point of view, tradition itself may be an arena for the exercise of power and at the same time a potential focus for change and rejection. This may take the form of rejections by individuals, resulting in the existing of parallel versions (alternatives and subcultures), or it may take the form of a more profound competition over control that may lead to ontological transformation.

Using burial traditions to think with, it becomes clear that such characteristics as the size and composition of communities would make a difference to what is needed to uphold tradition and what may cause it to fracture. In small-scale communities, in which there may have been a substantial time gap between individual burials, social memory about how exactly burials are to be done may easily have been vague and may have provided little basis for descriptive norms, leading to a reliance on injunctive norms based around expectations (and imaginations) of how others would have conducted burial rituals. In practice, because memory and recall are faulty new practitioners cause variation in the performance and there are often numerous small alterations in the repeat performance of a particular ritual. The appearance of such slight shifts through the repetition of a specific performative event is well known from observation of different forms of cultural performance, including contemporary memorialisation practices (Sørensen *et al.* 2019), and it would most likely also have affected prehistoric performance of tradition. Mark Haughton has recently shown that this was the case for Irish and Scottish Early Bronze Age burials. Overall, these very small cemeteries (and therefore not the result of regularly performed events) followed similar traditions (a ‘roadmap’ for burials), but there was, nonetheless, a substantial degree of variation in how shared general ideas of appropriate rituals were expressed (Haughton 2018).

Such examples suggest that transformation may arise from deliberate challenges to existing traditions, including the normative convention they reference, as well as from a gradual slippage in normative behaviour eventually leading to a need for rejuvenation or reinvention of what is shared about these conventions.

The individual: social tension

The obvious tension between the individual and the social/communal reveals a complex dimension to gender transformation. The individual is always undergoing change, whereas the social aims at stability and static norms and is wary of and vulnerable to challenge, as any form of social convention would be. There is a deep difference between these two foci, including in the reasons for potential significant transformations and the type of changes encountered, although they are often interwoven and have complex levels of interdependency. Take as our example the onset of menstruation – it will happen in some peoples’ bodies regardless of whether it is, for instance, seen as a pollution, and at some stage in those peoples’ life it will most likely stop, even if society may desire its continuation. We can create narratives explaining menstruation, build huts for celebrating or segregating the menstruating body, and in other ways erect culture around the body, but we cannot direct and control menstruation in any significant manner, although societies may believe they can and therefore act accordingly. We may see substantial transformation in the social regulation of behaviour connected to menstruation, and in that sense it is part of our long-term gender history; but the experience of the individual body is only partly affected by that history of change. Whatever the dictates of social norms, for the person experiencing it, the onset of menstruation is a transformative event and integral to their individual lifecycle.

This tension has also been recognised by other disciplines. The term life course perspective emerged in the 1970s as a means of focusing on the interplay between

larger social forces and the actual experiences of people (Elder 1994); the two dimensions are seen to be woven together in a dynamic relationship.

'In short, the perspective calls attention not only to the ways in which people's lives are influenced by broad economic, political, social, and cultural developments, but also to how the collective impact of individuals' reactions to these changes affects the course of subsequent change at the macro-level' (Kertzer 1991).

Advocates of this approach point to one of its distinct advantages being that it brings attention to the connection between social change and the stages of a person's life; the consequences of change are linked to the specificity of this interconnection. This is, I think, an interesting point for prehistorians to think about, as we often work with small-scale societies in which changes will be absorbed by (different) individuals or particular groups of people rather than necessarily by the community *per se*. Therefore, finding ways of further exploring the dynamic relationship between society and individuals could provide us with a finer-tuned appreciation of social transformation, including how it may potentially be a fractured experience, in the sense that transformative forces may not affect, and involve, all within a community in the same manner. Migration, for instance, will affect very young children very differently from members of other age groups (e.g. no experience of loss of 'home' and severed attachments), and if, for example, the introduction of domesticates during the early Neolithic resulted in new labour divisions, then the negotiation over this would have taken place among the people involved in certain activities, but not necessarily all others, even if it indirectly affected the larger community. It therefore seems that the impact of externally induced changes depends on at which point in their lifecycle individuals experience them. This perspective highlights age as an enormously important factor in how changes affect individuals; people are never faceless abstracts in their actions, but individuals, whose various identities influence how they act and react at a particular stage in their lifecycle and how societal changes are directed at them. While incorporating such variability within all our various analyses of prehistoric societies may be unrealistic, it is worth becoming aware of who we refer to when we assign these communities agency.

Moreover, if we could begin to recognise the varied impacts of different forms of change, we would become better at identifying the causes and the format of gender transformations. We might, even, try to disentangle which material expressions are reflections of individual lifecycle changes and which are about society's normative engagement with gender. We might also be able to ask who within a community would be most affected by change or, alternatively, most able to explore opportunities arising from change.

We know that gender ideologies, as an expression of social expectations and values assigned to people who are perceived to be different from each other, can be challenged and subverted, potentially resulting in radical changes and shifts. Such changes may take place at different scales, ranging from ontological shifts to practical aspects of social organisation, such as labour divisions. But the important question of why gender may be transformed remains difficult to answer beyond generalities. Nevertheless, our debates about gender transformation do need to aim beyond appreciating that change and transformation are inherent to gender and, instead, focus on ways of investigating what other causes there may be for such changes and transformations – and in particular what forms they may take. We also need much more thorough research of core questions, such as whether some factors, such as changes in access to resources, will always lead to gender transformation, whereas other transformations are located within, and depending on, specific conditions. Such further analyses might helpfully be structured around such issues as gender as a social contract, critically reflect on the nature of negotiation, and how to investigate the range and kind of practices (the 'social semiotics') through which

gender is performed and maintained. From an archaeological perspective, some of these potential avenues for further investigation can be sketched out.

Where does gender transformation take place?

We may move one step further towards locating diverse reasons for gender transformation by recognising that in addition to its inherent instability, factors external to the social system may also challenge existing gender relations, as they disrupt the ability or the desirability of maintaining agreed relationships between people. This makes it possible to zoom in on the kinds of relationships and conditions that may react to external pressures, and through that to move from the abstract argument to concrete examples. Such observations will raise further questions about whether certain aspects of society are more easily affected by externally induced changes whereas others are able to resist them.

We may find some clues to what such external factors may be by looking at contemporary gender studies. Projects that have been specifically designed to enable gender-equitable transformations are especially enlightening due to their explicit focus on gender-transformative mechanisms. Among such ventures, the auditing of projects in Africa conducted as part of sustainable development projects (e.g. Eagly *et al.* 2000) are particularly interesting because their reports contain measures of change. In these assessments, a number of classical ‘disruptors’ become apparent. To engender change, such projects typically focus on questioning ‘... *internalized belief systems and closely held identities, challenges entrenched institutionalized structures and deals with everyday habits and relationships*’ (Hillenbrand *et al.* 2015, 5), and they are concerned with ‘*unpacking the deeper systems and beliefs beneath surface-level differences*’ (*ibid.*). Typically, such studies reveal that many factors external to local communities can cause local changes to gender roles and ideology, especially if they influence ideas about ‘natural abilities’ and what kinds of occupations (and thus behaviour) are considered appropriate for different genders. They also commonly focus on access to, and control over, resources. Table 1 outlines some of the typical factors behind gender transformations and change identified by such projects.

These causes of changes in gender are not only seen in studies of contemporary situations; it is well known from historical and anthropological investigations that similar, as well as probably also different, ‘external’ factors, are found to have desta-

Table 1. Outline of commonly observed externally induced changes and their impacts on gender. The overview is based on work aimed at gender-equitable transformations as part of sustainable development in Africa (e.g. Hillenbrand *et al.* 2015, with additions by Marie Louise Stig Sørensen).

Change to social structure	Can affect access to resources; can result in challenges to authority
Economic change	Can introduce new resources; can change who is benefitting from certain resources (access and rights); can connect new partners and leave behind others
Change to value system	Can result in renegotiation of gender roles and rights
Advancement in science	Affects health, mortality rate, child birth survival (both mother and child); results in new products
War, conflict, epidemics	Affects the population profile; disrupts family patterns and roles; forces new responsibilities on people
Religious change (incl. secularisation)	Can result in challenges to the reasons for gendered roles and expectations about behaviour; can result in challenges to authority or change of authority
Demographic change	Outsourcing of male labour affects local relationships and roles; disease, epidemics, and illness (e.g. AIDS) affect sibling and kin structure and roles
Migration/mobility	Can cause interruption to existing gender agreements; can affect demographics; can introduce conflicts over resources and values
Change in the division of labour	Can destabilise power relations; can create new social contacts; can create new products

bilised, ruptured, or transformed gender relations through time and within specific contexts. Many of these factors are likely to also have affected prehistoric societies. We may even feel comfortable arguing that certain situations, such as change in subsistence practices and change in demographics due to migration or new diseases, will always challenge gender roles and relations because they affect fundamental structures and role allocations within communities. However, although gender transformation may be predictable within such contexts, it is less easy to foresee the actual outcome – how did societies restructure their understanding of gender due to these external challenges and, in particular, how were gender roles and ideologies affected and reformed? One way of advancing our understanding of these processes may be to focus on practices that specifically aim to consolidate norms and regulations, and to investigate examples of their transformation.

Locating challenges to gender

Looking at examples of gender construction and performance from the European Bronze Age, it is possible to try to identify such practices. By focusing on vulnerable links, or nodes, within regulated behaviour, we may be able to extricate how transformation was generated within these spheres of action and concern. By vulnerable links, I mean cultural norms that affect agreed-upon notions of proper behaviour and for which challenges in the form of subversion, neglect, or radical changes can take root with relative ease, resulting in transformation of gender norms, but without necessitating or causing a more profound alteration or collapse of the social system.

As I have already indicated, distinct shifts in the presentation and performance of the body during burial rites were probably related to such transformations, as they reveal changing attitudes affecting the (re)presentation of different members (bodies) of the community. In other words, burials can reveal variations and transformations in the social recognition of the ‘correct manner’ of presenting the social identity of bodies. In this regard, the changes during the end of the Early Bronze Age in Europe are particularly interesting and well known (*e.g.* Harding 2000). They can, therefore, be used to suggest how we may locate transformation in this sphere. Until the middle/end of the Early Bronze Age, a rigid gendered differentiation of bodies had been maintained by placing the deceased body in a crouched position within burial pits and, depending on their gender, placed on a different side of the body and with their heads at opposite ends of the graves. While the direction of the bodies was not entirely the same throughout the large area of central Europe, where we see this practice, within each region there was a strict adherence to a particular version of this overall norm of rigid classification. The insistence on deceased individuals being treated as if they belong to one of two different categories, or kinds, of bodies was widely shared and affected even children’s bodies. Moreover, data from large cemeteries show how, within them, both the categorisation of people into different gendered individuals and views about how this should be expressed within burials was almost universally held/agreed to. The data from the Early Bronze Age site of Gemeinlebarn F (Bez. Sankt Pölten, Austria) shows this pattern very clearly (Neugebauer 1991; Sørensen 2004), and is similar to the pattern found on other nearby cemeteries. However, there were commonly also a very small percentage of bodies that did not follow this norm. At Gemeinlebarn F, 3 percent of the 258 inhumation burials did not follow the prescribed norms precisely (Neugebauer 1991, 86). Some of these divergences may be due to a lack of correlation between our contemporary biological sex identification and the gender of the person in the Bronze Age, but a few examples show that this binary gender classification could be over-ruled when a body did not fit other aspects of bodiness. For example, the body of an adult male

who appeared to have had a congenital malformation of the hip joint that would have made walking difficult was placed in a very small (*i.e.* child-size) grave and in a ‘female position’ (Appleby 2010a, 52). It seems that his society had difficulties deciding on his gender categorisation; this burial provides a powerful illustration of the tension between individual lives and social norms.

However, at the end of the Early Bronze Age, these practices were changed, and to such an extent that we can argue for a transformation in gender ideology insofar that the rigid binary division of bodies disappeared. The transformation takes place through changes focussed on how the body is placed within the grave, with the deceased body now placed flexed, extended on the back within the grave, rather than on the side, thereby erasing what had previously been one of the most important axes of gender differentiation. This is an absolute difference, as there were no stages between being placed on the side and on the back. The differentiation of body orientation (*e.g.* north vs. south) also disappears, but it seems to show a more gradual loss of significance – probably this feature was of secondary importance in terms of gender performance and representation. Other aspects, such as the use and kinds of grave goods, as well as the form of the grave constructions (simple pits and coffins), show less change, but neither had been central to the presentation of a particular articulation of gender.

This example shows how normative and rigidly held views about gender expressed through the treatment of the deceased body became transformed by the change of the core signifiers within this understanding. Moreover, within the burial practices emerging during the end of the Early Bronze Age, different ways of arguing for and representing gender were invented and had to be agreed to, and for a certain period of time we find former large-scale, similar practices replaced by a plurality of cultural forms. This may suggest that such performative aspects of gender lend themselves to transformation because it is relatively easy to change the outward form that ideology takes; an important aspect of burials is that they are affected by, and in turn aim to reflect, ideological views about the person being buried. In this specific case, it may be that kinship or family relations (and thus social changes) began to insert the need to mark other solidarities within burial practices or that ideological changes may have affected notions of personhood and gender. Table 1, above, suggests that such changes would most likely have affected understandings, and thus performances, of gender. Such expression of change, both localised and over larger regions, may also reside behind transformations in principles of clothing during this time, as this was another medium for the performance of gender differences and one similarly open to both subtle and more drastic alterations.

But we also learn from Table 1 that transformation may not just take place within practices that are reflexive in terms of gender policies and social ideas, but may also be caused by changes to the organisation of subsistence practices and other economic activities. An important example of this is when society changes from a particular form of subsistence practice to another, and in particular when this involves a change from labour-intensive activities to investment-intensive ones. An example of this may be the introduction of plough agriculture, replacing garden agriculture, but also the introduction of new plants or animals, which introduce new requirements and needs. In addition, changes in the organisation of labour towards more complex production, with more differentiation between stages within production sequences and the need for new kinds of expertise, tend to have substantial transformative influences on gender ideologies in terms of who does what within these divisions and the values associated with different tasks. In archaeology, we have long been aware of how the introduction of domesticates, with the associated investment in cultivated land, need to care for animals, and different sequences of food processing, may have dramatically influenced gender ideology in the form of gender-based divisions of labour and associated values. The importance of changes

in subsistence and productive practices is, however, not limited to this particular example of historical change. For example, the emergence in Europe of wool-producing sheep during the Middle Bronze Age would have introduced an entirely new product (woollen textiles vs. plant-based ones; Bender Jørgensen *et al.* 2018). With it came a production sequence that was distinct to the material, and which would have introduced new practices that would have affected existing labour divisions. Who, for example, participated in the laborious cleaning and sorting of the wool? Was this based around the household or did it draw on wider social networks? And may the different stages of the production have been gendered (Kristiansen and Sørensen 2019)? At present we do not know how to answer these questions, but that does not mean that it is not obvious that the introduction of the new material would have challenged existing labour arrangements, and also that, rather than assuming that textile work was women's labour, we should raise this as a question within research on the Bronze Age wool economy.

Finally, as we are gaining increased knowledge about mobility in prehistoric societies, we can also begin to develop research concerned with how social relationships in prehistory could have been a tool of power – and gender control. Movement between groups causes creolisation, acculturation, suppression, and the fracturing of some existing relationships, but also the opportunity of new formations. This is especially blatant if the groups coming into contact are very varied in terms of both their gender composition (*e.g.* male-dominated external groups composed of warriors or traders) and their ideological worldview. Such relationships are expressed through control over resources, including bodies and objects, and transformations may arise from both the imposition on local communities and from the ability or the desire to undo such control or to exploit it.

Conclusion

The question that this volume raises about gender transformation, and especially when broached in terms of past societies, provokes reflections about central aspects of how societies function. These are aspects that we usually cannot address directly in our studies of past societies, but becoming aware of them is, nonetheless, an important step towards working against a gender-blind past. Furthermore, as these concerns point to gender as a lived quality at scales ranging from the individual to the community, they also caution us to continue to struggle with how to move gender perspectives into wider aspects of the archaeological project. We cannot remain focussed on the areas of social practice most dominated by easily identifiable prescriptive norms, that is, the explicitly performative aspects of gender. Although this paper has used burial traditions to think with, it wants to stress that these are only part of gendered lives – the transformations we see in burial traditions, surely, are signatures of other changes in society, changes that we should be concerned about. The paper argues that, to move into these other reaches of society, it may be helpful to take note of experienced gained from contemporary work on pathways for women's empowerment. Such work proposes three strategic areas for gender transformation: economic empowerment, political empowerment, and empowerment in terms of bodies and sexualities (Cornwall 2016). Of course, these proposals are not based on historical analyses, but, rather, based on detailed, fact-based insights into how social order and values may be changed, but in this they also provide potential clues to how we may analyse and interpret change in past societies.

Using varied sources, it is possible to identify factors internal and external to society, as well as aspects of behaviour, that will lead to challenges to existing gender arrangements and values – and potentially to their transformation. Many of these, such as the subversion of rules or alternative interpretations, are fundamental-

ly about control and power – moreover, this is not only about deciding between different ontologies, but also about controlling these and their changes. Such control is often focussed on access to resources and knowledge, including bodies, and it is often machinated either through raw power or through ideological appropriations of views about what is right and who has rights. Effectively challenges to existing gender arrangements have to, eventually, be concerned about these same resources and ideologies.

Transformation is not the only aspect of past gender ideologies. It does, however, pose a fundamental intellectual and analytical challenge, and we need to develop and explore ways of incorporating this dimension into our attempts to investigate the past in a manner that enables some of its social dynamics to emerge and become subjected to scrutiny and reflection.

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References

- Appleby, Joanna 2010a. Aging as fragmentation and dis-integration. In: Rebay-Salisbury, Katharina, Sørensen, Marie Louise S., and Hughes, Jessica (eds). *Body Parts and Bodies Whole: Changing Relations and Meanings*. Oxford: Oxbow, 46-53.
- Appleby, Joanna 2010b. Why We Need an Archaeology of Old Age, and a Suggested Approach. *Norwegian Archaeological Review*, 43, 145-168.
- Arnold, Bettina 2016. Belts vs. blades: the binary bind in Iron Age southwest German mortuary contexts. *Journal of Archaeological Method and Theory*, 23, 832-853.
- Bender Jørgensen, Lise, Sofaer, Joanna, and Sørensen, Marie Louise S. 2018. *Creativity in the Bronze Age*. Cambridge: Cambridge University Press.
- Cialdini, Robert B., Reno, Raymond R. and Kallgren, Carl A. 1990. A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58, 1015-1026.
- Cornwall, Andrew 2016. Women's Empowerment: What Works? *Journal of International Development*, 28, 342-359.
- Eagly, Alice H., Wood, Wendy, and Diekmann, Amanda B. 2000. Social role theory of sex differences and similarities. A current appraisal. In: Eckes, Thomas, and Trautner, Hanns M. (eds). *The developmental social psychology of gender 1*. Mahwah, N.J.: Erlbaum, 23-174.
- Elder Jr, Glen H. 1994. Time, Human Agency, and Social Change: Perspectives on the Life Course. *Social Psychology Quarterly*, 57, 1, 4-15.
- Fahlander, Fredrik 2012. Facing gender corporeality, materiality, intersectionality and resurrection. In: Danielsson, Ing-Marie Back, and Thedéen, Susanne (eds). *To Tender Gender The Pasts and Futures of Gender Research in Archaeology*. Stockholm: Stockholm University, 137-152.
- Gero, Joan M., and Conkey, Margaret W. 1991 (eds). *Engendering Archaeology: Women and Prehistory*. Oxford: Blackwell.
- Harding, Anthony F. 2000. *European Societies in the Bronze Age*. Cambridge: Cambridge University Press.
- Haughton, Mark 2018. Social Relations and the Local: Revisiting Our Approaches to Finding Gender and Age in Prehistory. A Case Study from Bronze Age Scotland. *Norwegian Archaeological Review*, 51, 64-77.

- Hillenbrand, Emily, Karim, Nidal, Mohanraj, Pranali and Wu, Diana 2015. *Measuring gender transformative change: A review of literature and promising practices*. CARE USA. Working Paper. <www.care.org/sites/default/files/documents/working_paper_aas_gt_change_measurement_fa_lowres.pdf>, retrieved 18 December 2018.
- Kertzner, David 1991. Household and gender in a life-course perspective. In: Eleonora Masini and Susan Stratigos (eds). *Women, households and change*. Tokyo: United Nations University Press, 18-29. <archive.unu.edu/unupress/unupbooks/uu10we/uu10we05.htm>, retrieved 22 September 2018.
- Kristiansen, Kristian, and Sørensen, Marie Louise S. 2019. Wool in the Bronze Age. Concluding reflections. In: Sabatini, Sabrina, and Bergerbrant, Sophie (eds). *The Textile Revolution in Bronze Age Europe*. Cambridge: Cambridge University Press.
- Martin, Carol L., and Ruble, Diana 2004. Children's search for gender cues: Cognitive perspectives on gender development. *Current Directions in Psychological Science*, 13, 67-70.
- Neugebauer, Johannes-Wolfgang 1991. *Die Nekropole F von Gemeinlebarn, Niederösterreich. Untersuchungen zu den Bestattungssitten und zum Grabraub in der ausgehenden Frühbronzezeit in Niederösterreich südlich der Donau zwischen Enns und Wienerwald*. Römisch-germanische Forschungen 49. Mainz am Rhein: Zabern.
- Sørensen, Marie Louise S. 1997. Reading Dress: The Construction of Social Categories and Identities in Bronze Age Europe. *Journal of European Archaeology*, 5, 93-114.
- Sørensen, Marie Louise S. 2004. The Interconnection of Age and Gender: A Bronze Age Perspective. *Ethnographisch-Archäologische Zeitschrift*, 45, 327-338.
- Sørensen, Marie Louise S., Dacia Viejo Rose, and Paola Filippucci 2019. Memorials and memorialisation – forms and affects. In: Sørensen, Marie Louise S., Viejo Rose, D. and Filippucci, Paola (eds). *From History to Heritage: Memorials and memorialisation*. London: Palgrave.
- Trinetti, Matthew 2018. *The Difference between Change and Transformation*. <medium.com/the-mission/the-difference-between-career-change-and-transformation-47fbab0c780c>, e-published 21 February 2018; retrieved 1 August 2018.
- Van Gennep, Arnold 1909. *Les rites de passage*. Paris: Nourry.
- Zosuls, Kristina M., Miller, Cindy F., Ruble, Diane. N., Martin, Carol L., and Fabe, Richard A. 2011. Gender Development Research in Sex Roles: Historical Trends and Future Directions. *Sex roles* 64, 11-12, 826-842.

Osteology defines sex and archaeology defines gender? Insights from physical anthropology

Johanna Kranzbühler

Abstract

The ability to determine the sex of a skeletal specimen is an indispensable resource to the field of physical anthropology/bioarchaeology, as it provides vital information regarding the demographic composition, death rate, life expectancy, and burial customs correspondent to each sex. Frequently, these customs include sex-differentiated grave goods, and sometimes even occupation-based burial features. However, in analysing these data, archaeologists often draw conclusions related to the societal roles of the deceased, creating an area of overlap in which the bioarchaeological (*i.e.* anatomical) assignment of sex and the archaeological (*i.e.* social) concept of gender both come into play. Due to this dichotomy, the assumption is often that the field of physical anthropology will be able to provide, definitively, the biological sex of the deceased individual, in order that societal roles may be inferred by archaeologists. This paper discusses the possibilities and limitations of osteological sex determination and asks whether physical anthropology really provides the bare facts of a person's biology. Moreover, it suggests how these methodological limitations can be faced.

Keywords: *sex, gender, bioarchaeology, method*

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Sex and gender in physical anthropology/ bioarchaeology

In the bioarchaeological examination of skeletal populations¹, the result of the anthropological/bioarchaeological sex determination is a piece of key information, as it allows conclusions about the demographic composition of a former population, about the death rate and the life expectancy of the sexes, and therefore about their possibly diverging living conditions (Grupe *et al.* 2015, 249). Turning to the sphere of dead, sex determination also allows insights into funerary customs, such as burial patterns or grave goods, depending on the sex of the buried person.

It is here, during the comparison of data from bioarchaeological sex determination and burial features, that analysis of gender concepts in past societies often takes place, by analysing the combinations of the sex of the deceased and specific burial features. In this way, conclusions can be drawn concerning the male and female roles in former societies, and in this way bioarchaeological sex determination provides information for the investigation of social role patterns, notably gender concepts, of past societies (Arnold 2006, 144; Hofmann 2009, 146 ff.).

As bioarchaeological sex determination derives from the skeleton and therefore from the body, it is usually considered to be the invariant fact in archaeological gender studies based on burial analyses, whereas conclusions about the social role are seen to be an interpretative task and the subject of discourse (Gilchrist 2009, 1031 f.; Hofmann 2009, 135). Especially in bioarchaeological literature, sex determination based on osteology is seen as the starting point for gender studies in past societies (Mays and Cox 2000, 117; Lewis 2007, 47). But it can be questioned whether physical anthropology delivers the sex of a deceased person in terms of a given fact and whether bioarchaeological sex determination is always free from interpretative tasks.

Sexual dimorphism in the human skeleton

The method of bioarchaeological sex determination is based upon the observation that there is a sexual dimorphism in the human body that is also shown in the skeleton. On average, the bony part of the female pelvis is broader than male one, whereas the overall skeleton of males tends to be more robust. Males show more distinct muscle attachment sites and greater overall dimensions of individual bones, on average, also leading to, for example, greater joint and circumference diameters in the bones, especially in the femur, and greater tooth dimensions. This robusticity is also described as being highly observable in the skull; on average, male skulls are larger and with more accentuated facial bones and muscle attachment sites than female ones. These sexually dimorphic traits in the skeleton can be divided into functional traits, concerning the spatial demands of pregnancy and birth in the pelvis, and non-functional traits, in the other parts of the skeleton. In both categories of traits, the sexual dimorphism is controlled by genetics and hormones and is fully developed after adolescence, but its expression is also influenced by age, living conditions, and activity (Acsádi and Nemeskéri 1970, 73 ff.; Brothwell 1981, 59 ff.;

1 This article covers the morphological sex determination of inhumations. Sex determination in cremations is even more ambitious and requires a partly differing range of methods. It therefore should be discussed separately. Sex determination by analysing ancient DNA is also possible, but it is invasive, and, among other limitations, its success is highly dependent on the state of preservation. Hence, in the majority of cases, anthropological sex determination is still based upon morphological skeletal features (see Grupe *et al.* 2015, 505 ff. for a critical review of the method, Bösl 2017 for the history of aDNA analyses, and Geller 2017b for both).

Herrmann *et al.* 1990, 73 ff.; Mays and Cox 2000, 117 ff.; White and Folkens 2005, 385 ff.; Grupe *et al.* 2015, 254 ff.)².

It is important to emphasise at this point that bioarchaeological sex determination deals not with primary but with secondary or even tertiary sexual characteristics. These are found in the hard tissue of the skeleton, whereas primary sexual characteristics are found in soft tissue only. The primary sexual characteristics are organs that primarily serve reproduction and that are developed at the time of birth, for example, ovaries, testicle, uterus, vagina, and penis. The secondary sexual characteristics are those that do not primarily serve reproduction and that develop with pubescence, for example, pubic hair in both sexes or the mammary gland in females. The shape of the pelvis is listed as a tertiary sexual characteristic, together with body height and behaviour (Acsádi and Nemeskéri 1970, 73 f.; Clauss and Clauss 2018, 348). Moreover, the human body shows a lesser distinct sexual dimorphism in the skeleton than in the soft tissue (Acsádi and Nemeskéri 1970, 73; White and Folkens 2005, 385).

It is also important to emphasise that multiple sex categories can be distinguished in the human body: the chromosomal sex (based on which types of sex chromosomes a person carries), the gonadal sex (based on which types of gonads a person develops), and the somatic sex (based on which types of primary and secondary sexual characteristics a person shows). Partly, these sex categories entail each other, for example, when the embryonal testicle produce testosterone, which is responsible for the development of the spermatic duct and other male sexual characteristics. But they do not necessarily correspond to each other. For example, a person with an XY set of chromosomes can develop female sexual characteristics in the soft tissue, and vice versa (Henke and Rothe 1998; Hofmann 2009, Fig. 1).

The sex determination in physical anthropology, on the other hand, is based only on skeletal features, which are only one part of the whole set of sexual characteristics observable in the human body. Therefore, the skeletal sex determined with bioarchaeological methods – the ‘bioarchaeological sex’ – can be considered as close to the somatic sex but not equal to it.

Sex determination in bioarchaeology

Bioarchaeology offers more than two different results for the determination of the sex based on the examination of bones: a skeleton can be determined to be male, to be female, to be probable male, to be probable female, or to be indifferent/ambiguous. It also occurs that there is no sex determination possible because the sexually dimorphic traits are not observable, due to limited preservation or due to a limited archaeological record. In that case, the result simply is ‘no result’ or indeterminate. Probable male, probable female, or indifferent/ambiguous, in contrast, means that sexually dimorphic traits were observable but that they did not show an expression as distinct as required by the method. These cases have to be distinguished from ‘no result’. The reason for this comparatively high number of possible results of bioarchaeological sex determination diverging from a simple dichotomy of male and female skeletons lies in the nature of the human skeleton itself: the expression of sexually dimorphic traits in the skeleton is variable between individuals and populations. In a skeletal sample, each trait can be sorted on a continuous scale, with the most distinct expressions at the very ends and the less distinct expressions toward the midpoint. But it is not necessarily the case that all parts of a single skeleton will show traits pointing to one sex only. Especially in the area around the distributions’ midpoint, it is possible that a skeleton will show a mosaic

2 In single traits, sexual dimorphism is already observable in subadult skeletons; Herrmann *et al.* 1990: 85ff.; Mays and Cox 2000, 121 ff.; Lewis 2007: 47ff.; Grupe *et al.* 2015, 255 ff.

of male and female trait expressions. Additionally, there is the possibility of gracile male and robust female skeletons. Nonetheless, bioarchaeological sex determination is possible, with accuracies over 90 per cent for specific traits and methods. But accuracy is highly dependent on the bone preservation and completeness of the skeleton, on the traits used, on the expression of sexual dimorphism in the population under study, and on the individual's trait expression (Acsádi and Nemeskéri 1970, 73 ff.; Ferembach *et al.* 1979, (1) f.; Brothwell 1981, 59 ff.; Sjøvold 1988, 444f.; Herrmann *et al.* 1990, 73 f.; Buikstra and Ubelaker 1994, 15; Mays and Cox 2000, 117ff.; White and Folkens 2005, 385 f.; Grupe *et al.* 2015, 254 ff.)³.

So, the result of a sex determination being 'indifferent' does not constitute a failure of bioarchaeological methodology. It is on the result of the individual's trait expression being less distinct than possible, lying in a position nearer to the distribution's midpoint. But of course, to come to conclusions about the sex of skeletons with non-distinct trait expressions or a puzzling trait mixture is a challenge to be accepted by physical anthropology. Additionally, it is important to emphasise here that there is no method in physical anthropology that allows us to determine intersexual persons by their skeletal features. As mentioned above, the definition of intersex is defined in soft tissues and chromosomes.

Ideal types and the observer, or the 'Barbie and Ken vs. public transport phenomenon'

Whether a trait is considered to be expressed typically by a male or by a female skeleton and whether a specific trait has to be weighted as a higher or a lower diagnostic criterion is the result of a scientific discourse dealing to a certain extent with assumptions about how female and male bodies should be (Wesp 2017, 105; see Geller 2017a, 21 ff. for a recent description of the historical reasons for that situation). And it is the result of the single observer's thorough decision about how to deal with an unknown sample, as the weight of a sexually dimorphic trait might differ in populations from different regions and eras (Brickley and McKinley 2004, 23). The coexistence of skeletons with distinct sexually dimorphic traits and those with weaker expressions can be described as the 'Barbie and Ken vs. public transport phenomenon': To define the end positions in the continuum of sexually dimorphic trait expressions in a skeletal population, those specimens are used that show the most distinct expressions, whereas the less distinct cases are sorted away from the extremities, up to the indifferent cases in the middle of the scale (White and Folkens 2005, 386). 'Ideal' types of male and female bodies are used to define the end positions, with an underlying concept of smooth, gracile, weak females and rough, robust, strong males, each with bones to match (the 'Barbies and Kens' in a given population). But, as we all know, especially those of us who regularly use public transportation, humans are diverse, with a huge range of types not fitting an artificially defined 'ideal type'.

Comparing sex and burial features

When the results of bioarchaeological sex determination and burial features (in particular, grave good assemblages and burial positions) are compared, there are two possible outcomes. Either the results converge, whereby a burial relating to a successfully sex-determined male or female skeleton shows burial features that are

3 See also Skoglund *et al.* 2013. Here, the results of genetic and morphological sex determination differed in some cases, which can easily be traced back to an insufficient completeness of the skeleton for morphological analysis.

expected for this sex at this time and place, or the results diverge, whereby a male skeleton found buried with attributes defined as female, or vice versa. While there is usually no further attention paid to the former result, it is all the more for the latter, and on varying levels. One approach is to ignore the bioarchaeological results, demand a re-examination, and/or questioning the bioarchaeological method⁴. The other approach is more integrative, and might involve discussing cross-gendering in past societies and rethinking given connotations of maleness and femaleness in grave goods. There is also a demand for integrating the results of both disciplines into a broader, more complex model of past societies – role frameworks that include overlapping aspects, such as age, sex, gender, and status⁵. In a nutshell: Maybe, past societies defined being male or female in different ways than we do in our society, and maybe, sex and gender were not the first and foremost attributes for past societies when it came to burying their dead.

Also, the question arises if it is necessary at all to combine the results of both disciplines in exploring past societies' gender concepts. On the one hand, according to gender theory, one might argue that gender is constructed and performed in our behaviour (Sørensen 2000, 10; Arnold 2006, 140 f.; Gilchrist 2009, 1031). From there, one might further argue that conclusions about gender systems can be drawn without any knowledge of the bodies, which would mean that the bioarchaeological sex of a buried person is no longer important. At the same time, the bioarchaeological point of view could be to be fully satisfied with the skeletal biology of a deceased. On the other hand, we could say that exploring gender in the past happens in the overlapping area, where bioarchaeological and archaeological results are compared. But we should not forget that there might be the underlying pre-supposition that gender is a binary system that is built around sex as a biological constant, which is supposed to have been 'first and foremost'. Additionally, this model does not take into account impact on the body from activities emerging from social roles (Sofaer and Sørensen, 2013, 526; Wesp 2017, 99 f. 106 ff.).

Stepping beyond?

Returning to the anthropological method, it is important to keep in mind that the result of bioarchaeological sex determination is the weighted sum of the examination of several single traits. Especially in regard to non-functional features, a mosaic of 'male' and 'female' traits is possible, all over the skeleton. But when bioarchaeological data are integrated into archaeological studies using statistical analysis, several single burial features are used, while the result of the sex determination process is considered later, from an outside position and as a given fact. An alternative approach could be to take all of the single sexually dimorphic features observed in the skeleton and analyse them together with the single features observed in the burial (see Figs. 1-3). The result may reflect aspects beyond the mere product of the bioarchaeological sex determination process, such as multi-gender systems. Additionally, this approach might also be able to show the impact of gender performed in life on the skeleton.

4 The author would like to remark at this point that, if 'gender deviant' burials were solely the result of an anthropological error, the default should be expected to appear in all cases, that is, also in those where sex and gender are congruent. Which would mean that when, for example, in a given cemetery female-sexed skeletons buried with weapons are suspected to be males by archaeologists, skeletons buried with weapons and sexed as males (based on the same category of traits and in a comparable state of preservation) should consistently be suspected to be women.

5 For example, Fries 2005; Burmeister and Müller-Scheeßel 2005; Arnold 2006, 152 ff.; Falkenstein 2008; Hofmann 2009, 151 f.; Karl 2013; Koch 2017; Gärtner *et al.* 2014; Toplak 2018. See also Herrmann 1977 for a well-founded reply to a case where anthropological sex determination and archaeological interpretation of the grave goods in a cremated population diverged strongly.

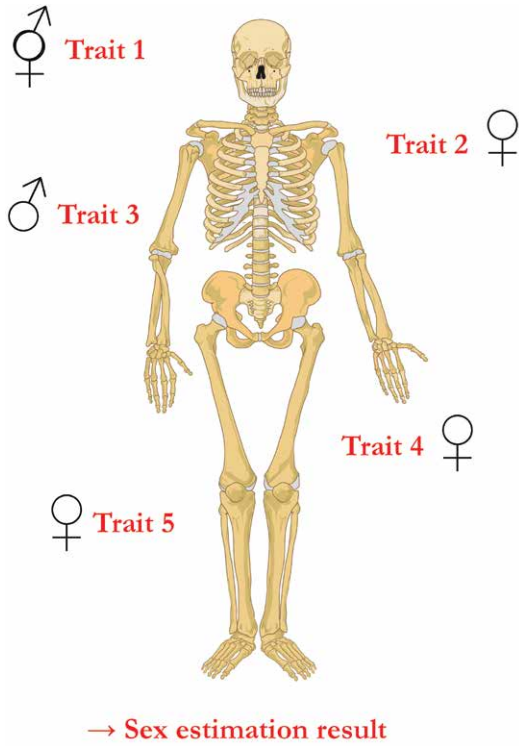


Figure 1. Schematic showing how skeleton may display a mixture of 'male' and 'female' traits, both morphological and metric (Johanna Kranzbühler).

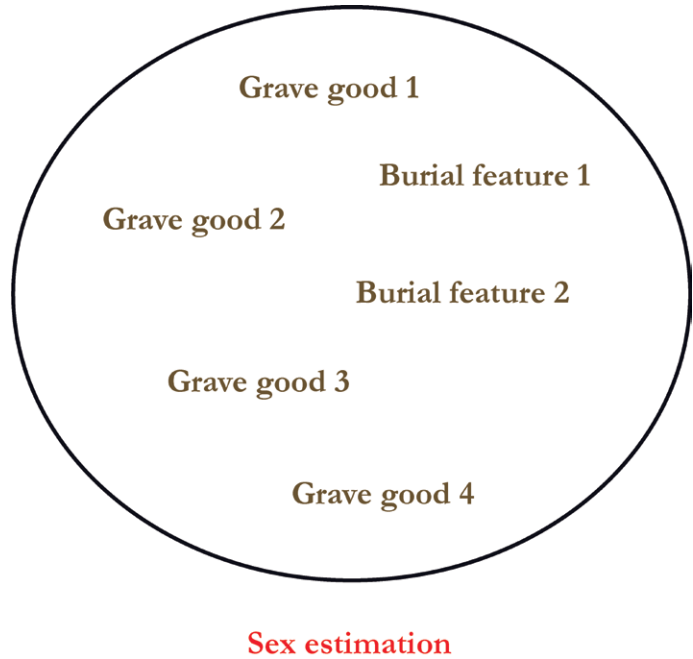


Figure 2. Schematic showing how when bioarchaeological data are integrated in archaeological analysis, usually only the result of the sex estimation process is used (Johanna Kranzbühler).

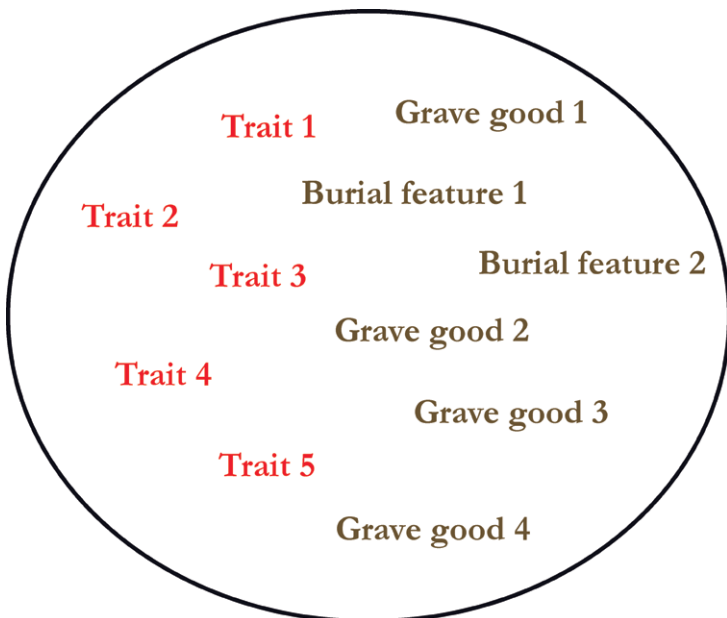


Figure 3. Schematic showing how analysing the sexually dimorphic features as single traits together with the archaeological data might show aspects beyond the product of the bioarchaeological sex determination process (Johanna Kranzbühler).

References

- Acsádi, György, and Nemeskéri, János 1970. *History of human lifespan and mortality*. Budapest: Akadémiai Kiadó.
- Arnold, Bettina 2006. Gender and Archaeological Mortuary Analysis. In: Nelson, Sarah M. (ed.). *Handbook of gender in archaeology*. Gender and archaeology series. Lanham: AltaMira, 137-170.
- Bösl, Elsbeth 2017. Geschlecht ansprechen. Archäologische und anthropologische Anspracheverfahren aus der Perspektive der Wissenschaftsgeschichte. *Feministische Studien*, 2, 318-334.
- Brickley, Megan, and McKinley, Jacqueline I. 2004. *Guidelines to the standards for recording human remains*. Institute of Field Archaeologists paper 7. Reading: Institute of Field Archaeologists.
- Brothwell, Donald R. 1981. *Digging up bones: The excavation, treatment and study of human skeletal remains* [3rd edition]. Oxford: Oxford University Press.
- Buikstra, Jane, and Ubelaker, Douglas H. 1994 (eds). *Standards for data collection from human skeletal remains. Proceedings of a seminar at the Field Museum of Natural History*. Arkansas Archeological Survey research series 44. Fayetteville: Arkansas Archeological Survey,
- Burmeister, Stefan, and Müller-Scheeßel, Nils 2005. Der Methusalemkomplex: Methodologische Überlegungen zu Geschlecht, Alter und Sozialstatus am Beispiel der Hallstattzeit Süddeutschlands. In: Müller, Johannes (ed.). *Alter und Geschlecht in ur- und frühgeschichtlichen Gesellschaften. Tagung Bamberg 20.-21. Februar 2004*, Universitätsforschungen zur prähistorischen Archäologie 126. Habelt, Bonn, 91-125.
- Clauss, Wolfgang, and Clauss, Cornelia 2018. *Humanbiologie kompakt*. Lehrbuch [2nd edition]. Heidelberg: Springer.
- Falkenstein, Frank 2008. Geschlechterrollen und Sozialstatus im Spiegel der neolithischen Gräberfelder von Alterhofen-Ödmühle und Trebur. In: Falkenstein, Frank, Schade-Lindig, Sabine, and Zeeb-Lanz, Andrea (eds). *Kumpf, Kalotte und Pfeilschaftglätter. Zwei Leben für die Archäologie: Gedenkschrift für Annemarie Häusser und Helmut Spatz*. Internationale Archäologie Studia Honoraria 27. Rahden/Westf.: Leidorf, 77-95.
- Ferembach, Denise, Schwidetzky, Ilse, and Stloukal, Milan (1979). Empfehlungen für die Alters- und Geschlechtsdiagnose am Skelett. *Homo*, 30, (1)-(32).
- Fries, Jana E. (2005). Von weiblichen Nadeln und männlichen Pinzetten. Möglichkeiten und Grenzen der archäologischen Geschlechterforschung. In: Leskovar, Jutta, and Karl, Raimund (eds). *Interpretierte Eisenzeiten: Fallstudien, Methoden, Theorie; Tagungsbeiträge der 1. Linzer Gespräche zur interpretativen Eisenzeitarchäologie*, Studien zur Kulturgeschichte von Oberösterreich 18. Linz: Oberösterreichisches Landesmuseum, 91-100.
- Gärtner, Tobias, Haas-Gebhard Brigitte, Harbeck, Michaela, Immler, Franziska, and Rott, Andreas (2014). Frühmittelalterliche Frauen in Waffen? Divergenzen zwischen der archäologischen und anthropologischen Geschlechtsansprache. *Bayerische Vorgeschichtsblätter*, 79, 219-240.
- Geller, Pamela L. 2017a. *The bioarchaeology of socio-sexual lives: Queering common sense about sex, gender, and sexuality*. Cham: Springer.
- Geller, Pamela L. 2017b. Brave Old World. Ancient DNA Testing and Sex Determination. In: Agarwal, Sabrina C., and Wesp, Julie K. (eds). *Exploring Sex and Gender in Bioarchaeology*. Albuquerque: University of New Mexico Press, 71-98.
- Gilchrist, Roberta 2009. Sex and Gender. In: Cunliffe, Barry, Gosden, Chris, and Joyce, Rosemary A. (eds). *The Oxford handbook of archaeology*. Oxford Handbooks series. Oxford: Oxford University Press, 1029-1047.

- Grupe, Gisela, Harbeck, Michaela, and McGlynn, George 2015. *Prähistorische Anthropologie*. Heidelberg: Springer Spektrum.
- Henke, Winfried, and Rothe, Hartmut 1998. Biologische Grundlagen der Geschlechtsdifferenzierung. In: Auffermann, Bärbel, and Weniger, Gerd C. (eds). *Frauen, Zeiten, Spuren*. Mettmann: Neanderthal Museum, 43-64.
- Herrmann, Bernd 1977. *Zur Bestimmung des Leichenbrandes aus dem Gräberfeld von Kemnitz, Kr. Potsdam-Land. "Eine Lanze für Kemnitz"*. Zeitschrift für Archäologie, 11, 85-86.
- Herrmann, Bernd, Grupe, Gisela, Hummel, Susanne, Piepenbrink, Hermann, and Schutkowski, Holger 1990. *Prähistorische Anthropologie. Leitfaden der Feld- und Labormethoden*. Heidelberg: Springer.
- Hofmann, Kerstin P. 2009. Grabbefunde zwischen sex und gender. In: Rambuscheck, Ulrike (ed.). *Zwischen Diskursanalyse und Isotopenforschung. Methoden der archäologischen Geschlechterforschung*. Bericht 3. Sitzung der AG Geschlechterforschung, Schleswig 2007. *Frauen – Forschung – Archäologie* 8. Münster: Waxmann, 133-161.
- Karl, Raimund 2013. *Die Waffe macht den Mann. Oder: Warum Gräber mit Waffenbeigabe (auf den britischen Inseln) letztendlich doch Männergräber sind*. In: Wefers, Stefanie, Fries, Jana E., Fries-Knoblach, Janine, Later, Christiana E., Rambuscheck, Ulrike, Trebsche, Peter, and Wiethold, Julian (eds). *Bilder – Räume – Rollen. Beiträge zur gemeinsamen Sitzung der AG Eisenzeit und der AG Geschlechterforschung während des 7. Deutschen Archäologenkongresses in Bremen 2011*. Beiträge zur Ur- und Frühgeschichte Mitteleuropas 72. Langenweißbach: Beier & Beran, 37-44.
- Koch, Julia K. 2017. Weibliche Biographien und statistische Gruppen. Das Leben und Sterben der hallstattzeitlichen Frauen vom Magdalenenberge. In: Keller, Christin, and Winger, Katja (eds). *Frauen an der Macht? Neue interdisziplinäre Ansätze zur Frauen- und Geschlechterforschung für die Eisenzeit Mitteleuropas*. Universitätsforschungen zur prähistorischen Archäologie 299. Bonn: Habelt, 93-106.
- Lewis, Mary E. 2007. *The bioarchaeology of children: Perspectives from biological and forensic anthropology*. Cambridge studies in biological and evolutionary anthropology 50. Cambridge: Cambridge University Press.
- Mays, Simon, and Cox, Margaret 2000. Sex determination in skeletal remains. In: Cox, Margaret, and Mays, Simon (eds). *Human osteology: In archaeology and forensic science*. London: Greenwich Medical Media, 117-130.
- Skoglund, Pontus, Storå, Jan, Götherström, Anders, and Jakobsson, Mattias 2013. Accurate sex identification of ancient human remains using DNA shotgun sequencing. *Journal of Archaeological Science*, 40, 12, 4477-4482.
- Sjøvold, Torstein 1988. Geschlechtsdiagnose am Skelett. In: Knußmann, Rainer (ed.). *Anthropologie. Wesen und Methoden der Anthropologie 1. Wissenschaftstheorie, Geschichte, morphologische Methoden*. Stuttgart: Fischer, 444-480.
- Sofaer, Joanna, and Sørensen, Marie Louise S. 2013. Death and Gender. In: Tarlow, Sarah, and Stutz, Liv N. (eds). *The Oxford handbook of the archaeology of death and burial*, Oxford handbooks in archaeology. Oxford: Oxford University Press, 527-541.
- Sørensen, Marie Louise S. 2000. *Gender Archaeology*. Cambridge: Polity.
- Toplak, Matthias S. 2018. *War Wikinger-Krieger eine Frau?* Archäologie in Deutschland, issue 1, 60-63.
- Wesp, Julie K. 2017. *Embodying Sex/Gender Systems in Bioarchaeology Research*. In: Agarwal, Sabrina C. and Wesp, Julie K. (eds). *Exploring Sex and Gender in Bioarchaeology*. Albuquerque: University of New Mexico Press, 99-126.
- White, Timothy D., and Folkens, Pieter A. 2005. *The human bone manual*. Amsterdam: Elsevier Academic Press.

Gender in Linearbandkeramik research. Traditional approaches and new avenues

Nils Müller-Scheeßel

Abstract

The paper deals with gender issues in the Early Neolithic of central Europe as represented by the Linearbandkeramik (LBK). After discussing current topics and definitions in gender research, it reviews preceding attempts at ‘gendering’ the LBK world. The main section of the paper then presents a reanalysis of one of the most comprehensive datasets, the Bavarian LBK cemeteries published by Norbert Nieszery. With the help of the multivariate statistical method of correspondence analysis, three important latent factors are identified that primarily influence the data structure: gender, status, and age. These factors correspond with recurring sets of objects. However, especially the comparison of the gender axis with that of the morphological sex as determined anthropologically reveals that apparently there were many individuals who did not fit into strict binary categories. Interestingly, this vagueness in terms of social gender roles is accompanied by higher uncertainties in morphological sexing. This, in turn, can be related to Joanna Sofaer’s notion of the ‘*plasticity of the body*’, which bears and conserves traces of daily activities. These findings are discussed in the light of the social structure of the LBK as a whole. The contribution closes with suggestions for possible avenues for future research.

Keywords: *Neolithic, Linearbandkeramik, central Europe, burials, correspondence analysis*

Introduction

There are certainly not many other archaeological phenomena that have been as thoroughly discussed in terms of gender as the burials of the Linearbandkeramik (LBK), the ‘first farmers of Central Europe’ (Bickle and Whittle 2013), c. 5400-5000 cal BCE. However, one cannot escape the impression that this discussion has stayed on a somewhat superficial level and thus remained sterile as well as unsatisfying. The rich literature on gender-specific differences in the LBK suffers from the same

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problems that John Robb and Oliver Harris (2018, 130) have identified for the entire gender discussion: It is largely static and inherently binary.

A large part of this ‘Gender Trouble’ (Butler 1990) can be attributed to the problem that one of the most informative sources for differences between men and women is burial data. Based on anthropological sex determinations, these impose a rigid, binary division between the male and female spheres. In the session “‘Binary Binds’: Deconstructing Sex and Gender Dichotomies in Archaeological Practice’ of the EAA 2014 in Istanbul, this problem was distilled in the catchy term *binary bind* (some of the contributions are published in *Journal of Archaeological Method and Theory* 23, Issue 3, 2016). This rigid, essentialist conception blatantly contradicts the prevailing view of ‘gender’ as culturally determined.

In this paper, I discuss current treatments of the topic of gender generally and in LBK research specifically and hint at avenues for new approaches in terms of gender and social status in Early Neolithic burials¹.

Definitions: Plural configurations of gender

It seems hard to believe, but the term *gender* is less clearly defined than would be desirable. It is significant that many essays that deal centrally with the concept of gender ultimately fall back on an implicit understanding. It seems problematic to me that the actual concept and its relevance not only for social but also for archaeological practice is watered down beyond recognition. An essay with the ambitious title ‘Gender-informed Archaeology: The Priority of Definition, the Use of Analogy, and the Multivariate Approach’ (Hill 1998) may serve as an example. Especially in view of the programmatic title, the definition of the gender concept turns out disappointingly meaningless: ‘(T)he term “gender” refers here to one of several culturally constructed categories of difference that cross-cut human groups on the basis of perceived biological, racial, class, and ethnic characteristics.’ It remains completely unclear what is actually meant, and this seems to be the intention, but the author thus deprives the term of any epistemological relevance.

Robb and Harris (2018, 142), on the other hand, state that ‘*gender is usually defined as the cultural elaboration of biological sexual difference*’, which as the lowest common denominator seems fair enough. However, when they ask a future gender archaeology to emphasise, among other things, ‘(a) possible use of gender as an abstract classificatory principle not anchored in specific sexed bodies’ (Robb and Harris 2018, 142), they are eroding the very fundament that all archaeological treatment of gender must rest on. Every kind of identity that is not linked back to the human body can be called many things, but certainly not ‘gendered’. Conversely, only a form of identity that is ontologically linked to the human body should, in my opinion, be called ‘gendered’.

In the poststructuralist critique, the differentiation between ‘sex’ on the one hand and ‘gender’ on the other hand is rejected as modernist and as inappropriate for non-Western societies (e.g. Marshall 2008, 28). Even sex, then, ‘is a discursive category based on the perception and subsequent signification of some anatomical features motivated by a certain “abstraction” and “objectification” of the body’ (Moral 2016, 797). However, the distinction between possible analytical terms and lived prehistoric reality is blurred by such an argumentation. In order to be useful for archaeological research, the actors need not have been necessarily aware of terms

1 The paper I gave at the Gender Transformations workshop compared the newly discovered individuals of the site of Vrábľe (Okres Nitra, Slovakia) with those of the Nitra cemetery. Since the final anthropological study of the individuals from Vrábľe was not yet available when this text was written, I decided to give the essay a different direction so that it could serve as a stepping stone for the analysis of the humans from Vrábľe.

or concepts. This is reminiscent of the decades-old debate as to whether our etic categories must coincide with the emic ones (Eggert 1977). The answer can only be negative, especially since we do not have the possibility of checking whether our classifications corresponded to the prehistoric view. If one doubts the meaningfulness of the inclusion of anthropological data, one should also reject the categorisation of artefacts, for example, which is necessary for any analysis.

The essential suitability of analytical categories is revealed in the question of whether patterns can be found in the data. Concerning the category 'sex', which is derived from the anthropological determination, such an analysis is only the beginning and not the end of the interpretation: *'Osteological sexing of skeletons is perfectly possible, but this does not mean sex is essential'* (Alberti 2013, 102; see also Marshall and Alberti 2014). Hereby something is said about 'male' and 'female' bodies, but initially nothing about assignable social categories. The decisive step, which requires careful consideration and argumentation, is thus the inference on regularities of the social gender structure that can be related to the anthropological or morphological sex².

With Joanna Sofaer (2013, 231), sex and gender can then be understood as two sides of the same coin. Sofaer defines the body as *'plastic with particular material properties'*, that is, that gendered actions in turn have repercussions on the body. The body can thus serve as an ideal metaphor for the gender concept: Much can be changed, but some characteristics are more 'expensive' to change than others. And despite all changes, the body remains the same. With Pierre Bourdieu (1996, 166), the body thus assumes the function of a memory aid for the social world.

LBK – the special

In the stimulating essay already referred to above, Robb and Harris (2018) pointed to the impossibility of naming pan-European gender characteristics for the Neolithic, even more, for some Neolithic societies no gender-specific characteristics are known at all. As a remarkable exception they mention LBK graves, which have been used for a long time for the interpretation of male and female gender. According to Robb and Harris (2018, 140), these LBK graves cover up the absence of comparable Neolithic cemeteries: *'... when we find a case where things look "right", as with gendered LBK burials, we tend to breathe a sigh of relief – and to reproduce the fact more often than is perhaps warranted'*.

First, it should be noted that the establishment of cemeteries as such is already unusual for the European Neolithic. Formal burial places are hardly known; to the overview by Robb and Harris (2018, 138), cemeteries of the south-west German Middle Neolithic, such as Trebur (Lkr. Groß-Gerau, Germany; Spatz 1999; Falkenstein 2008), and those of the Late Neolithic in eastern Bulgaria, such as Durankulak (Oblast Dobritsch, Bulgaria; Todorova 2002; Stratton 2016), could be added. In both regions, however, the graves date later than the mass of the LBK burials.

Since the discovery of the first larger LBK cemeteries, a continuous discussion about the interpretation of gender-specific grave goods has taken place (for an overview, see Nordholz 2015, 18 f.). While the discussion in the early years often ran along accustomed gender-specific stereotypes, since the 1990s it has been marked by the recognition of the distinction between sex and gender. The discussion centred in particular on the critical evaluation of stereotypical interpretations in relation to the anthropological determinations (especially Bulla 1998; Nordholz 2015). The Bavarian cemeteries (Nieszery 1995) played an important role here, since they had been published in an easily accessible form.

2 K. Rebay-Salisbury (2017, 268) correctly points out that in view of the rapid developments in aDNA research, it should be clearly indicated on which markers a sex determination is based.

Most other attempts at ‘gendering’ the LBK world remain on a theoretical level (Röder 1998). This can be traced back to the problematic nature of most archaeological sources. If activity zones in settlements are visible archaeologically at all, they are blurred; almost nowhere occupation layers are preserved. Division of labour, let alone gender-specific division of labour, is therefore almost impossible to prove. A further important source for the question of gender relations in LBK are certainly the numerous figurines. For reasons of time and space, these will not be dealt with here³.

Analysing the Bavarian LBK cemeteries

Burial data

As my object of investigation, I have chosen the Bavarian LBK cemeteries, since they are well published by Norbert Nieszery (1995) and provide both extensive anthropological results and a rich inventory of material culture (Fig. 1). The results on age and sex structure are contrasted with the individuals from Nitra (Slovakia; Pavúk 1972), as well as the recently published burials from the settlement of Balatonzsárszó (Somogy megye, Hungary; Oross and Marton 2012).

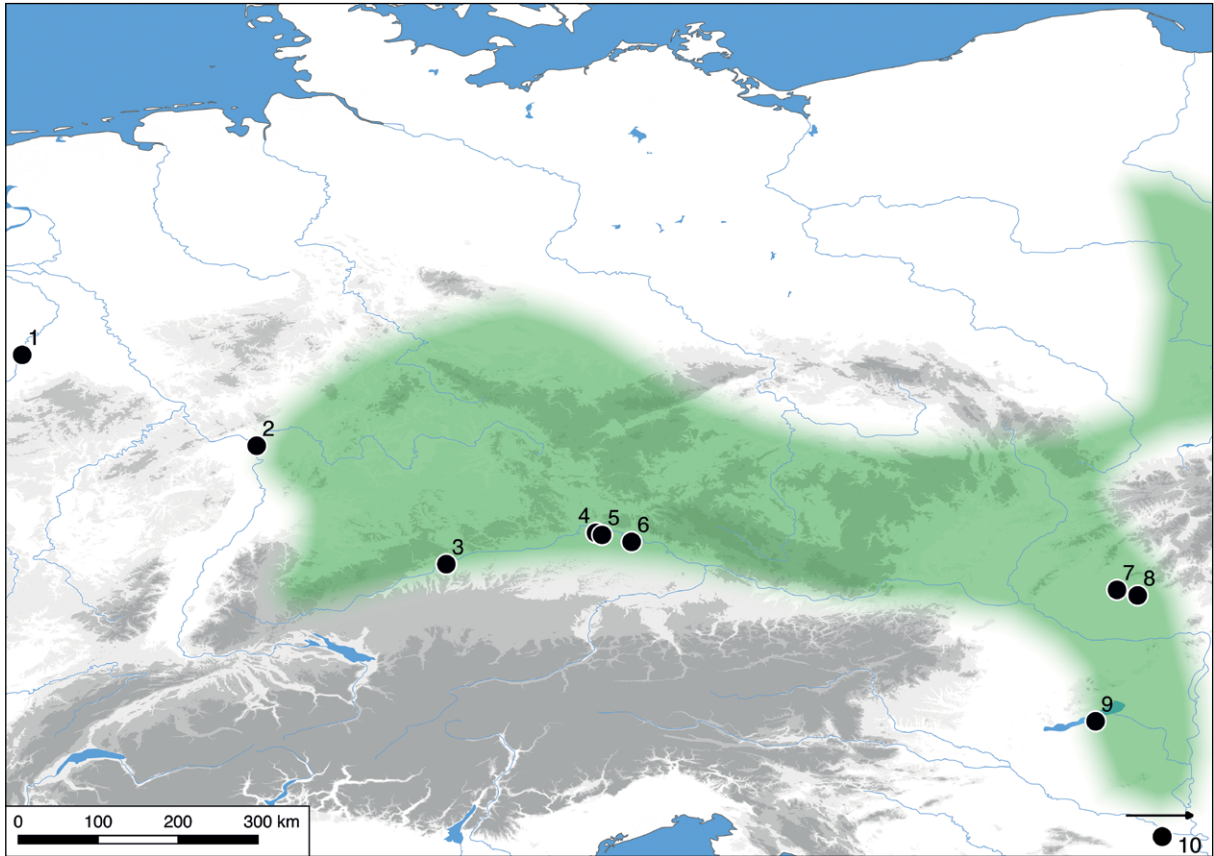
The sample of LBK graves from Bavarian necropolises comprises 212 age- and/or sex-determined individuals altogether, most of them from the cemetery of Aiterhofen-Ödmühle (Lkr. Straubing-Bogen, Germany)⁴.

The age structure of the LBK cemeteries (Fig. 2) does not, initially, hold any surprises. The majority of those buried in the graves died between the ages of 20 and 40. While the death curve rises steeply in the transition from adolescence to adulthood, it then flattens out to the over-40-year-olds, that is, considerably fewer individuals lived to reach the 40+ age group, but, nevertheless, a not inconsiderable proportion of the population buried in the cemetery lived into old age. However, the age curve for children under the age of 10 is obviously abnormal. In all known mortality tables of historical or ethnographic populations, the highest losses are recorded here (Grupe *et al.* 2015, 408 Fig. 9.1b), as this group has the highest mortality risk in the form of infections or other diseases. This makes it clear that not all individuals in the burial community could have buried their dead in the cemetery. Since this phenomenon, known as ‘infant deficit’ (Guy *et al.* 1997), is observed again and again also elsewhere, the age curve could still be considered representative.

However, if one compares the proportions of adult individuals defined as ‘female’ or ‘male’, a striking imbalance becomes obvious (Fig. 3): 81 male adult individuals are present, compared with only 55 adult female individuals; that is, almost 50 per cent more men than women were buried. Although the 23 sexually indeterminate adult individuals would almost make up for the deficit, it seems highly unlikely that all indeterminate individuals are, in fact, female. In the cemetery of Nitra, the sex relations are exactly the opposite. Here, 26 females and 17.4 males were found, compared with 3.8 indeterminate adult individuals. A total of 43 individuals were

3 Even the most comprehensive study on this group of artefacts to date (Becker 2011) provides hardly any useful details relating to this question. Generally, on the question of engendered figurines, see Bailey (2013). Bailey (2013, 260f.) emphasises above all the importance of figurines in the construction of the human body: ‘[...] figurines were active (though subconscious) stimuli for people’s thinking about the physical shape of being.’

4 The specific problem in the case of the cemetery at Aiterhofen-Ödmühle does not lie in non-existing anthropological determinations, but in too many. The human remains have undergone sex determination by up to four anthropologists, who, in part, came to diametrically opposed results (Nieszery 1995, 91). For reasons of consistency, the compromise of Nieszery is followed here.



recovered from the LBK settlement of Balatonszárszó, where the sex ratio is approximately equal: 15 adult individuals were identified as female and 14 as male.

However, there are also interesting differences in the age structure of the male and female individuals (Fig. 4). Both at Nitra and in the Bavarian cemeteries, especially younger female adults are buried there, while at Nitra, the maximum age for the adult male individuals is around 40 years. In the Bavarian necropolises, considerably more older male individuals were buried as well. This results in an interesting reversal of the ratios between male and female individuals in both populations. Among the younger adults, the female individuals predominate; among the older ones, the male individuals predominate. A comparison with the individuals buried in the settlement of Balatonszárszó shows that this is by no means a necessary characteristic of LBK collectives. There, in general, relatively more male than female individuals under the age of 40 were discovered, while female individuals dominate among the older adults.

From the point of view of the above discussion on the relevance of anthropological determinations, the differences discussed show that potentially relevant patterns emerge in the combination of age and sex – that is, that the decision of the LBK burial communities whether or not to bury individuals in the cemeteries is at least partially correlated with the physical characteristics (male vs. female, old age vs. young age).

Material culture

The Bavarian LBK cemeteries are especially well suited for a discussion of gender issues because these graves have yielded very diverse burial goods (Fig. 5), which are generally regarded as firmly connected with socially ‘female’ or, especially,

Figure 1. The distribution of the oldest LBK and the location of the sites mentioned in the text. 1 Elsloo; 2 Trebur; 3 Dillingen-Steinheim; 4 Mangolding; 5 Sengkofen; 6 Aiterhofen-Ödmühle; 7 Nitra; 8 Vráble; 9 Balatonszárszó; 10 Durankulak (Nils Müller-Scheeßel).

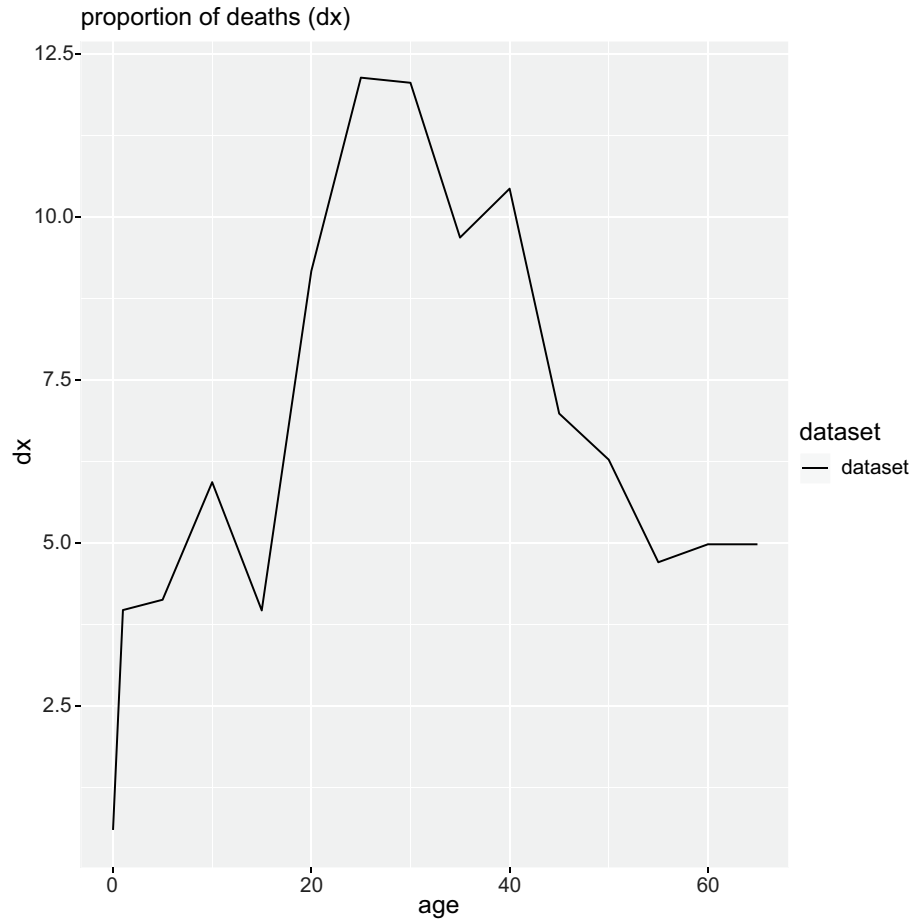


Figure 2. Proportion of deaths (dx) by age of the Bavarian LBK burials (n = 212; data after Nieszery 1995; life table calculated with the R-package mortAAR 1.0.1).

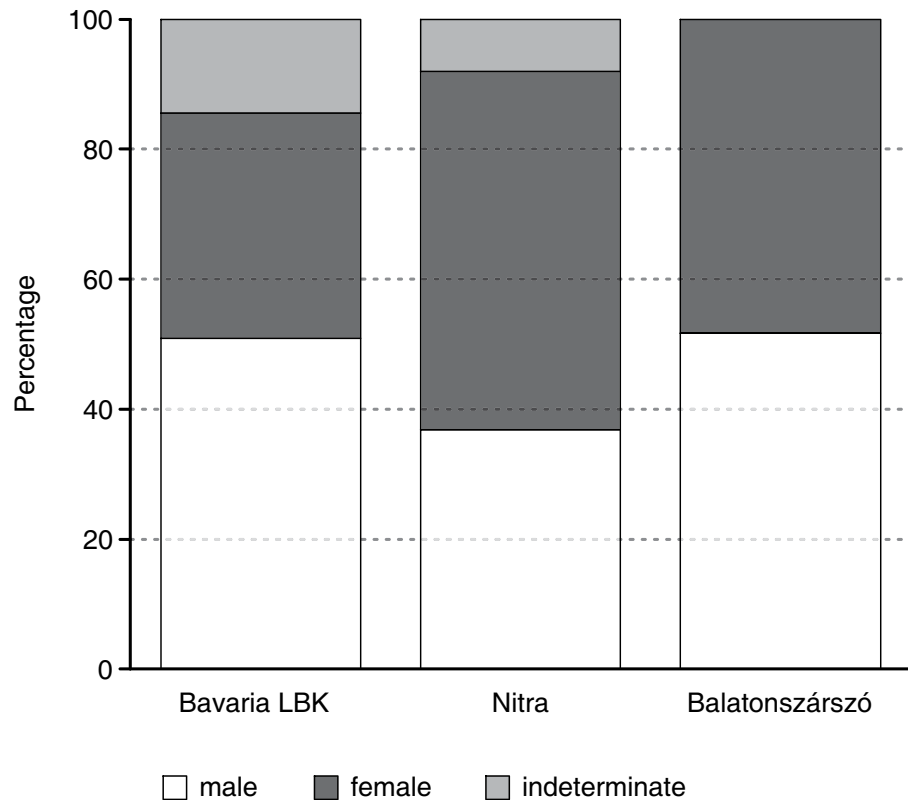


Figure 3. Proportion of morphologically sex-determined adult individuals in the Bavarian cemeteries (n = 169; data after Nieszery 1995), at Nitra (Slovakia; n = 47.2; data after Bickle and Whittle 2013), and at Balatonszárszó (Somogy megye, Hungary; n = 29; data after Oross and Marton 2012, 260 Table 1).

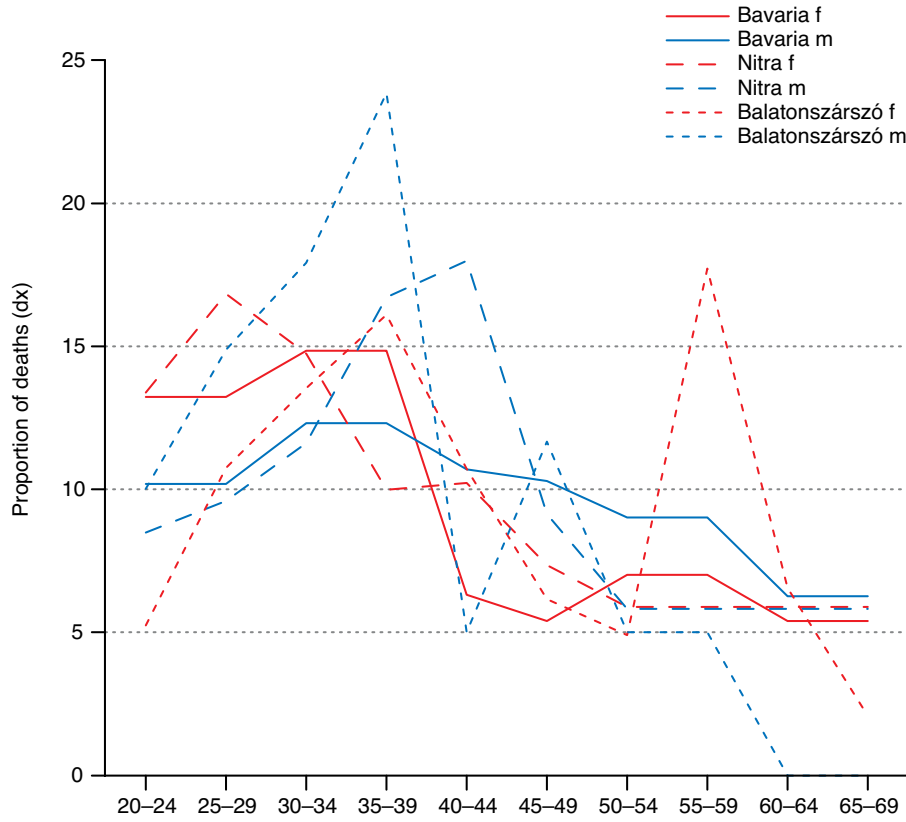


Figure 4. Proportion of deaths (dx) of morphologically sex-determined adult individuals in the Bavarian cemeteries, at Nitra, and at Balatonszárszó (see Fig. 3 for the data; life tables calculated with the R-package mortAAR 1.0.1).

Sex	Grave goods	
	Present	Absent
Indeterminate	38	15
Male	68	26
Female	38	26

Table 1. Comparison of sex determination and grave goods in Bavarian LBK cemeteries (restricted to age-determined individuals; data after Nieszery 1995).

‘male’ individuals (Nieszery 1995, 110; Falkenstein 2008). For example, weapons (especially arrowheads) and tools (adzes, flint implements) are interpreted as definite male attributes and thus as argument to contest the anthropological sex determination (Nieszery 1995, 110).

In a comparison of sex determination and grave goods (Table 1), it is clear that for male individuals, the chance of being buried without grave goods (28 per cent) was substantially smaller than it was for female individuals (40 per cent). Among indeterminate individuals (including subadults), the proportion of persons buried without grave goods is also relatively low (28 per cent).

Of course, it cannot be ruled out that objects made of organic material and put into the graves have vanished today, but it seems questionable whether this would significantly change the picture, since this would potentially apply to both sexes.

With regard to age and sex, it is striking that senile men are apparently almost always endowed with grave goods, but otherwise the curves in male and female individuals are uneven (not shown).

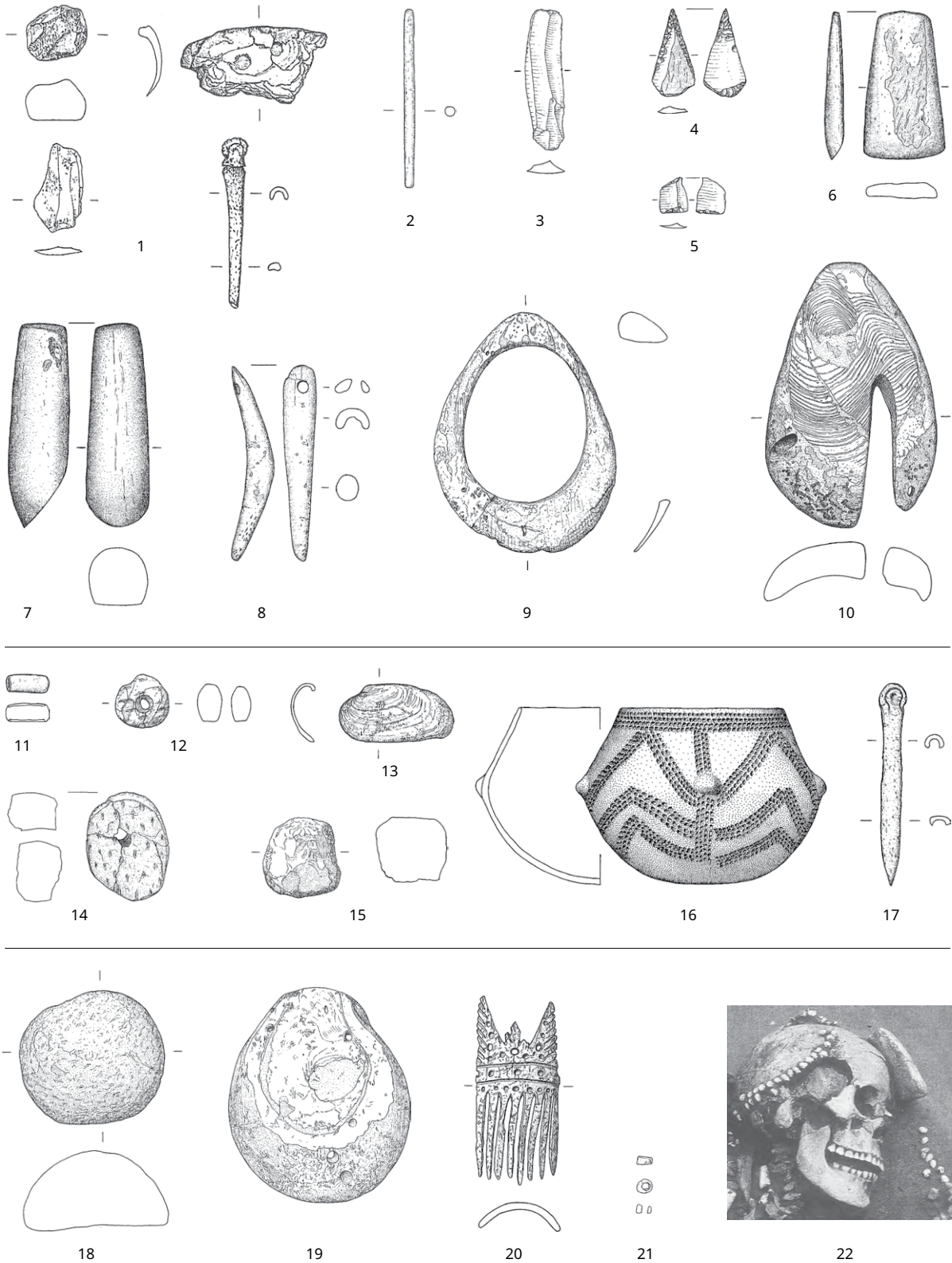


Figure 5. Typical grave goods in Bavarian LBK graves and their usual attribution as either 'male', 'female' or not-gender-specific. Artefacts considered to be typically 'male': 1 lighter; 2 bone staff; 3 silix blade; 4 arrow head; 5 silix flake; 6 flat adze; 7 high adze; 8 button-like antler item; 9 Spondylus arming; 10 V-shaped Spondylus. Artefacts considered to be not-gender-specific: 11 Protula; 12 Spondylus bead; 13 freshwater mussel; 14 colouring stone; 15 silix core; 16 ceramic vessel; 17 bone-awl. Artefacts considered to be typically 'female': 18 grinding stone; 19 Spondylus pendant; 20 bone comb; 21 stone bead; 22 snail jewellery (after Nieszery 1995).

Previous evaluations with regard to equipment groups were mostly carried out by hand, using qualitative methods⁵. In the following, the classification by Nieszery⁶ is used as the basis for a correspondence analysis in order to reveal latent structures within the data (Greenacre 1993). Similar to the Chi-Square-test, the multivariate method of correspondence analysis takes into account the relationship between expected and observed values. In archaeology, it is mostly used to work out a chronological trend within archaeological data, but it is by no means limited to this. What is probably still the best known application is found in the work of the sociologist Pierre Bourdieu (1984 [1978]), who used correspondence analysis in his famous work *Distinction: A Social Critique of the Judgement of Taste* to illustrate the attitudes and behaviour of members of 1960s French society in 'social space'. Furthermore, in a similar case study to the one presented here, correspondence analysis has already been used successfully (Stratton 2016, 863 ff.). In the interpretation of the axes, it is important to emphasise that the shape of the data cloud is defined only by the graves and the included grave goods. Age or sex are not directly taken into account, but are only displayed to facilitate the interpretation of the axes. A chronological interpretation of one of the axes is unlikely because Nieszery (1995, 203) was unable to place the Bavarian graves in chronological order.

In the following, we will look only at axes 1, 2, and 4, because these three axes together explain 26.9 per cent of the total variance (R-package FactoMineR 1.41). Axis 3 is omitted, as it is clearly influenced by a single object (bone staff) that already has a strong impact on the other axes. Axis 3 can therefore contribute little to the knowledge of the data structure.

Axis 1 is dominated by the contrast between a narrow cluster in the left half (< 0) of the diagram (Fig. 6), comprising different types of items (silex arrow heads, high adzes, flat adzes, silex cores, silex implements), but also other things, such as freshwater mussels, ochre colouring pigments or 'Gewandknebel' (button-like toggles), and a loose scatter of different ornamental objects, especially different forms of beads, but also bone combs and round *Spondylus* pendants in the right half (> 0). Grinding plates are also found in the right half of the diagram. Between these clusters are located black colouring stones (mostly graphite), V-shaped *Spondylus* objects, fox jaws, and *Spondylus* armrings. According to the position in relation to axis 1, ceramic vessels would also belong to the left cluster, but especially these, as well as bone staffs, obviously influence axis 2 most strongly, so they seem to stand somewhat outside this order.

If one searches for an interpretation for only axis 1, that is, the latent gradient, the comparison with the anthropological interpretations (Table 2), at first glance, gives an unambiguous picture: The left half (< 0) of the diagram is filled with anthropologically 'male' individuals, while the right half (> 0) is dominated by anthropologically 'female' individuals. The 'female' and 'male' outliers visible in these clusters could be dismissed, as was done by Nieszery, as misidentified individuals.

In fact, the vast majority of male individuals are found in the left half of the diagram. However, this pattern is not so clear for female individuals: Even if one subtracts the individuals equipped only with ceramics, almost as many female individuals are hidden in the 'male' data cloud as are in the right half of the diagram. This observation will be discussed below in more detail.

5 For example, Falkenstein 2008. A notable exception is Pieter van de Velde (1979), who worked with principal component analysis. Unfortunately, at the cemetery of Elsloo (Prov. Limburg, Netherlands), which was analysed by him, no bones are preserved and, therefore, anthropological studies are not possible.

6 Nieszery 1995, 110 Fig. 63. In this table, no. 13 is erroneously assigned twice. In fact, the first entry should be '113'. The same is true for no. 39. In this case, the first entry should be '139'. For the doubly assigned no. 42, the second entry should be '142'. Finally, the first of two entries for 'Ma 3' should be 'Ma 13' and the first of two entries for 'Se 4', 'Se 10b'.

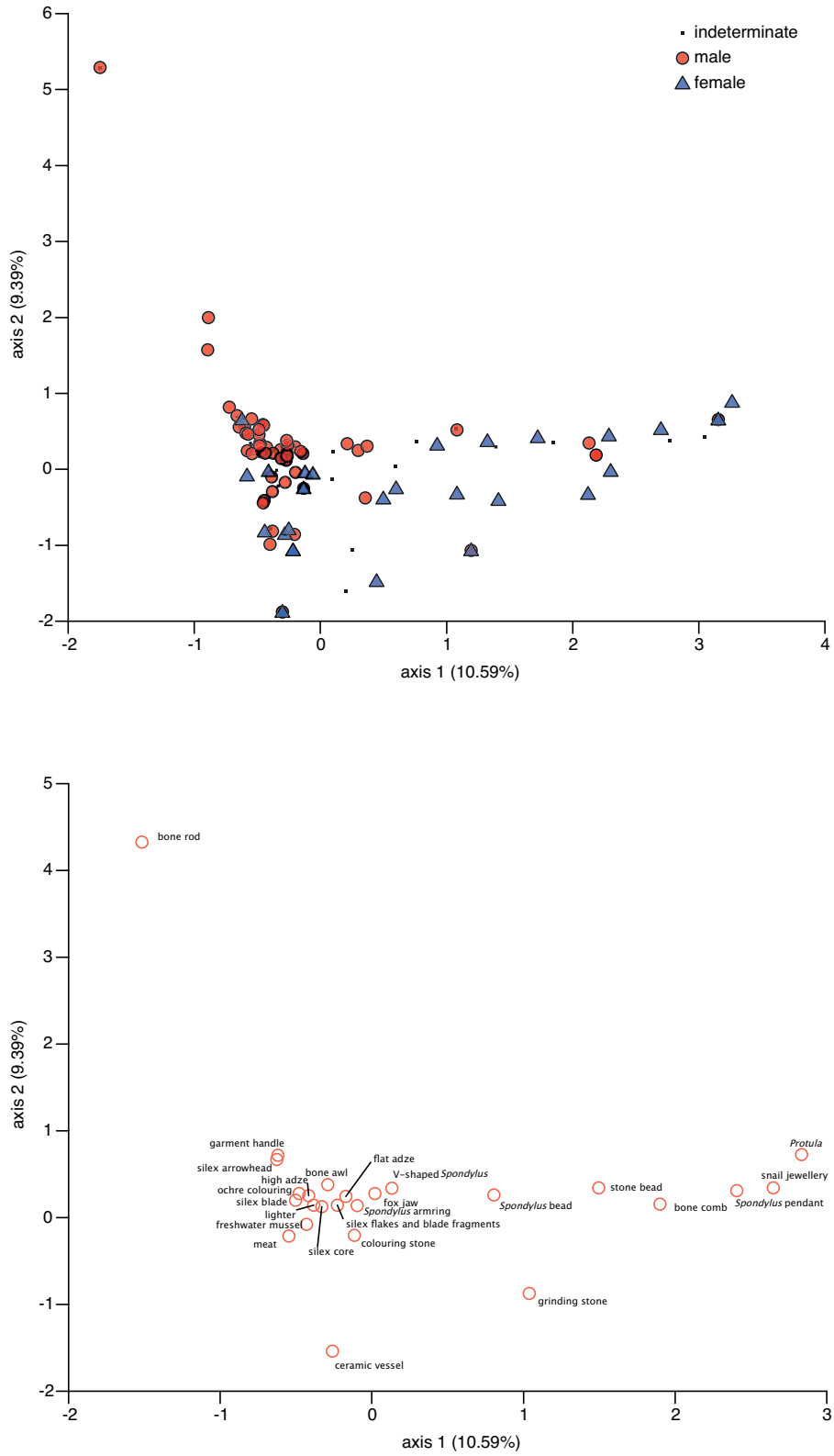


Figure 6. Ordination diagrams of axes 1 and 2 of a correspondence analysis of graves (left) and grave goods (right) in Bavarian LBK cemeteries. In the diagram of graves, the morphologically determined sex is plotted to aid the interpretation of the axes (calculated with the R-package FactoMineR 1.41; data after Nieszery 1995).

Morphological sex	Axis 1 < 0	Axis 1 > 0	Only pottery
Indeterminate	17	11	11
Male	51	11	6
Female	13	16	9

Table 2. Differentiation of morphologically sex-determined individuals according to axis 1 of Figure 6. Individuals buried with only pottery are listed separately.

Morphological sex	Axis 2 < 0	Axis 2 > 0
Indeterminate	18	21
Male	18	50
Female	29	9

Table 3. Differentiation of morphologically sex-determined individuals according to axis 2 of Figure 6.

Morphological age	Axis 2 < 0	Axis 2 > 0
Indeterminate	8	12
Subadult	12	7
Adult	12	13
20-39	25	21
40-59	7	18
60+	1	9

Table 4. Differentiation of morphologically age-determined individuals according to axis 2 of Figure 6.

Morphological sex	Morphological age	Axis 2 < 0	Axis 2 > 0
	indeterminate	8	12
	subadult	12	7
	adult	11	8
Male	adult	4	7
	20-39	6	16
	40-59	2	16
	60+	1	6
Female	adult	1	0
	20-39	15	3
	40-59	5	2
	60+	0	3

Table 5. Differentiation of morphologically age- and sex-determined individuals according to axis 2 of Figure 6.

Axis 2 is more complicated to interpret. A comparison of the proportions of anthropologically sex-determined individuals in the upper and lower halves of the diagram (Table 3) confirms the first impression: The upper half is dominated by males, while the lower half is dominated by females. Do ceramics and bone staffs represent another ‘gender’ dimension, one that correlates to only a limited extent with that of stone tools and jewellery objects?

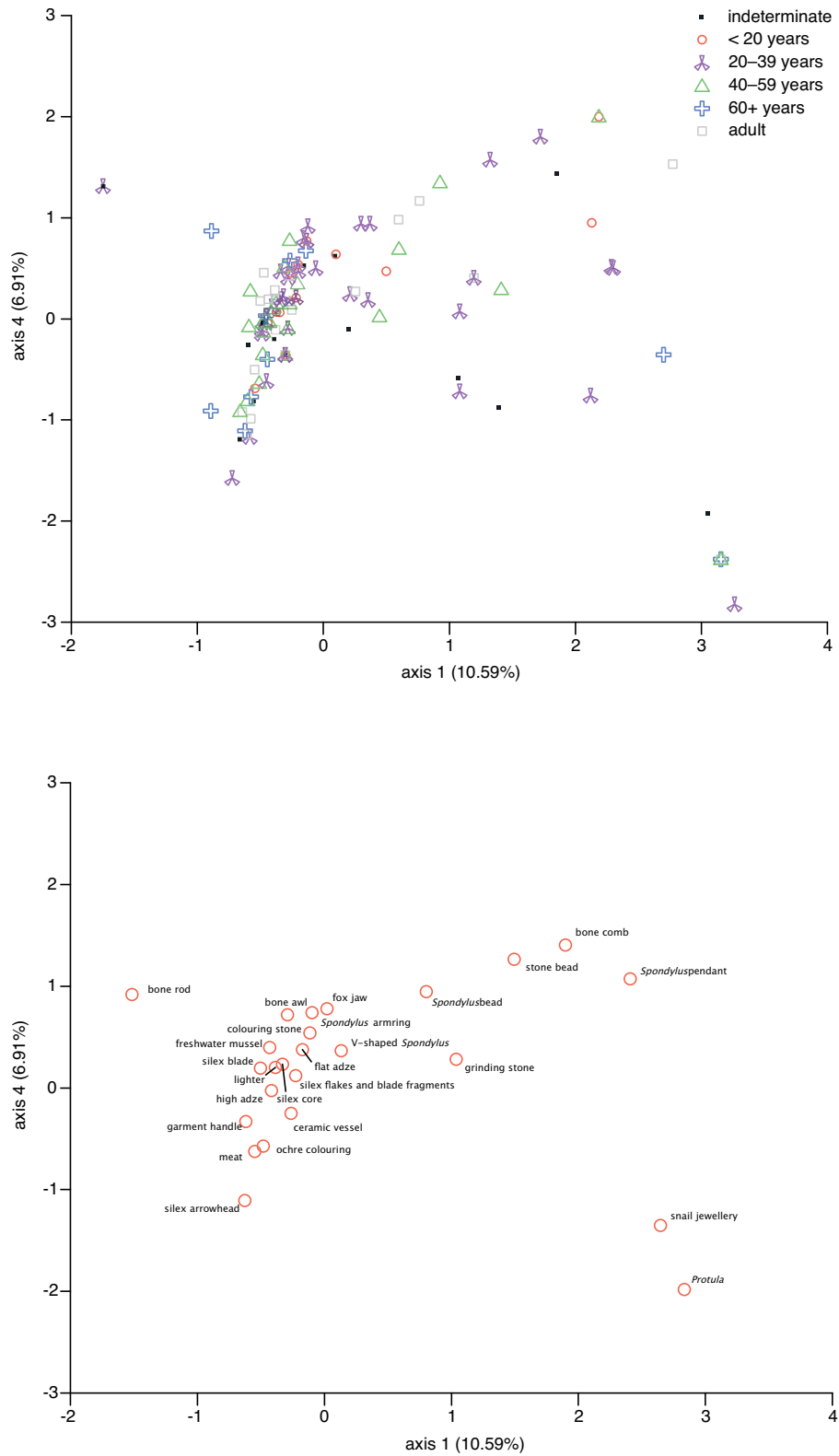


Figure 7. Ordination diagrams of axes 1 and 4 of a correspondence analysis of graves (left) and grave goods (right) in Bavarian LBK cemeteries. In the diagram of graves, the morphological age is plotted to aid the interpretation of the axes (calculated with the R-package FactoMineR 1.41; data after Nieszery 1995).

age	Axis 4 < 0	Axis 4 > 0	Only ceramics
Indeterminate	11	4	5
Subadult	2	10	7
Adult	6	13	6
20-39	13	26	7
40-59	12	12	1
60+	6	4	0

Table 6. Differentiation of morphologically age-determined individuals according to axis 4 of Figure 7.

Morphological sex	Axis 4 < 0	Axis 4 > 0
Indeterminate	24	15
Male	34	34
Female	18	20

Table 7. Differentiation of morphologically sex-determined individuals according to axis 4 of Figure 7.

In fact, the interpretation becomes blurred if the age of the buried person is taken into account (Table 4), since a gradient along axis 2 seems to run just as clearly with age: mature and senile individuals predominate in the upper half, and children and younger adults predominate in the lower half. If age and morphological sex are combined into one category, the relationship becomes clearer (Table 5). Axis 2 seems to differentiate *both* age and gender.

In view of the importance of the factor 'age' for the social position of individuals in segmental, acephalous societies – the type of society generally assumed for the LBK – it seems reasonable to interpret axis 2 as status-related. Since in the lower half there are mainly individuals with relatively few grave goods, to whom mainly pottery was given, this interpretation seems viable. Apart from the individuals with no grave goods at all, the individuals with the lowest social status would be those with the lowest number of grave goods. This relationship is also reflected in the correlation between the number of grave goods (each category of grave goods counted only once) and the axes. Only for axis 2 is Pearson's Product-Moment Correlation Coefficient significant ($n = 145$; $r = 0.213$; p [two-tailed] = 0.010). Interestingly, however, the relationship between 'wealth' and the status-indicating axis 2 does not seem to be linear at all. As mentioned above, the positive side of this axis is primarily spanned by the 'bone staff'. Individuals with this object are even comparatively 'poorly' equipped. However, the fact that two senile individuals are found among the four buried with a bone staff may be interpreted as an indication that the special position of this group in the correspondence analysis covers a significant aspect of LBK society.

Axis 4, together with axis 1, leads to a strongly parabolic shape of the columns and rows (Fig. 7). Snail jewellery and *Protula* in the right half (> 0) of the diagram, as well as silex arrowheads, meat, and ochre in the left, form the corner points of the parabola. The vertex is represented by bone awls, fox jaws, colouring stones, *Spondylus* jewellery in various forms, as well as stone beads and bone combs. Here, too, the anthropological determinations offer a starting point for interpretation: primarily children and younger adults are found in the upper half of the diagram, while the older adults are found disproportionately often in the lower half (Table 6). This is true for both male and female individuals (Table 7).

Axis 4 therefore primarily represents a gradient associated with the age of the buried person, which is adjusted for the factor 'status' – the gradient of axis 2. Thus interpreted, *Spondylus* artefacts seem to have been a characteristic of younger age

groups (subadult and adult individuals), regardless of gender. Similar functions are assumed by older adults with snail ornaments and *Protula* tubes or ‘*Gewandknebel*’ (button-like toggles) made of antler⁷. The special position of the bone staffs in this diagram is also noteworthy.

Discussion

In the correspondence analysis discussed above, three essential aspects seem to be represented in the ordination diagrams: axis 1 = gender, axis 2 = status, axis 4 = age. This interpretation of the axes according to age and sex as determined anthropologically cannot show more than tendencies. Numerous individuals do not conform to the model outlined above, which may be connected with the uncertainties in anthropological age and sex determinations but is probably also a function of the reality of life. Individual objects of material culture were certainly not fixed one-dimensionally to a single connotative meaning; rather, they denoted a whole spectrum of possible interpretations. Gender, status, and age are only three of the possible aspects. The basic premise is, of course, that the material culture as uncovered in the graves reflects in some way the social relationships and achievements of the individual with which they were found. In former theoretical discourse, these issues would probably have been subsumed within a discussion of the notions of *social persona* (Binford 1971) or *identity* (Graves-Brown *et al.* 1996). Nowadays, these terms seem problematic, at least in the present context, because we cannot really say if the three aspects outlined above were a self-reflected part on a person’s identity or incorporated a single social role. What can be said, however, is that, apart from certainly many other personal skills, experiences, and achievements, they obviously formed an important part of the individual’s life that can be captured under the heading of ‘personhood’ (Budja 2010; Fowler 2010, 2016).

Looked at from this angle, the result of the correspondence analysis can thus serve as a *model* of personhood. It is a model because the result does not allow for the pinpointing of a certain individual with this or that specific personhood (especially because particular aspects of personhood were certainly more salient in some situations than in others), but it shows the most important dimensions along which personhood was probably constructed in the LBK. Correspondence analysis is ideally suited for that task, as the interpretation of the axes is always bound to be relational, which, following Chris Fowler (2016), should be considered a defining principle of personhood.

The interpretation based on correspondence analysis is not fundamentally different from that arrived at through previous research (*e.g.* Falkenstein 2008), but in my view it shows more clearly the connections and interdependencies between the object categories. In addition, there are individual aspects that, to my knowledge, have not yet been taken into account in other approaches, such as the association of younger individuals with *Spondylus* or the special social significance that obviously was attached to older male individuals buried with bone staffs.

Perhaps the most interesting result, however, is the gender aspect. As emphasised above, axis 1 seems to support an interpretation that allows a differentiation into ‘male’ and ‘female’ spheres within LBK society. Going by the separation into tools and weapons on the one hand and jewellery on the other, this is in accordance with commonly held ideas about the division of labour between the sexes. However, the sex assignment of anthropologically sex-determined individuals does not cor-

7 Nieszery (1995, 196) interpreted the fact that V-shaped *Spondylus* valves and antler ‘*Gewandknebel*’ (toggles) are mutually exclusive as a function of chronological differences. He assumed an undersupply of *Spondylus* raw material, which had to be compensated for by the use of alternative raw materials. He did not connect this with the age of the deceased.

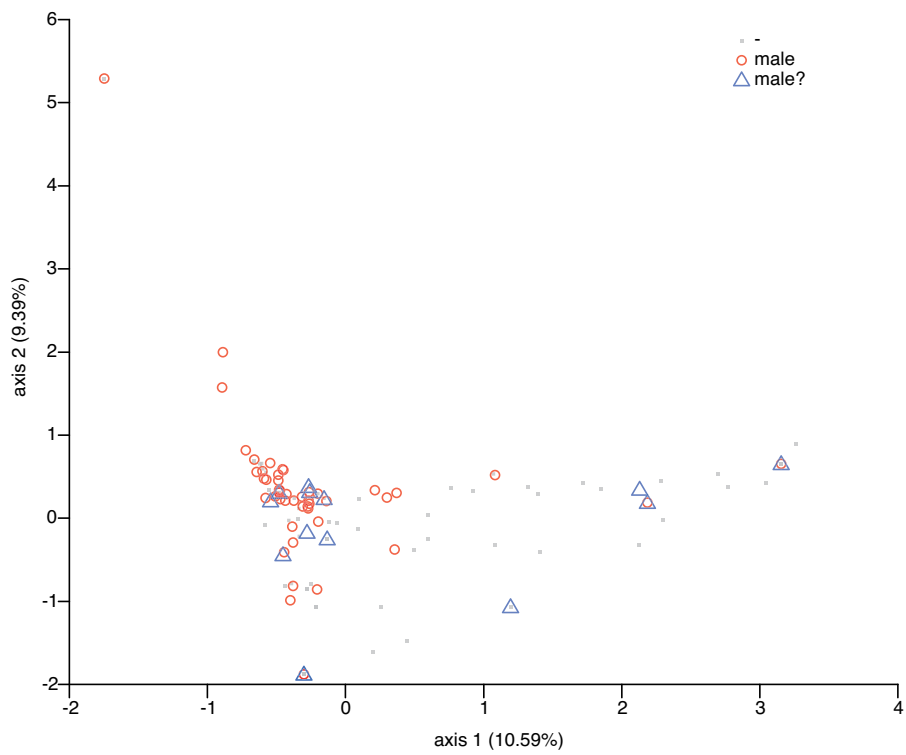
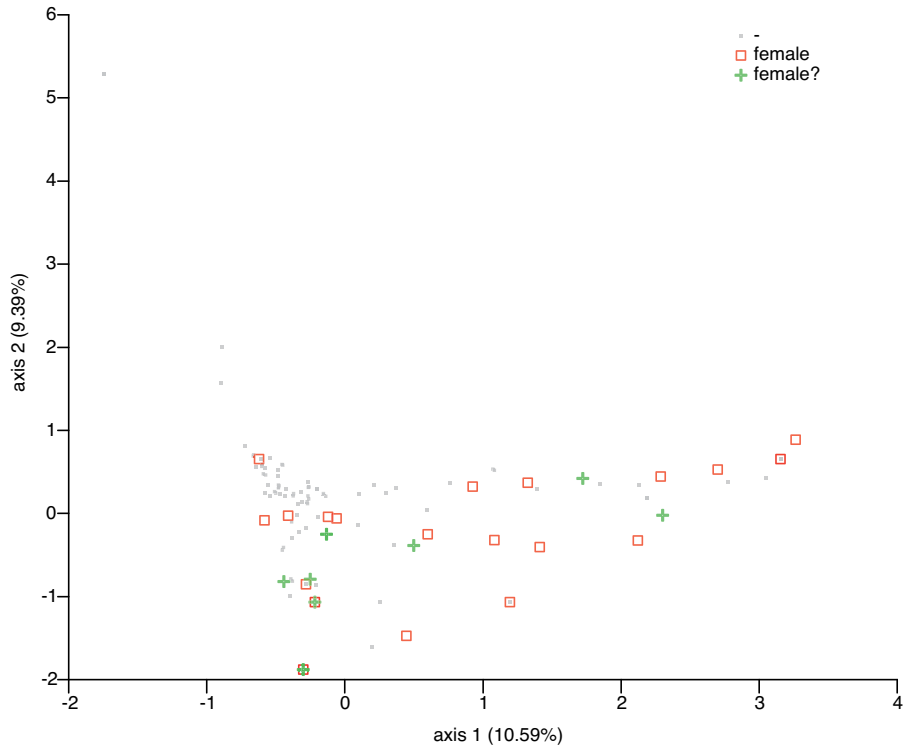


Figure 8. The diagram Fig. 6 differentiated according to morphological sex and certainty of determination.

respond to this binary dichotomy. Almost half of all 'female' individuals lie in the 'male' half of the diagram. If one disregards the individuals who are only equipped with ceramics, 11 individuals who are 'male' are located in the right half (> 0) of the diagram. In relation to the 51 'male' individuals in the left half (< 0), the proportion is 17.7 per cent (11 of 62). This proportion of individuals in the 'wrong' half of the diagram could easily be explained by anthropological misidentification. There are 16 individuals in the 'female' domain determined anthropologically as 'female' and 13 individuals in the 'male' domain also determined anthropologically as 'female', which corresponds to a share of 44.8 per cent (13 of 29). To explain this proportion as being the result of anthropological misdeterminations alone would imply that the accuracy of sex determination by anthropological methods is on practically the same level as a random generator, since random determinations would not have a significantly lower hit rate. Therefore, to argue away this proportion of 'wrong' female individuals as being the result of incorrect anthropological sex determination, as Nieszery does (1995, 110 f.), seems inappropriate.

Above all, the ordination diagram of the correspondence analysis shows a certain systematicity with the seeming outliers. If we take a closer look at the data of the left, 'male' half of the diagram (Fig. 6), we see in the range from 1 to 0 a compact group of almost exclusively anthropologically 'male' individuals. Of the 51 individuals who can be assigned to this 'cloud', only one has been identified as 'female'. This cluster – accompanied mainly by adzes, flint implements, and other objects considered to be typically 'male' – in fact, seems only interpretable as hypermasculine. Below this, however, in the range from 0 to -0.5 , there is a loose scattering that, with six 'female' and seven 'male' individuals (two were indeterminable), shows almost equality with regard to the sexes. In the graves of this group, 'male' objects, such as adzes or arrowheads, were found throughout, but colouring stones, lighters, or ceramic vessels appeared more frequently. Again, somewhat lower, in the -1 range, is another group in which the six 'female' individuals even outnumber the three 'male' (two are indeterminable). With these individuals, ceramic grave goods are the rule, and of the 'male' accessories, always only single representatives are present.

But the presence of individuals in the seemingly 'wrong' area also works the other way round: a striking group of three 'male' individuals in the range $0.5/0.5$ (axis 1/axis 2) lies between the 'masculine' cluster and the 'female' domain. These three individuals are all equipped with adzes and other typically 'male' objects, such as V-shaped *Spondylus* valves or *Spondylus* armrings, but due to the addition of beads (*Protula*, *Spondylus*, stone), they lie apart from the 'hypermasculine' cluster.

In view of this finding, one cannot assume an unambiguous gendering of individual object types. Only the combination of different categories of material culture obviously led to a 'masculine' equipment that could be clearly identified by their contemporaries. At the same time, however, it would be wrong to necessarily see representatives of a third sex or of crossdressers in the less unambiguous groupings.

Of the 11 individuals identified as 'male' in the right half of the diagram, four (36.4 per cent) were classified as 'uncertain male' (Fig. 8). For comparison: In the left half (< 0 ; without individuals only accompanied by ceramics), eight out of 51 individuals were 'uncertain' (= 15.7 per cent). Among the 13 'female' individuals from the 'male' range, however, five had been classified as 'uncertain', that is, 38.5 per cent, while in the right half (> 0), three of the 16 were 'uncertain' (= 18.8 per cent).

On the one hand, these numbers certainly prove the dependence of anthropological sex determinations on clearly definable parameters. If these are missing, the rate of misidentification also increases. Some of the 'uncertain' individuals probably had a different morphological sex than the anthropologists indicated. On the other hand, it would be too easy to simply assign all 'uncertain' classified individuals to the other sex. First, the very high proportion of 'female' individuals in the two 'male' clusters between 0 and -1 (axis 2) would remain unexplained. Second, the propor-

tion of ‘uncertain’ individuals is particularly high in these clusters, although the state of preservation of the bones in these graves is by no means worse.

Although it is true that biological sex is not a continuum (Sofaer 2013, 230), sex markers are generally continuously formed, especially since many characteristics are only robustness indicators. So if, for example, a biologically female individual engages in much physical labour, this individual’s morphological characteristics can drift into the ‘male’ range. This is what Sofaer also has in mind with the ‘plasticity’ of the human body, which develops traces of human activity and potentially conserves them. If individuals are classified as ‘possibly female’, this may be due to poor preservation and resultant degradation of assessable characteristics, but it may also be due to the fact that the individual falls into the intermediate range or shows contradictory sex markers.

In this respect, it seems conceivable that the correlation between the result of the correspondence analysis and the high degree of ‘uncertain’ classified individuals can be attributed to the special living conditions of these individuals. These individuals would not have taken part in either the ‘hypermasculine’ activities or the ‘feminine’ ones. This by no means makes them representatives of a ‘third sex’⁸, but shows that the spectrum of equipment groups encompassed both those that were clearly marked as ‘male’ or ‘female’ and those that only had a limited (or mixed) selection of objects in their graves. It is remarkable that this was accompanied by an obviously ‘inaccurate’ morphological sex attribution, and this seems to correspond to past realities, since these clusters cannot be unambiguously classified as ‘male’ or ‘female’.

Together with the differentiations regarding age and status, this results in a complex picture of social relations within the LBK. In addition to the nuances in the gender roles shown above, we must generally assume an age gradation, in which older individuals generally had a higher status solely because of their age. It is possible, however, that this higher estimation with advanced age included women only to a limited extent, if one considers the fact that older women are under-represented in cemeteries and over-represented in settlements (but see Veit 1996, 188, based on smaller numbers, though). And, finally, the individuals accompanied by a bone staff seem to have enjoyed a special position.

Still, the age and sex distribution of the individuals buried in the LBK cemeteries largely corresponds to that of a ‘natural’ population, that is, that apart from a deficit of small children, the relative proportions of the age groups correspond to the expected values. This becomes all the more relevant when one considers that it is estimated that only 20 per cent of all people were buried in one of the cemeteries (Nieszery 1995, 17 f.; Sommer 2001, 259). This allows for the conclusion that each cemetery was used by a self-contained kinship group, a lineage, and that burial in the cemetery probably represented a special privilege. This privilege was presumably derived from ancestry, for example, from the first colonists of an area. In view of the importance of individual mobility for the spread of the LBK, this interpretation does not seem far-fetched.

Conclusion

The above analysis has shown that the burials of the LBK and the objects found in them make it possible to make sophisticated statements about LBK gender relations that go beyond simplistic binary comparisons. For the foreseeable future, the graves are likely to remain our most important source, although the range

8 The narrowing of the possibilities of a comprehensive gender discourse to the question of how exponents of a third gender could be recognised (*e.g.* Arnold 2002) was recently vehemently criticised (Moral 2016).

of information already available has not been fully exploited. In particular, the inclusion of further scientific findings on the biography of individuals (palaeopathology, analysis of stable isotopes, aDNA; on some of these topics, see Bickle and Whittle 2013; Nordholz 2015), which could not be done here for reasons of time and space, is elementary. The critical comparison of the scientific results with the archaeological remains of the material culture seems to me to be essential in order not to fall into the 'binary trap'. The analysis has demonstrated that it is perfectly legitimate to compare analytical units, such as anthropological age and sex determination, with archaeological evidence. It becomes unsatisfactory, however, when these analytical units are promoted to emic units – as gender is – in the twinkling of an eye. Despite all our efforts to grasp the biographies of individuals, we should always bear in mind that gender is an inherently relational concept, that is, it depends on the juxtaposition of more than one entity.

In the above analysis, the graves from Bavaria were the focus, which has to do not least with the easily accessible publication, but also with the obviously practised, very differentiated burial customs, which make it possible to distinguish different social dimensions. However, similar analyses should also be carried out with other cemeteries and regions in order to gain a deeper understanding of the gender roles of the LBK.

Finally, the premises of Robb and Harris (2018) with regard to the exceptional nature of the LBK in terms of gender should be tackled in the future: The clear expression of social dimensions in general and gender in particular is obviously linked to the establishment of formal cemeteries, which are rare prior to this time in south-eastern Europe, the supposed area of origin of the LBK, but it does not explain why gender aspects are particularly clearly expressed in LBK graves. In this vain, the transformation to completely different forms of disposal of the dead in the post-LBK periods is also open to question.

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References

- Alberti, Benjamin 2013. Queer Prehistory: Bodies, Performativity, and Matter. In: Bolger, Diane (ed.). *A Companion to Gender Prehistory*. Hoboken, NJ: Wiley-Blackwell, 86-107.
- Arnold, Bettina 2002. 'Sein und Werden': Gender as Process in Mortuary Ritual. In: Nelson, Sarah M. (ed.). *In Pursuit of Gender: Worldwide Archaeological Approaches*. Walnut Creek: Altamira, 239-256.
- Bailey, Douglass W. 2013. Figurines, Corporeality, and the Origins of the Gendered Body. In: Bolger, Diane (ed.). *A Companion to Gender Prehistory*. Hoboken, NJ: Wiley-Blackwell, 244-264.
- Becker, Valeska 2011. *Anthropomorphe Plastik der westlichen Linearbandkeramik*. Saarbrücker Beiträge zur Altertumskunde 83. Bonn: Habelt.
- Bickle, Penny and Whittle, Alasdair W.R. 2013 (eds). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow Books.
- Binford, Lewis R. 1971. Mortuary Practices: Their Study and Their Potential, in Brown, James A. (ed.). *Approaches to the Social Dimensions of Mortuary Practices*.

- Memoirs of the Society for American Archaeology 25. Washington, DC: Society for American Archaeology, 6-29.
- Bourdieu, Pierre 1984 [1978]. *Distinction*. London: Routledge. [*La Distinction. Critique sociale du jugement*. Paris: Éditions de Minuit].
- Bourdieu, Pierre 1996. Die männliche Herrschaft. In: Dölling, Irene, and Kraus, Beate (eds). *Ein alltägliches Spiel: Geschlechterkonstruktion in der sozialen Praxis*. Edition Suhrkamp N.F. 732. Frankfurt am Main: Suhrkamp, 153-217.
- Budja, Mihael 2010. The archaeology of death: from 'social personae' to 'relational personhood'. *Documenta Praehistorica*, 37, 43-54.
- Bulla, Andrea 1998. *Untersuchungen zur Frage der geschlechtsspezifischen Beigabenausstattung bandkeramischer Gräber Mitteleuropas unter besonderer Berücksichtigung der Inventare anthropologisch bestimmter Frauenbestattungen*. Aachen: Shaker.
- Butler, Judith 1990. *Gender Trouble: Feminism and the Subversion of Identity*. New York, London: Routledge.
- Eggert, Manfred K. H. 1977. Prehistoric Archaeology and the Problem of Ethno-Cognition. *Anthropos*, 72, 242-255.
- Falkenstein, Frank 2008. Geschlechterrollen und Sozialstatus im Spiegel der neolithischen Gräberfelder von Alterhofen-Ödmühle und Trebur. In: Falkenstein, Frank, Schade-Lindig, Sabine, and Zeeb-Lanz, Andrea (eds). *Kumpff, Kalotte und Pfeilschaftglätter. Zwei Leben für die Archäologie: Gedenkschrift für Annemarie Häusser und Helmut Spatz*. Internationale Archäologie Studia Honoraria 27. Rahden/Westf.: Leidorf, 77-95.
- Fowler, Chris 2010. From Identity and Material Culture to Personhood and Materiality. In: Hicks, Dan and Beaudry, Mary C. (eds). *The Oxford Handbook of Material Culture Studies*. Oxford: Oxford University Press, 352-385.
- Fowler, Chris 2016. Relational Personhood Revisited. *Cambridge Archaeological Journal*, 26, 397-412.
- Graves-Brown, Paul, Jones, Siân, and Gamble, Clive 1996 (eds). *Cultural Identity and Archaeology: The Construction of European Communities*. London, New York: Routledge.
- Greenacre, Michael J. 1993. *Correspondence Analysis in Practice*. London: Academic Press.
- Grupe, Gisela, Harbeck, Michaela, and McGlynn, George C. 2015. *Prähistorische Anthropologie*. Berlin, Heidelberg: Springer.
- Guy, Hervé, Masset, Claude and Baud, Charles-Albert 1997. Infant Taphonomy. *International Journal of Osteoarchaeology*, 7, 221-229.
- Hill, Erica 1998. Gender-Informed Archaeology: the Priority of Definition, the Use of Analogy, and the Multivariate Approach. *Journal of Archaeological Method and Theory*, 5, 99-128.
- Marshall, Yvonne 2008. Archaeological possibilities for feminist theories of transition and transformation. *Feminist Theory*, 9, 25-45.
- Marshall, Yvonne, and Alberti, Benjamin 2014. A Matter of Difference: Karen Barad, Ontology and Archaeological Bodies. *Cambridge Archaeological Journal*, 24, 19-36.
- Moral, Enrique 2016. Qu(e)rying Sex and Gender in Archaeology: a Critique of the "Third" and Other Sexual Categories. *Journal of Archaeological Method and Theory*, 23, 788-809.
- Nieszery, Norbert 1995. *Linearbandkeramische Gräberfelder in Bayern*. Internationale Archäologie 16. Espelkamp: Leidorf.
- Nordholz, Daniela 2015. *Untersuchungen zum Verhältnis der Geschlechter in der Linearbandkeramik: ausgewählte Befunde aus Gräberfeldern*. Internationale Archäologie 127. Rahden/Westf.: Leidorf.

- Oross, Krisztián and Marton, Tibor 2012. Neolithic burials of the Linearbandkeramik settlement at balatonszárszó and their European context. *Acta Archaeologica Academiae Scientiarum Hungaricae*, 63, 257-299.
- Pavúk, Juraj 1972. Neolithisches Gräberfeld in Nitra. *Slovenská Archeológia*, 22, 5-105.
- Rebay-Salisbury, Katharina 2017. Review of 'Augstein, Melanie 2015. Das Gräberfeld der Hallstatt- und Frühlatènezeit von Dietfurt an der Altmühl ("Tankstelle"): ein Beitrag zur Analyse einer Mikroregion. Universitätsforschungen zur Prähistorischen Archäologie 262. Bonn: Habelt'. *Germania*, 95, 264-268.
- Robb, John and Harris, Oliver J. T. 2018. Becoming Gendered In European Prehistory: Was Neolithic Gender Fundamentally Different? *American Antiquity*, 83, 128-147.
- Röder, Brigitte 1998. Jungsteinzeit: Frauenzeit? Frauen in frühen bäuerlichen Gesellschaften Mitteleuropas. In: Auffermann, Bärbel, and Weniger, Gerd C. (eds). *Frauen, Zeiten, Spuren*. Mettmann: Neanderthal Museum, 241-269.
- Sofaer, Johanna 2013. Bioarchaeological Approaches to the Gendered Body. In: Bolger, Diane (ed.). *A Companion to Gender Prehistory*. Hoboken, NJ: Wiley-Blackwell, 226-243.
- Sommer, Ulrike 2001. 'Hear the Instruction of Thy Father, and Forsake Not the Law of Thy Mother': Change and Persistence in the European Early Neolithic. *Journal of Social Archaeology*, 1, 244-270.
- Spatz, Helmut 1999. *Das mittelneolithische Gräberfeld von Trebur, Kreis Groß-Gerau*. Materialien zur Vor- und Frühgeschichte von Hessen 19. Wiesbaden: Landesamt für Denkmalpflege Hessen.
- Stratton, Susan 2016. "Seek and you Shall Find." How the Analysis of Gendered Patterns in Archaeology Can Create False Binaries: A Case Study from Durankulak. *Journal of Archaeological Method and Theory*, 23, 854-869.
- Todorova, Henrieta 2002. *Durankulak 2: Die prähistorischen Gräberfelder von Durankulak*. Sofia: Anubis.
- van de Velde, Pieter 1979. The Social Anthropology of a Neolithic Cemetery in the Netherlands. *Current Anthropology*, 20, 37-58.
- Veit, Ulrich 1996. *Studien zum Problem der Siedlungsbestattung im europäischen Neolithikum*. Tübinger Schriften zur ur- und frühgeschichtlichen Archäologie 1. Münster: Waxmann.

2 Tracing gender transformations

2.2 In burials

Changing gender perception from the Mesolithic to the beginning of the Middle Neolithic

Daniela Nordholz

Abstract

Researchers into the past carefully articulate their conclusions, with an awareness that they are only transitional. This certainly holds true for gender archaeology, which evolved from focusing on man the hunter to focussing on woman the gatherer, settling briefly on woman the hunter, and eventually arriving at the realisation that gender is flexible (Nelson 1997; Sørensen 2000). Despite this progress, however, there is still a faint echo of ‘division of labour’, of ‘male and female spheres’ and ‘male and female grave goods’. Actually, ‘male grave goods’ are always easier to identify than ‘female grave goods’ and this is all the more noticeable because most archaeologists are on board in attempting to identify diversity in prehistoric societies. The question is, was there gender identity in the Mesolithic, and if so, was it fully formed, just as we recognise for the Bronze Age or was it still in its ‘infancy’? Did it change and evolve during the course of the Mesolithic? How did it present itself in the Neolithic? Was it similar? Or totally different? In this paper, I will compare gender identities and gender relations in a sample of Mesolithic (18), Linearbandkeramik (15), and Middle Neolithic (four) cemeteries through the number and quality of grave goods and changes therein.

Keywords: *Mesolithic, Linearbandkeramik, Hinkelstein, Großgartach, gender perceptions, gender archaeology*

Introduction

The present paper is a continuation of my research on questions of gender and identity focused on the Early Neolithic, namely, the Linearbandkeramik (LBK), of central Europe – research that is here extended to the Mesolithic and Middle

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Table 1. Fictitious cemetery – distribution of grave goods by grave. Number of burials with objects: 18 ($3 = 6; 6 \times 2 =$) median = 12 individuals in object classes 1-6. Light grey fields: graves without objects; dark grey fields: graves with fewer objects; black fields: graves with lots of objects.

No. of objects	Grave identifier	No. of graves
0	24; 47; 65	3
1	76; 87	2
2	19; 77	2
3	22	1
4	31; 84; 94	3
5	41; 55	2
6	48; 51; 100	3
7	13; 60; 99; 112; 115	5
Total no. of graves with objects		18

Neolithic¹. To acquire a general overview on gender perceptions for prehistoric cultures, to determine whether said perceptions could have been changing over time and/or space requires a statistically viable number of human remains that have been sex-determined and – where possible – age-determined. In the absence of a viable statistical sample, the highest number of skeletons that fit the above-mentioned criteria are accepted instead. Therefore, only 18 burial places were selected from the Mesolithic, 15 from the Early Neolithic (LBK), and four from the beginning of the Middle Neolithic in central Europe (Fig. 1). To be able to acquire an overview on burial customs in connection with identity, the focus is on the presence or absence of grave goods and the number thereof. To determine differences, burials are divided into those without any (discernible) objects, those with fewer grave objects, and those with more grave objects, the distinction between the latter two being based on the median number (Table 1). It is important to note that the aim is not to distinguish rich graves from poor graves but simply to determine differences. The time frame of c. 8000 years and the distribution of cemeteries across Europe is certain to include variations in burial traditions, pertaining in this case to the type and number of burial artefacts. To date, archaeologists have been unable to determine whether grave objects were items that belonged to the deceased or whether they were given by the bereft, to name just two possibilities, or whether objects were of organic origin and thus unable to stand the test of time, skewing the numbers of grave goods found (see also Ucko 1969; Hofmann 2009; Arias 2016, 693-704). There is danger in simplifying datasets (in this case, solely focusing on burial objects and anthropologically sexed skeletons), as each cemetery shows variability (e.g. burial clusters, alignment of burials, body positions) that is not taken into account here. However, in this case, the drawbacks of not including this variability are compensated for by the fact that these simplified datasets allow me to create a baseline from

1 The research on gender relations and identity in the LBK includes data on sexed burials, number and quality of grave goods, burial positions, and alignment of burials that show that, while there are no significant differences between the genders, there is a noticeable change in terms of the amount and type of grave goods given towards the end of the LBK, seemingly to the detriment of females. To establish whether archaeological and anthropological datasets correspond, five cemeteries were examined for pathological changes on the cranium and the post-cranial skeleton, taking into account the 'prehistoric pathological paradox' (the older the skeleton, the more pathological changes are evident). It was established that the burial ritual of most burials corresponds correctly or almost correctly with the pathology of the individual (only between 8 per cent and 18 per cent did not correlate at all). Thus, at least a trend is established whereby the challenges each individual in the LBK met with and suffered from are mirrored to some extent in the implementation of the burial ritual (Nordholz 2015).

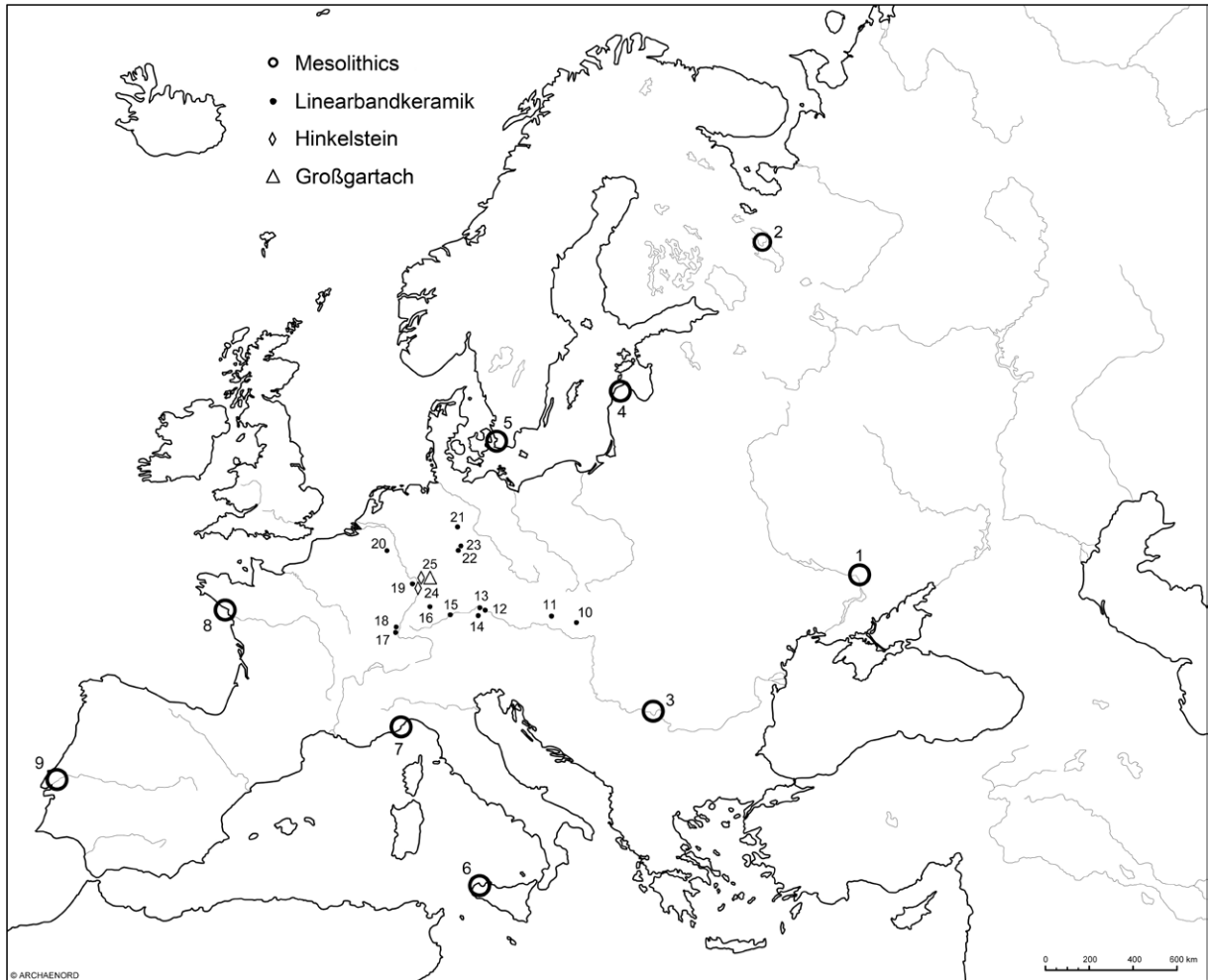


Figure 1. Map with sites mentioned in the text. 1 Vasil'evka I + III, Vološskoe; 2 Olenij Ostrov; 3 Padina, Vlasac, Lepenski Vir; 4 Zvejnieki; 5 Vedbæk, Henriksholm-Bøgebakken, Skateholm; 6 Grotta dell'Uzzo; 7 Arene Candide; 8 Île de Hoëdic, Île de Téviec; 9 Moita do Sebastião; 10 Nitro; 11 Klein Hadersdorf; 12 Aiterhofen; 13 Sengkofen; 14 Essenbach-Ammerbreite; 15 Dillingen-Steinheim; 16 Stuttgart-Mühlhausen; 17 Rixheim; 18 Ensisheim; 19 Flomborn; 20 Niedermerz; 21 Wittmar; 22 Bruchstedt; 23 Sondershausen; 24 Worms-Rheingewann, Worms-Rheindürkheim; 25 Trebur (Daniela Nordholz).

the Mesolithic to the Middle Neolithic that, I hope, will allow me to identify gender relations, identities, and changes in both by means of economic and social changes that span thousands of years and more than 10 million km².

The anthropological determination of the sex of a skeleton relies on biological and medical research, provided that the state of the skeleton allows such determination. The best results are obtained by measuring the pelvis and the cranium. If DNA analysis is feasible, sex can be determined through the XX and XY chromosomes (Mays 1999, 33; Hofmann 2009, 136). The anthropological determination of the gender of a skeleton, on the other hand, is a focus of social history, and relies on identifying division of labour and corresponding tools. This approach is not without its dangers, as the question remains who determines the meaning of things: the archaeologist or the prehistoric individual and/or society (Alt and Röder 2009; Hofmann 2009; Sørensen 2007). Because gender is not a fixed condition, but changes depending on social circumstances, it is more a process or even a performance (Arnold 2007; Sørensen 2007; Hofmann 2009), which is difficult if not impossible to identify correctly for the Palaeolithic to Neolithic (archaeologists working with Bronze Age, Iron Age, or more recent material seem to assign their respective gender along lines more familiar to Western

archaeologists; Robb and Harris 2017). The present paper is therefore based solely on anthropologically determined, or biological, sex.

Mesolithic

Although there are more than 250 Mesolithic burial sites with more than 20 000 individuals in all of Europe, spanning more than 5000 years, only 18 were selected for this study (see Fig. 1). Mesolithic burials are found in open air sites and in caves or rock shelters, with the former covering about two thirds of all burial sites (Grünberg 2016). Much of the data from the Mesolithic sites presented here was taken from Judith M. Grünberg's publication of Mesolithic burials in Europe (Grünberg 2000a; 200b).

The Early Mesolithic² is represented by Arene Candide (prov. Savona, Italy; 11 burials), Grotta del'Uzzo (prov. Trapani, Italy; 8 burials), and the proto-Lepenski Vir phase at Lepenski Vir (Opština Majdanpek, Serbia; 10 burials) (Grünberg 2000a, 15; Borić 2016, 71).

The Middle Mesolithic is represented by Padina (Opština Golubac, Serbia; 14 burials), Vlasac (Opština Majdanpek, Serbia; 75 burials), Lepenski Vir phases I-II (23 burials), Lepenski Vir phase III (14 burials), Vasil'evka III (Dnepropetrovskaja oblast, Ukraine; 22 burials), and possibly Vasil'evka I (19 burials) (Grünberg 2000a, 15-16; 281; 283; Borić 2016, 121; 269).

The Late Mesolithic is represented by Henriksholm-Bøgebakken (Vedbæk, Region Hovestaden, Denmark; 16 burials), Moita do Sebastião (prov. Ribatejo, Portugal; 25 burials), Île de Hoëdic (Dép. Morbihan, France; 9 burials), Île de Téviec (Dép. Morbihan, France; 14 burials), Zvejnieki (Valmieras rajona, Latvia; 33 burials), Olenij Ostrov (Lake Onega, Karelia Republic, Russia; 118 burials)³, Skateholm I (Trelleborgs kommun, Skåne län, Sweden; 28 burials), Skateholm II (18 burials), and Vološskoe (Dnepropetrovskaja oblast, Ukraine; 11 burials) (Grünberg 2000a, 16; 282). Not included here are all the burials that contain less than five burials of anthropologically determined adult individuals, which pertains to most burials found in central Europe. Interestingly, but not relevant for this study, all selected burials are situated more in the periphery of Europe, whereas those not included here are distributed all over Europe (*i.e.* in Belgium, Germany, France, and The Netherlands; Grünberg 2000a; 2000b). Several burial sites are situated near contemporaneous settlements, and both the burial sites and the settlements point to a more sedentary lifestyle. The burials representing a non-sedentary lifestyle – probably among them those containing only one or two graves⁴ – will be addressed at a later date in the course of this ongoing research.

As the sites are relatively evenly distributed across Europe, they have been clustered into the following regional groups:

- Mediterranean: Arene Candide and Grotta del'Uzzo;
- Iron Gorge: the proto-Lepenski Vir phase at Lepenski Vir, Padina, Vlasav, Lepenski Vir I-II, Lepenski Vir III;
- Ukraine: Vasil'evka III, Vasil'evka I, Vološskoe;
- Baltic: Henriksholm-Bøgebakken, Zvejnieki, Olenij Ostrov, Skateholm I, Skateholm II;
- Atlantic: Moita do Sebastião, Hoëdic, Téviec.

2 The chronological sequence during the Mesolithic is regionally specific; to be able to apply the data across Europe, I have divided the Mesolithic into Early Mesolithic (c. 9000-6800 BCE), Middle Neolithic (c. 6800-5500 BCE), and Late Mesolithic (c. 5500-3600 BCE).

3 Some of the oldest burials from Olenij Ostrov date to Early and Middle Mesolithic, but the majority of burials date c. 5500-4000 BCE (Grünberg 2000a, 15-16).

4 Two thirds of all burial sites contain only one or two graves (Grünberg 2016); these have not been considered for the present study, as the median could not have been applied.

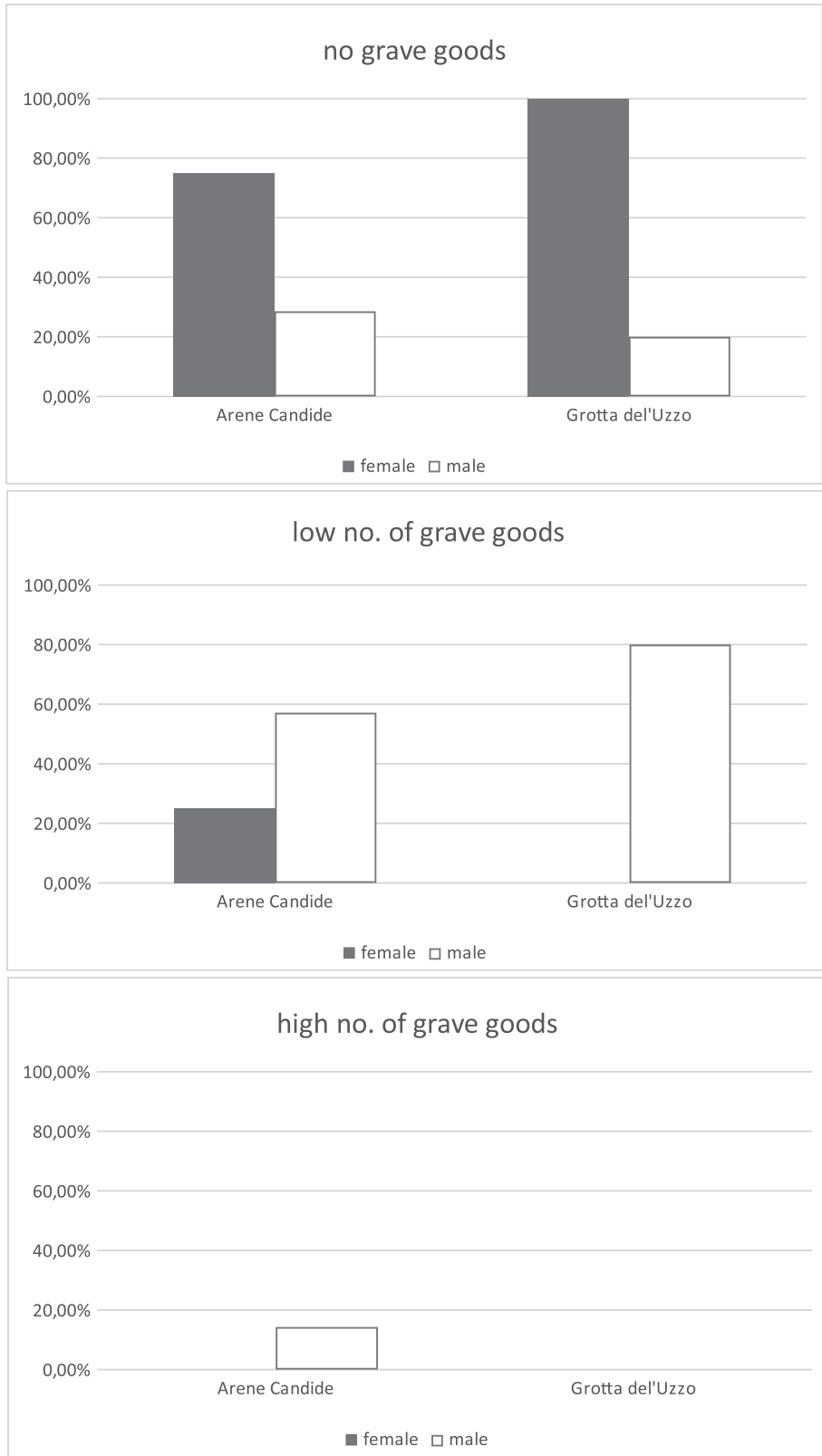


Figure 2. Statistical distribution of grave goods among sex groups in the burials of Arene Candide (prov. Savona, Italy) and Grotta del'Uzzo (prov. Trapani, Italy) (Daniela Nordholz).

Grave goods consist mainly of items of personal adornment and tools (flint, bone/horn, and stone), whereas ochre and other mineral pigments, and animal remains, which may or may not be considered food offerings, are considered part of the burial ritual (Grünberg 2000a, 110; 142).

Mediterranean

The two oldest burial grounds included here are Arene Candide and Grotta del'Uzzo, both in Italy, both within caves (Grünberg 2000b, 115-123; 126-131).

Excavations in Arene Candide have been taking place since 1864⁵. There are several layers dating to the Palaeolithic, four layers dating to the Mesolithic, and one dating to the Neolithic. The burials belong to the oldest of the Mesolithic layers. A total of 15 burials, containing more than 17 individuals, among which four females and seven males, have been highlighted for this study. The oldest burial consists of a late adult male with no discernible burial artefacts (grave I). The largest number of grave objects were found with two early adult males (graves II and Va). All but one of the female burials are without grave goods. More males than females show a lower number of grave objects. The earliest excavations to take place at the Grotta del'Uzzo, in 1924 and 1926, discovered that much of the upper layers had been taken away as fertiliser. Traces of settlement and several burials were also found. Since the 1970s, consecutive excavations have taken place⁶. Altogether, 10 burials, containing 12 individuals, among which three females and five males, are taken into further consideration. All female burials are without discernible grave goods. A few males have no grave objects, and many males have a low number of burial artefacts. There are no male burials with a high number of grave objects (Fig. 2).

In Arene Candide, males and females were found with flint tools, albeit more males than females. Bone/horn tools and stone tools were only found with male burials. Only male burials in Grotta del'Uzzo are found with flint and bone/horn tools. Stone tools were not part of the grave goods in Grotta del'Uzzo.

Iron Gate

Three sites from the Iron Gate, a Danube gorge separating the states of Serbia and Romania, all belonging to the Lepenski Vir culture, are part of this study. The site of Lepenski Vir was discovered in 1960 and excavated starting in 1965 (Fig. 3)⁷. Four phases have been identified: a proto-Lepenski Vir phase and phases I to III (Borić 2016, 5-33). In the proto-Lepenski Vir phase, slightly more males than females were found without any grave objects. Only a few males were found with a high number of burial artefacts. More females than males were found with a low number of grave objects. The greatest number of grave goods was given to a late adult male. The oldest males were given either no grave objects or just a few. The youngest males (juvenile and early adult) were given no grave goods. In Lepenski Vir phase I-II, more males than females were found without any grave objects and a lot more females than males were found with a lower number of burial artefacts. Conversely, a higher number of males were found with a high number of grave objects. A high number of grave goods were found with two older males (early and late mature) and relatively

5 The first of many excavation campaigns was carried out by A. Issel, in 1864, and the last seems to have taken place in the late 1970s; anthropological research was done by S. Sergi, G. Paoli, and R. Parenti (Grünberg 2002b, 115-117).

6 The first excavations, in the 1920s, were carried out by R. Vaufray; there was a hiatus until the 1970s, after which several campaigns followed, under different directors. Anthropological studies have been carried out by S. M. Borgognini Tarli, among others (Grünberg 2002b, 126-127).

7 Excavations were carried out by D. Srejović and Z. Letica, and anthropological research was carried out by Z.K. Zoffmann, J. Nemeskéri, I. Lengyel, and Z. Mikic (Grünberg 2002a, 296-298, 301).

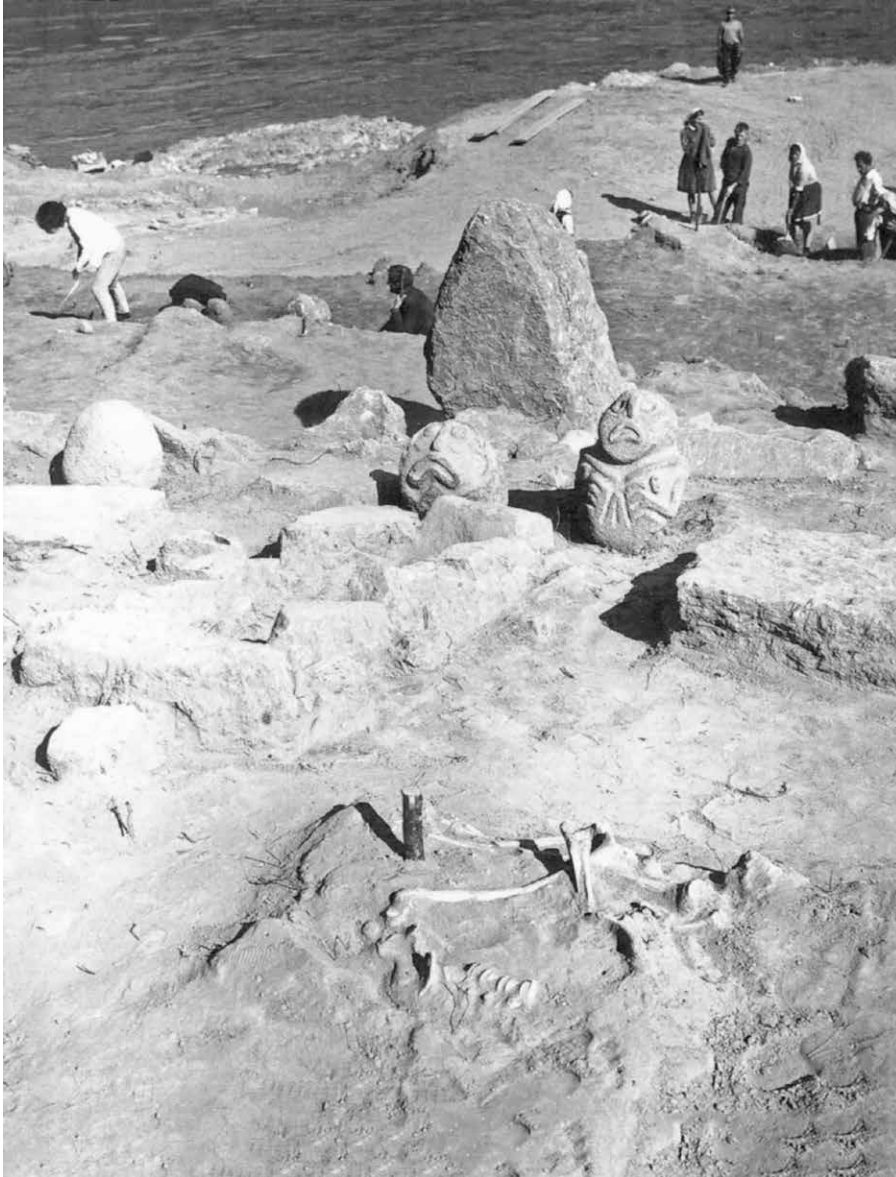


Figure 3. *Lepenski Vir* (Opština Majdanpek, Serbia). Skeletal remains in the foreground and hearth of building with sculpted boulders in the background (Borić 2016, 282 Fig. 5.6B).

young females (early and late adult). In the Lepenski Vir phase III, slightly higher numbers of males were found without any grave objects and with a low number of grave goods. Only females were found with a high number of grave objects. A high number of grave goods were found with an older female (late mature). No grave objects were found with the youngest female (juvenile).

The site of Padina lies in the upper area of the Iron Gate. It was discovered in 1968 and excavated between 1968 and 1971⁸. The excavation recovered finds spanning the Mesolithic to the Neolithic, Early Iron Age, Roman period, and medieval period. The Mesolithic layers contained 30 graves, containing 37 individuals (Grünberg 2000b, 294; 296; 305-309). Slightly more females than males were found buried without artefacts. Only males were found with a low number of grave objects, and neither males nor females were found with a high number of grave goods.

⁸ Between 1969 and 1971, B. Jovanović excavated at Padina; anthropological research was done by S. Živanović (Grünberg 2002b, 305-306, 308).

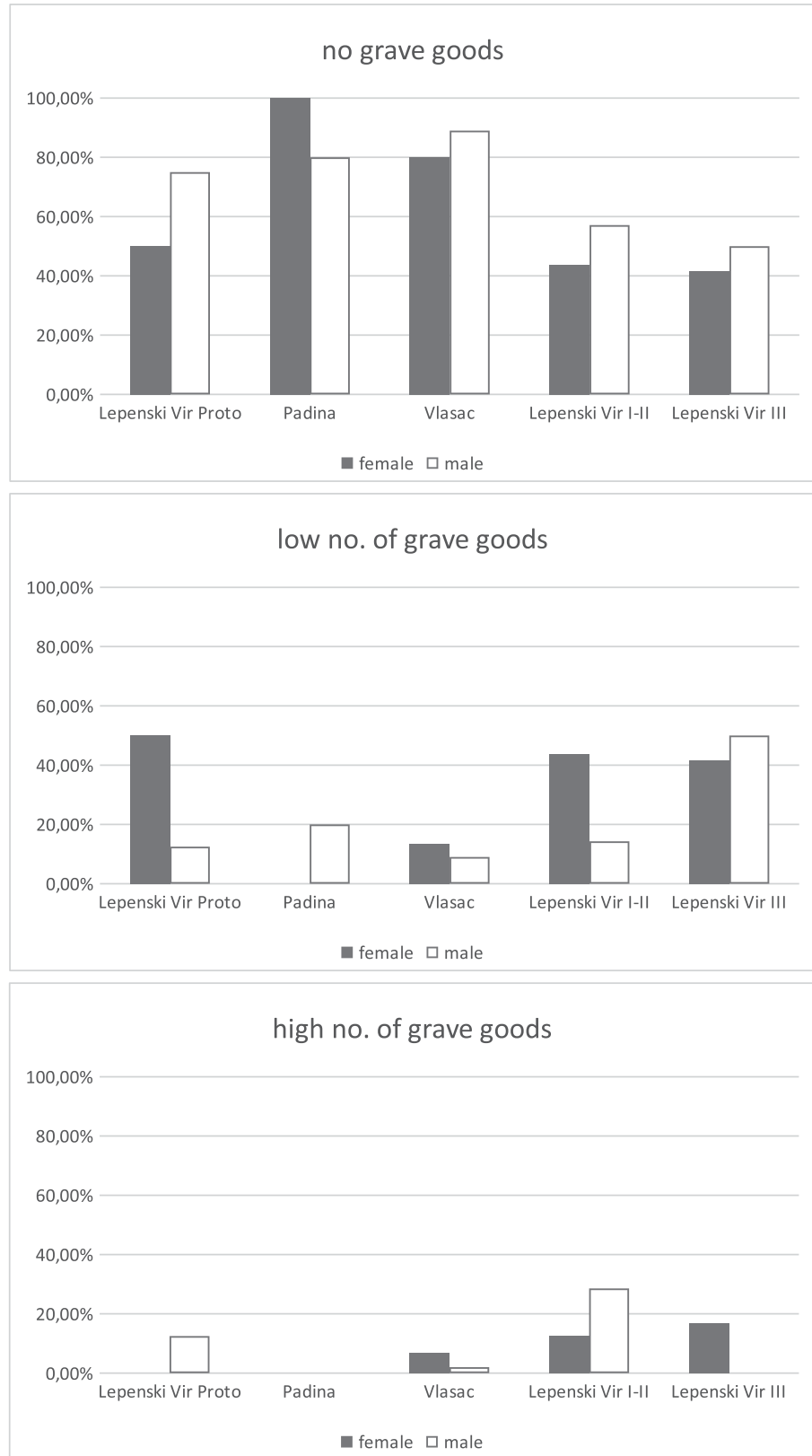


Figure 4. Statistical distribution of grave goods by sex in the burials of the proto-Lepenski Vir phase at Lepenski Vir (Opština Majdanpek, Serbia), Padina (Opština Golubac, Serbia), Vlasac (Opština Majdanpek, Serbia), Lepenski Vir I-II, and Lepenski Vir III (Daniela Nordholz).

The site of Vlasac is situated in the lower area of the Iron Gate. The site was discovered in 1970 and excavated for two years under the supervision of D. Srejović and Z. Letica⁹. Altogether four settlement layers (Vlasac Ia, Ib, II, and III), three of which were consecutive, were documented, dating between 6000 and 5400 BCE. A total of 87 graves with c. 165 individuals were excavated, not all of which belong to the Mesolithic (Grünberg 2000b, 309-331). Slightly more males than females were found without any grave objects. Slightly more females than males were found with a low and a high number of grave goods. A high number of grave objects was found with older males and females, yet many older males were also found buried without artefacts. Some of the younger males (juvenile and early adult) had been given no grave objects (Fig. 4).

Flint tools were found solely in female graves at Vlasac and in Lepenski Vir III, and only in male graves at Padina and in Lepenski Vir I-II. Bone/horn tools were found in male and female burials in the proto-Lepenski Vir phase at Lepenski Vir and at Vlasac, with more females than males having been given these tools. In Lepenski Vir I-II and III, only female burials carried bone/horn tools. At Padina, only males were given bone/horn tools. At Vlasac, only males were given stone tools.

Ukraine

The necropolis of Vasil'evka I in Dnjeprpetovsk was first discovered in 1953, by A.V. Bodjanski, and subsequently excavated in part by O.P. Efimenko. A total of 23 graves yielded 26 individuals, of which 19 have been anthropologically sex-determined by T.S. Konduktorova (Grünberg 2000b, 343-349). A high number of females compared with males were found with no grave goods; a high number of males were found with few grave objects. No females were found with a low number of burial artefacts. None were found with a high number of grave objects. Both younger males and females were found without any grave goods.

The necropolis of Vasil'evka III is situated about 600 m northeast of Vasil'evka I. The first human bones were discovered in 1953, and regular excavations started in 1955, under the supervision of D.J. Telegin¹⁰. Altogether, 36 graves, containing 45 individuals, were excavated (Grünberg 2000b, 350-357). Slightly more females than males were found without grave objects, and only a few males were given a lower number of burial artefacts. Neither males nor females were found with a high number of grave objects. The burial site of Vološskoe was discovered in 1952 and immediately excavated by A.V. Bodjanskij, because the Dnjepr was threatening to flood the area. Later excavations were carried out by V.N. Danilenko. Age and sex were determined by V.P. Jakimov. In all, 18 burials, containing 19 individuals, among which four females and seven males, are further studied here (Grünberg 2000b, 358-361). A slightly higher number of females were found with no grave goods. The number of males with a low number of grave objects slightly exceeds the number of females. Only a few males were found with a high number of grave goods. A high number of grave objects was given to the oldest male, whereas the youngest and oldest woman were given no burial artefacts (Fig. 5).

No flint was found in the burials at Vasil'evka III. At Vasil'evka I, flint was given only to males, whereas at Vološskoe, flint was given to males and females. Bone/horn tools were found in male burials at Vasil'evka III and Vološskoe, and stone tools were only found in male burials.

9 Anthropological research was carried out by J. Nemeskéri, I. Lengyel, and L. Szathmáry (Grünberg 2002b, 323).

10 Anthropological determinations were carried out by D.J. Telegin, I.I. Gochmann, G. Acsadi, and J. Nemeskéri (Goldberg 2002b, 354-356).

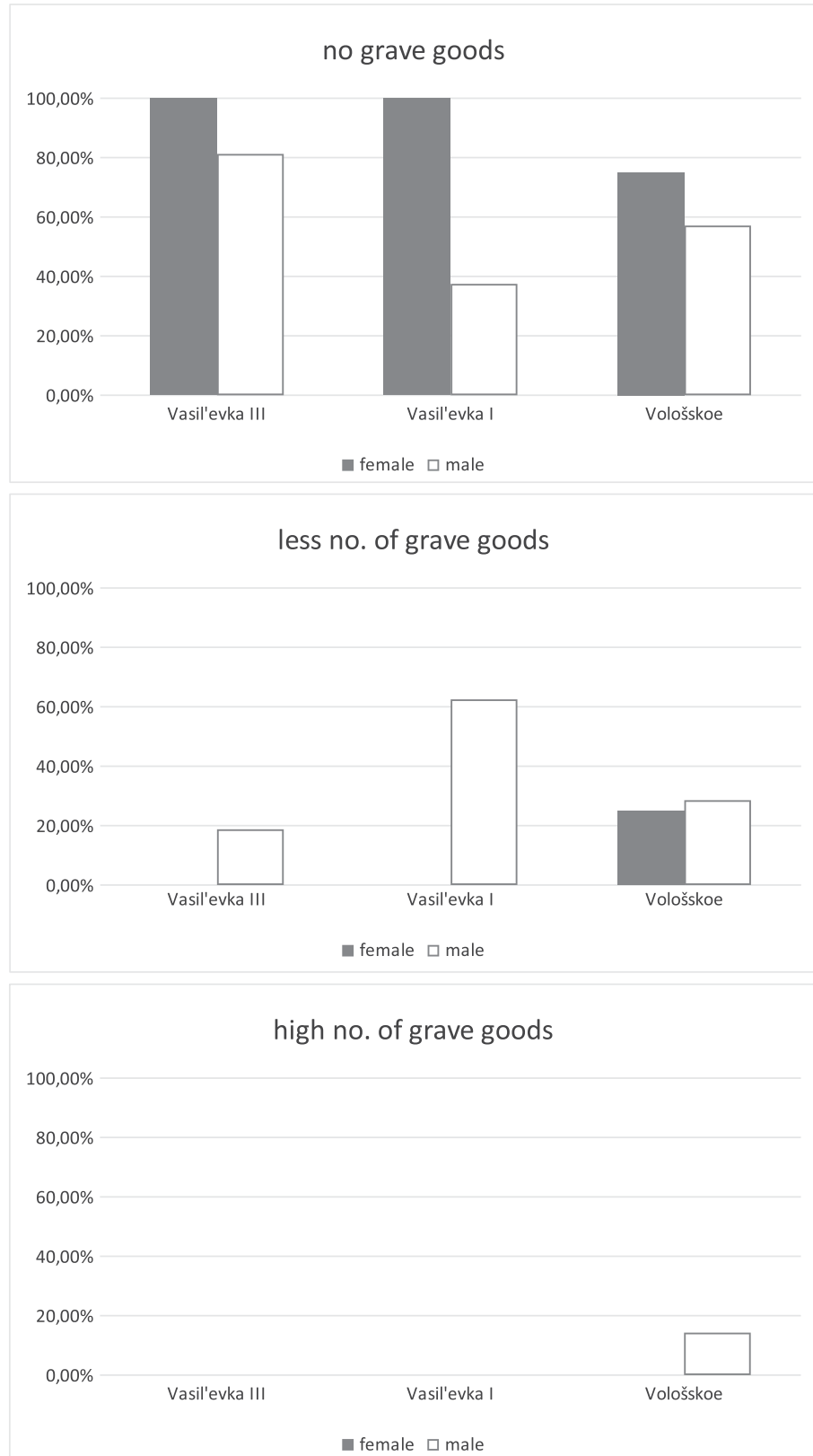


Figure 5. Statistical distribution of grave goods by sex in the burials of Vasil'evka III and I and Vološskoe (all Dnepropetrowskaja oblast, Ukraine) (Daniela Nordholz).

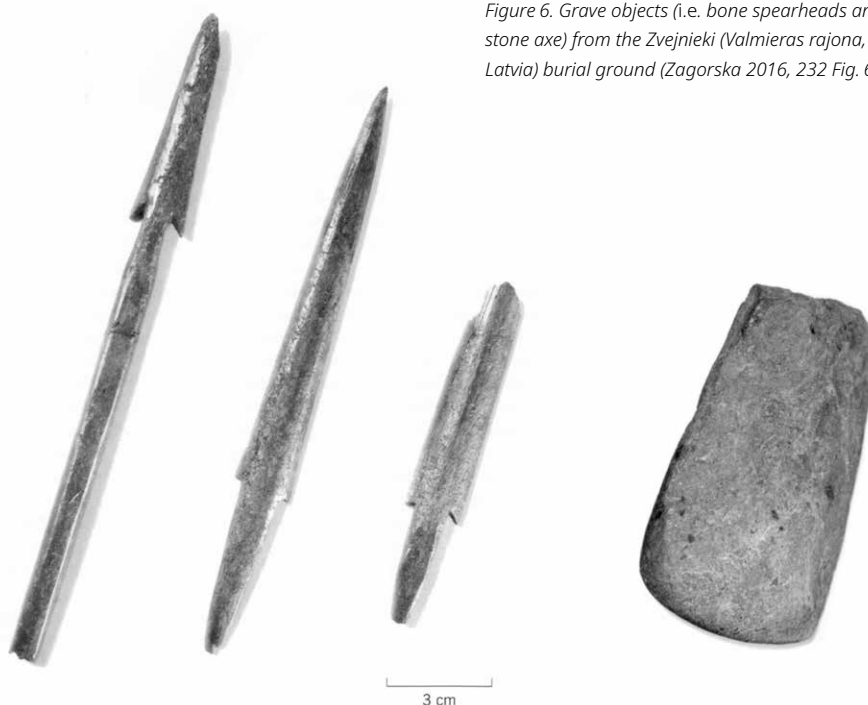


Figure 6. Grave objects (i.e. bone spearheads and stone axe) from the Zvejnieki (Valmieras rajona, Latvia) burial ground (Zagorska 2016, 232 Fig. 6).

Baltic region

Henriksholm-Bøgebakken was first excavated in 1924 by G. Hatt. It is part of an area in and around the modern village Vedbæk frequently used by Mesolithic peoples, as it is but one of at least 40 sites around the fossil Vedbæk fjord. A total of 18 burials, containing 22 individuals, 16 of which are further studied here, have been excavated¹¹. There is a settlement dating to the late Mesolithic in the vicinity of the burial ground (Grünberg 2000b, 9-14). A very high number of females were found without grave objects and only a few males were. A higher number of males were found with a few grave goods, and only males were given a high number of grave objects. The oldest and youngest male were given a high number of burial artefacts.

The Latvian burial site of Zvejnieki (Fig. 6) was first discovered in 1872 but excavated much later, in 1964, by F. Zagorski and I. Zagorska, who also excavated the settlements of Zvejnieki (which are partly contemporaneous with the burial site), in the 1970s. Excavations of the burial ground continued in the 1990s and between 2005 and 2009 with collaborations by F. Zagorski, L. Larsson, and I. Zagorska and L. Larsson and V. Bērziņš, respectively (Zagorska 2016, 225-239; Nilsson Stutz and Larsson 2016, 715-724). The burial site was used from the Mesolithic to the Late Neolithic, with a few graves dating to historic times. The majority of the burials belong to the Mesolithic and Mesolithic/Early Neolithic, numbering 145 altogether, but only 33 could be anthropologically determined by R.J. Deņisova and R. Grāvere (Grünberg 2000b, 135-157). Slightly more males than females were found without any grave objects and with a low number of grave goods. A higher number of females were found with a high number of grave objects.

Even though human bones had been discovered well before the Russian Revolution, the limestone quarry on the island of Olenij Ostrov continued to be exploited and, indeed, extended. It was not until 1936 that the burial site of Olenij Ostrov was systematically excavated, by G.P. Grozdilov, N.N. Gurina, V.I. Ravdonikas, and

11 Anthropological research has been carried out by S.E. Albrehtsen and E. Binch-Petersen (Grünberg 2002b, 12).

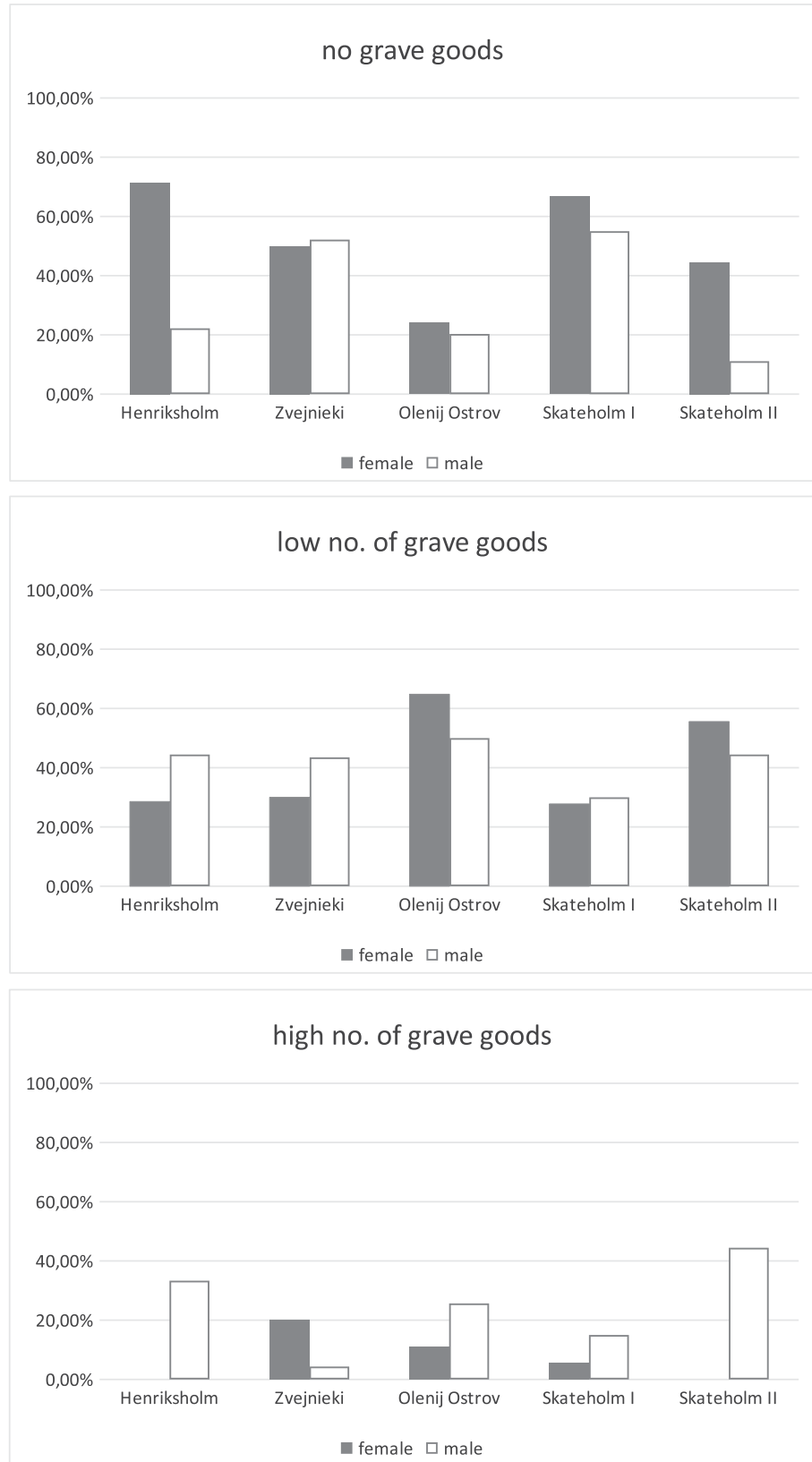


Figure 7. Statistical distribution of grave goods by sex in the burials of Henriksholm-Bøgebakken (Region Hovestaden, Denmark), Zvejnieki (Valmieras rajona, Latvia), Olenij Ostrov (Lake Onega, Karelia Republic, Russia), and Skateholm I and II (Trelleborgs kommun, Skåne län, Sweden) (Daniela Nordholz).

N.N. Černjagin. A Mesolithic settlement was discovered in the vicinity. Due to the extensive use of the quarry, only 144 burials, containing 177 individuals, could be recorded, the anthropological studies having been conducted by V.P. Jakimov (Grünberg 2000b, 211-251). Slightly more females than males were found without any burial artefacts. A higher number of females were found with a few grave objects, and a higher number of males were found with a high number of grave goods. The oldest male was found without any grave objects.

Skateholm II (see Skateholm I for relevant researchers) was discovered during the excavations of Skateholm I in 1982. In the vicinity of Skateholm I and II, two further cemeteries are located: Skateholm III and IX. Skateholm II is older than Skateholm I (Larsson 2016, 175-183). It consists of a settlement and a burial site, with 22 graves (including two dog burials), containing 22 individuals (Grünberg 2000b, 278-286). A high number of females and only a few males were found without any grave objects and with a low number of burial artefacts. Only younger (juvenile, early adult, and late adult) males were given a high number of grave objects. The site of Skateholm I has been known about long before it was excavated, by L. Larsson, starting in 1980. In the course of the excavations, a settlement and a burial site were recorded. The burial site consists of 65 graves (including eight dog burials), and contained 62 individuals, which were analysed by O. Persson and E. Persson, with further studies by R.R. Newell, T.S. Constandse-Westermann, and C. Meiklejohn (Grünberg 2000b, 263-278). Slightly more females than males were found without any burial artefacts. A slightly higher number of males were found with a low number of grave objects, and a higher number of males were found with a high number of grave goods. A high number of grave objects was found with the oldest and youngest males and females, yet no grave goods were found among the oldest and youngest males and females (Fig. 7).

Flint tools were found in male and female burials at Henriksholm-Bøgebakken, Zvejnieki, Olenij Ostrov, and Skateholm I and II, though only at Zvejnieki do they predominate in female burials. Bone/horn tools were found in male burials at Henriksholm-Bøgebakken, Olenij Ostrov, and Skateholm I and II, and in female burials at Zvejnieki, Olenij Ostrov, and Skateholm I and II. Stone tools were found in male burials at Henriksholm-Bøgebakken, Olenij Ostrov, and Skateholm I and II, and in female burials at Zvejnieki and Olenij Ostrov.

Atlantic region

The shell midden of Moita do Sebastião was discovered in 1893, with excavations starting there almost immediately, directed by C. Ribeiro and F.A. Pereira. Later excavations were directed by F. de Paula e Oliveira, A.A.E. Mendes Corrêa, A. Mendonça da Costa Ataíde, J.R. dos Santos Jr., R. de Serpa Pinto, and J. Roche. At least 94 burials were recorded, with more than 144 individuals, yet only 25 could be studied here (Grünberg 2000b, 185-198). Sadly, just prior to the resumption of excavations in the 1950s, the top of the site was taken away and any information contained therein lost (Jackes and Lubell 2016, 648). Slightly more females than males were found without any grave goods. A slightly higher number of males were found with a low number of grave objects, and only males were found with a high number of grave goods.

It is thought that the shell midden of Hoëdic was first discovered at the end of the 19th century by Abbé Lavenont, but it was only after its rediscovery in 1928 that excavation took place, from 1931 to 1934, by M. Péquart und S.-J. Péquart. The site contained nine burials totalling 14 individuals, anthropologically researched by H.V. Vallois and S. de Félice (Grünberg 2000b, 72-78). Only females were found with no grave objects. Double the number of males were found with a low number of burial artefacts. A higher number of females were found with a high number of grave objects.

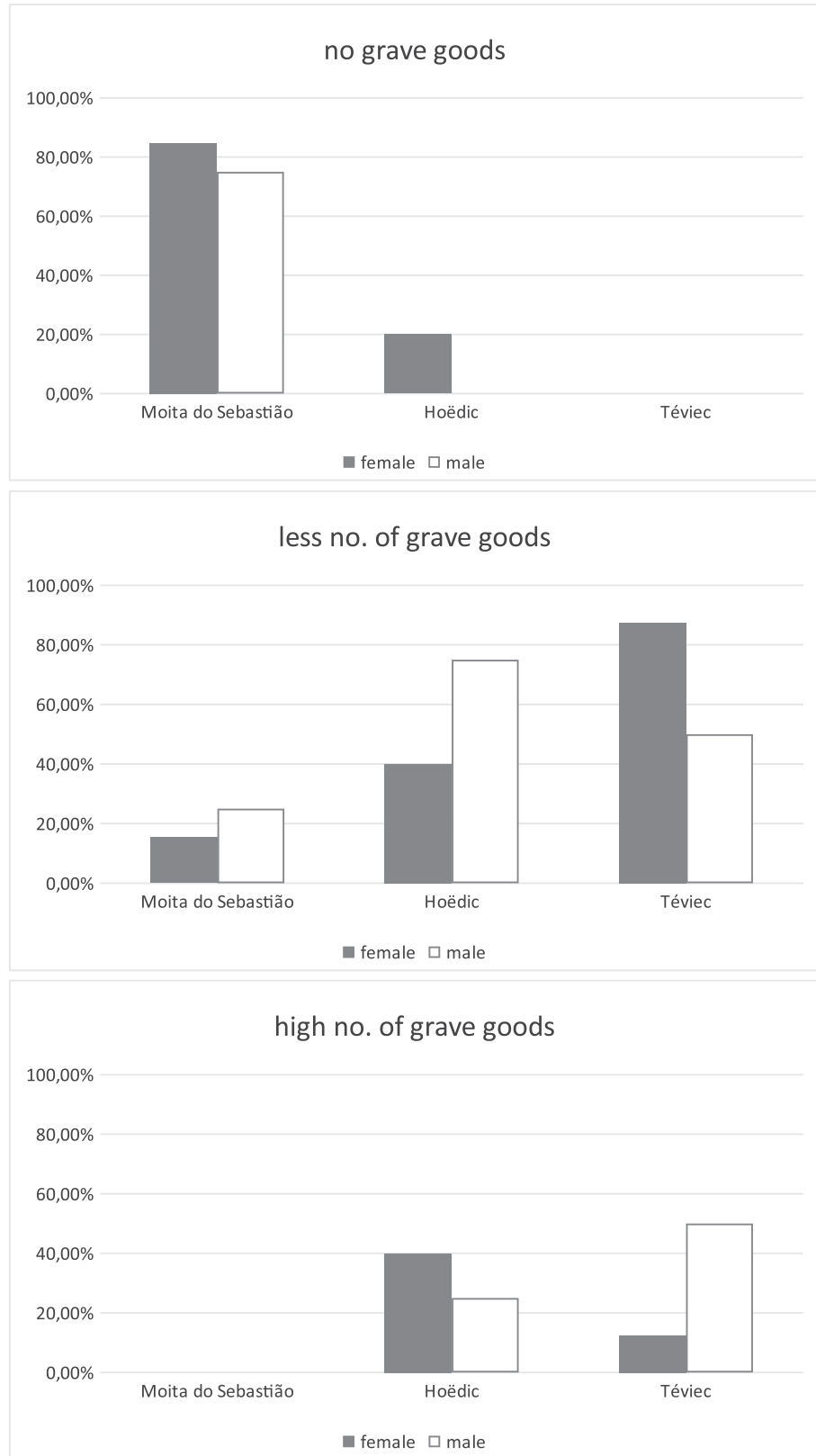


Figure 8. Statistical distribution of grave goods by sex in the burials of Moita do Sebastião (prov. Ribatejo, Portugal), Hoëdic, and Tévéc (both Dép. Morbihan, France) (Daniela Nordholz).

A shell midden was also discovered on the isle of Tévéc, in 1883, by F. Gaillard, and excavated from 1928 to 1930 by M. Péquart and S.-J. Péquart. Ten burials, containing 23 individuals, were discovered, and anthropological research was carried out by H.V. Vallois, S. de Félice, and P. Caillard (Grünberg 2000b, 92-100; David 2016, 609-628). All of the males and all of the females had grave goods. Slightly more males were found with a low number of grave objects, and a slightly higher number of females were found with a high number of grave goods (Fig. 8).

Both the male and the female burials at Hoëdic and Tévéc contained flint and bone/horn tools, but only at Tévéc were stone tools found, in both male and female graves.

Summary to the Mesolithic

Judith M. Grünberg's (2000a; 2000b) distinction between burial objects that were grave goods and objects that were part of the burial ritual seems ambivalent to me. While her arguments pertaining to ochre and other mineral pigmentation are coherent and logical, her arguments about animal bones, including fish and bird bone, are a bit more difficult to follow. They could represent a food offering made as part of a specific ritual, yet they could also be part of an amulet or part of a specific item of clothing. She argues that certain bones could also be considered hunting trophies, which would make them personal items (Grünberg 2000a, 154-164). I. Zagorska (2016, 231), however, counts animal teeth as pendants and includes animal remains as grave objects, in which case they should be included in the burial artefacts section of personal adornments and counted among the grave objects.

Concerning the graves without any grave objects, it needs to be stressed that organic offerings that did not stand the test of time cannot be included here, and so we cannot know whether these were typically given to both sexes or only to one sex. In 12 of the 18 burial sites discussed above, more women than men went without burial goods, whereas in only five out of 18 burial sites did more males than females go without objects¹². At Hoëdic, only females were buried without grave goods, and at Tévéc, neither sex was represented without any grave objects. In three burial sites, more men than women had a high number of grave objects; in five, only males had a high number of grave goods; in four, more women than men had a high number of grave objects; and in one burial site, only women had a high number of grave objects¹³.

Tools, especially those connected to hunting (which would include flint and bone arrowheads and harpoons), are more often than not found in male burials, yet not all males automatically were buried with these tools: in six burial sites, more men than women had tools; in four, only one man had tools; in one, only women had tools; in five, more women than men had tools; and in one, the ratio was equal.

If tools connected to hunting marked the individual as a hunter, one would expect these tools to be found in male burials in the age categories early and late adult and early mature primarily and in female burials (assuming women were occasional hunters) in the categories early adult and late mature graves, with a hiatus covering the prime reproductive years. In Arene Candide and Grotta del'Uzzo, the tool bearers are early adult or adult. In the proto-Lepenski Vir phase at Lepenski Vir,

12 Arene Candide, Grotta del'Uzo, Padina, Vasil'evka III, Vasil'evka I, Vološskoe, Henriksholm-Bøgebakken, Olenij Ostrov, Skateholm I, Skateholm II vs. Lepenski Vir proto phase, Vlasac, Lepenski Vir I-II, and Lepenski Vir III.

13 Burial sites with a high number of grave goods, males only: Arene Candide, Lepenski Vir Proto Phase, Vološskoe, Henriksholm-Bøgebakken, and Skateholm II. – Burial sites with a high number of grave goods, females only: Lepenski Vir III. – Burial sites with a high number of grave goods, more females than males: Vlasac, Zvejnieki, Hoëdic, and Tévéc. – Burial sites with a high number of grave goods, more males than females: Lepenski Vir I-II, Olenij Ostrov, and Skateholm I.

they were late adult or late mature. At Padina, they were mature. At Vlasac, they were juvenile, early adult, and mature/late mature. In Lepenski Vir I-II, they were early adult, late adult, and early mature. In Lepenski Vir III, they were late adult and late mature. At Vasi'evka III, they were juvenile and mature. At Vasil'evka I, they are late adult, early mature, and late mature. At Vološskoe, they were early and late mature. At Henriksholm-Bøgebakken, they were early adult, early mature, and late mature. At Zvejnieki, all females and many males could not be age determined, and the males with tools were early and late mature. At Olenij Ostrov, most tools were given to older (mature) individuals (33 males, 12 females); two went to senile females, 28 went to younger (adult), six went to individuals whose sex is undetermined. At Skateholm I, tools were given to five older (early and late mature and senile, four male and one female) and five younger individuals (juvenile and early adult, four males and one female). At Skateholm II, tools were given to four older individuals (early and late mature and senile, two male and two female), one male juvenile, three males who were early adult and two males who were late adult. At Hoëdic, tools were found with senile women, two early adult individuals (one male, one female), and three late adult individuals (two female and one male). At Téviec, all individuals included here were given tools; 11 were early adult (six women and five men), one a juvenile female, one a late adult female, and one an early mature male (Fig. 9).

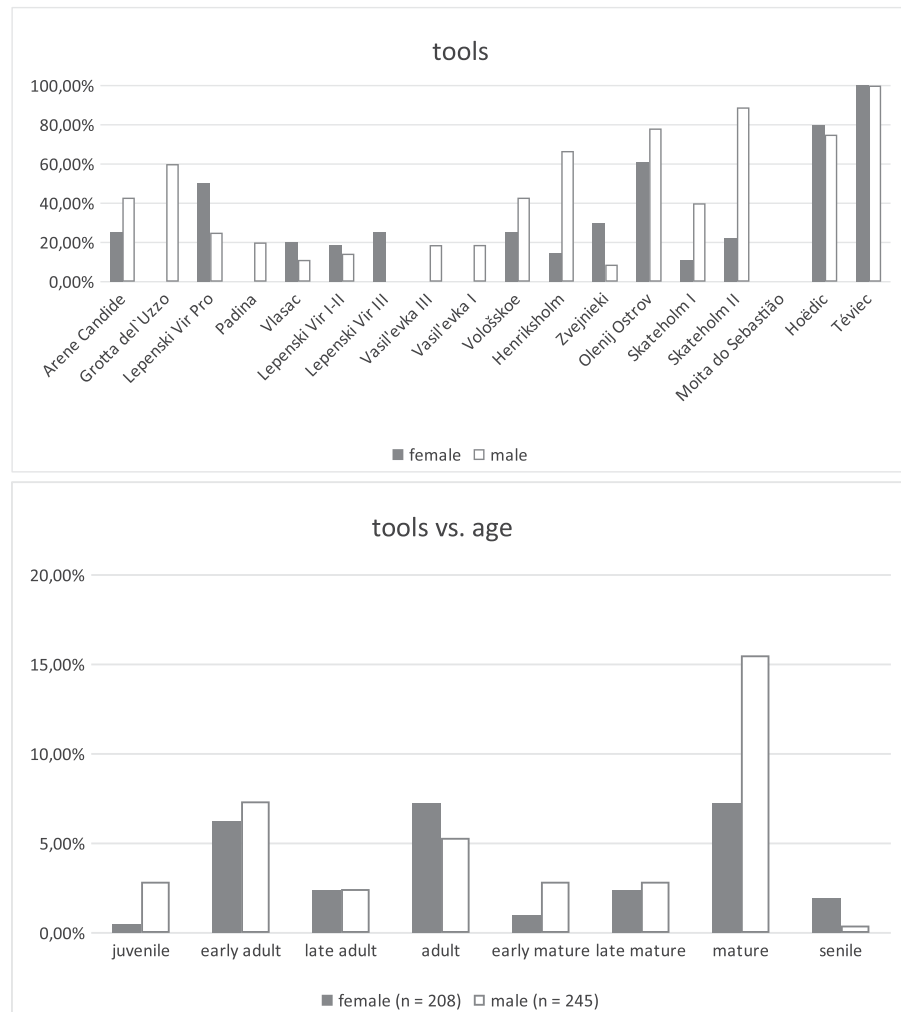


Figure 9. Statistical distribution of tools by sex during the Mesolithic (above); distribution of tools by age and sex (below); (Daniela Nordholz).

All of the data taken together show that the distribution of tools in burials does not trend exclusively to one sex: while more males than females are found with tools as grave objects at the age of juvenile, early adult, late adult, early mature, and late mature, more females than males are found with tools at the age of senile. While it can be argued that not all tools pertain to hunting, this argument applies to both male and female burials. All in all, if these burial artefacts symbolise personal possessions, they show that a rather small number of both sexes were active in tool usage (Brumbach and Jarvenpa 1997, 18-32; Estioko-Griffin and Griffin 1981, 121-151).

Neolithic

Early Neolithic (Linearbandkeramik)

Dating from the earliest phases of the Linearbandkeramik to the latest phases, 15 burial sites in Austria, the Czech Republic, France, Germany, and Slovakia have been analysed concerning (changing) gender relations and identities¹⁴, using the same method of analysis as was used for the burial sites of the Mesolithic period. The burial sites have been placed in chronological order based on relative chronology or, where applicable, C14-dating. The earliest to early LBK is represented by Vedrovice (okr. Znojmo, Czech Republic). The early LBK is represented by Flomborn (Lkr. Alzey-Worms, Germany), Sondershausen (Kyffhäuserkr., Germany), Bruchstedt (Unstrut-Hainich-Kr., Germany), and Niedermerz (Kr. Düren, Germany). The middle LBK is represented by Wittmar (Lkr. Wolfenbüttel, Germany) and Rixheim (Dép. Haut-Rhin, France). The middle to late LBK is represented by Sengkofen (Lkr. Regensburg, Bavaria, Germany), Aiterhofen (Lkr. Straubing-Bogen, Bavaria, Germany), Stuttgart (Germany), Kleinhadersdorf (Bez. Mistelbach, Austria), and Nitra (Slovakia). The late LBK is represented by Ensisheim (Dép. Haut-Rhin, France), Essenbach (Lkr. Landshut, Bavaria, Germany), and Dillingen (Lkr. Dillingen an der Donau, Germany).

Objects typically found in LBK burials are pottery (intact vessels, but also sherds¹⁵), bivalve shells (most prominent among those being objects made of *Spondylus*), bone and antler awls and combs, flint tools and arrowheads, adzes and wedges, querns, and food offerings (e.g. Fig. 10; Nordholz 2015, 14-17).

Throughout the LBK, all but one of the burial sites yielded examples of both sexes buried without any discernible artefacts. In 12 burial sites, more women than men were found without any grave objects, and the reverse was true in only in three burial sites. Additionally, the proportion of females without grave goods rose to be much higher than males at the beginning of the late LBK phase. The distribution of a low number of grave objects was rather varying throughout the LBK, with seven burial sites with more females than males having a low number and eight with more males than females having a low number. The distribution of high numbers of

14 Burial sites include Kleinhadersdorf, Vedrovice, Ensisheim, Rixheim, Flomborn, Sondershausen, Bruchstedt, Wittmar, Sengkofen, Aiterhofen, Stuttgart, Essenbach, Dillingen, and Nitra (Neugebauer-Maresch *et al.* 2015; Nordholz 2015).

15 The inclusion of sherds as part of burial objects has been discussed; sherds could be remains of destroyed vessels put in as burial goods, or large sherds could be offerings in and of themselves, but sherds could also be remnants of rituals/ceremonies/feasts performed in the vicinity of the cemeteries. There is also the possibility, however unlikely, that if settlements were nearby these sherds represent refuse. These questions are discussed in the relevant papers representing each cemetery; in the end, there is no clear communality, and so it was a choice in completely excluding them or including them. As neither choice seems appropriate, a compromise was found, in combining them per burial as one component regardless of the number of sherds in each burial, just to create a basis for comparison (Nordholz 2015, 18-19; Lenneis 2016, 310).

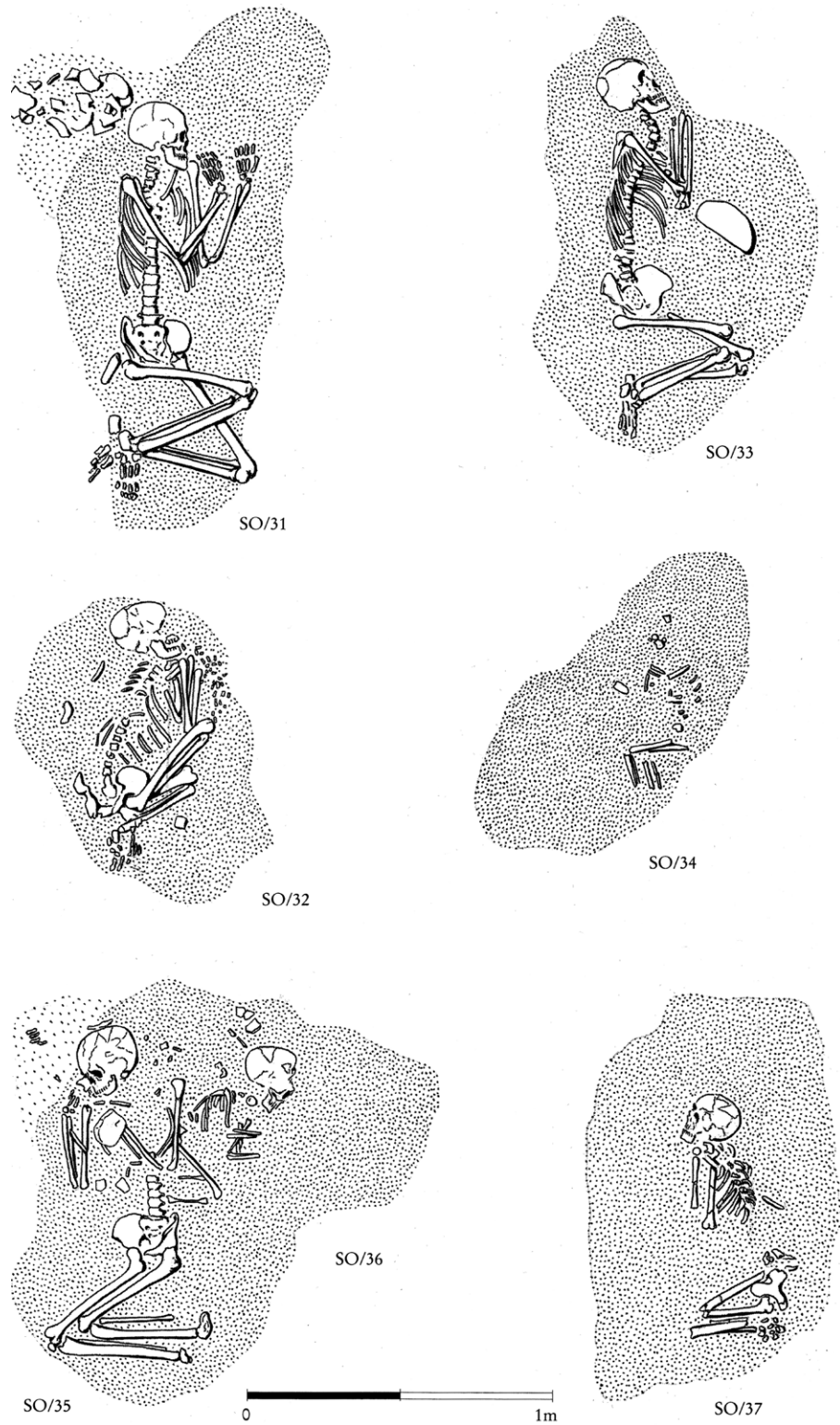
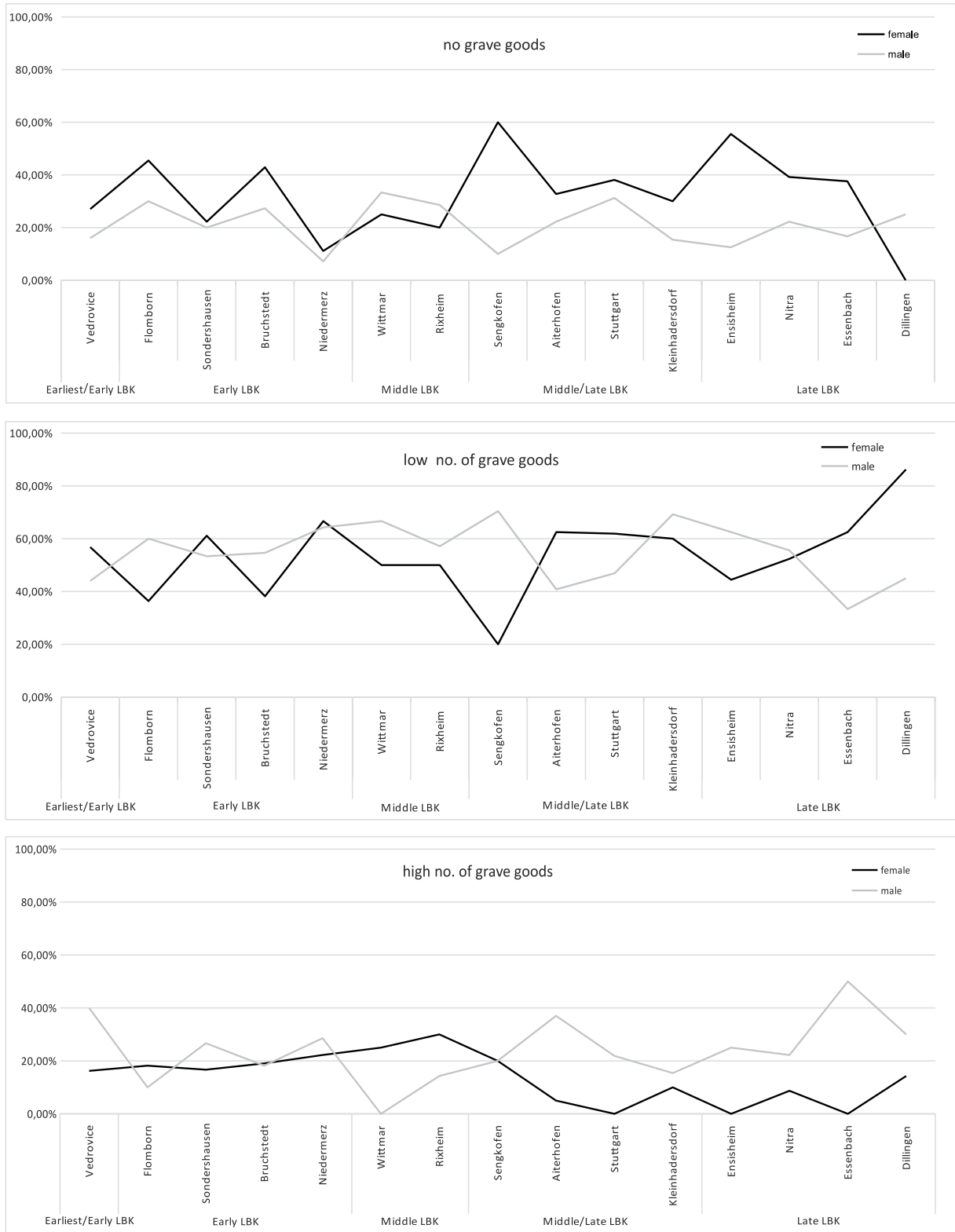


Figure 10. Sondershausen (Kyffhäuserkr., Germany). Burials with LBK pottery (Kahlke et al. 2004, 33 Fig. 8).

grave goods is more telling: 10 burials sites show more males than females with high numbers, four show more females than males, and one (Sengkofen) shows a parity between the sexes. However, the chances for a male to be buried with a high number of grave objects rose at the beginning of the late LBK phase and, conversely, so did the chances of a female to be buried without any burial artefacts (Fig. 11). Several



publications have attempted to identify grave objects that were typically found in male graves, thus defining them as ‘male’ grave goods. These are arrowheads, adzes, flint, and bone and stone tools (Dohrn-Ihmig 1983, 72; Nieszery 1995, 110). However, if we take all the anthropologically determined adults at those 15 burial sites into

Figure 11. Statistical distribution of grave goods by sex in the LBK (Daniela Nordholz).

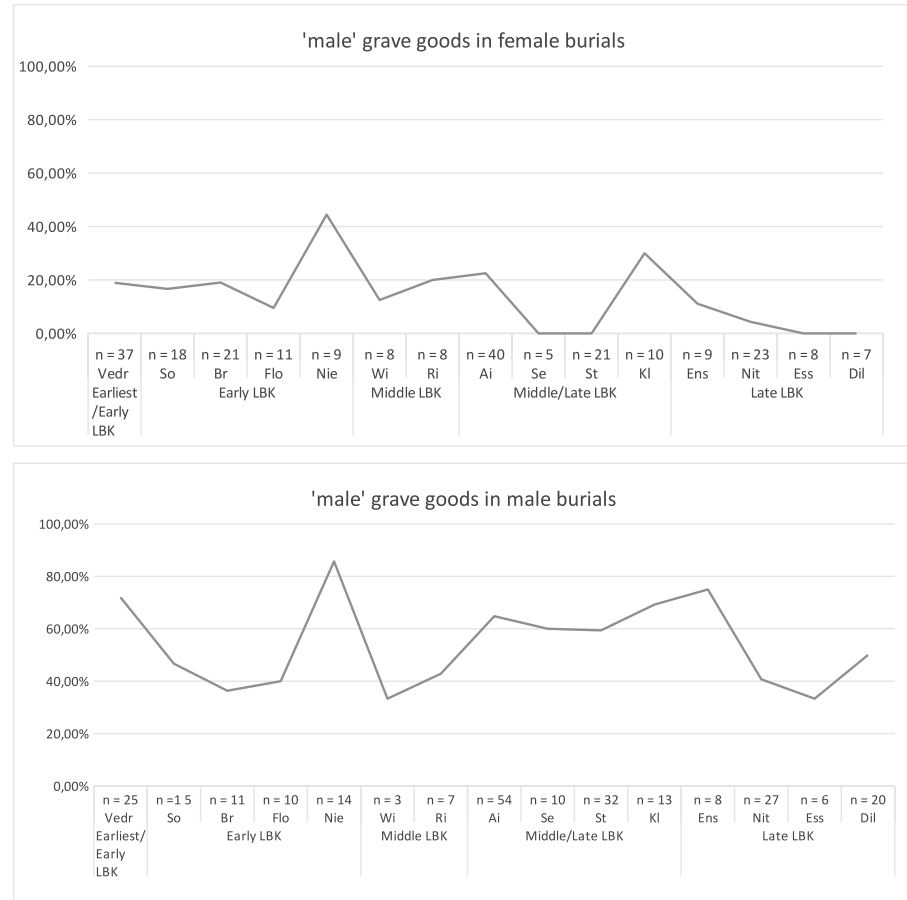


Figure 12. Statistical distribution of tools (adzes, arrowheads, flint-, stone- and bonetools) among gender in the LBK (Daniela Nordholz).

account, we can clearly see that while males' chances of being buried with so-called 'male' burial goods were between about 30 and 90 per cent, females' chances of being buried with 'male' grave goods were between about 10 and 45 per cent. At the beginning of the late LBK, the chances of females being found with 'male' grave objects were even lower, with four out of eight burial sites yielding no 'male' grave goods in female graves (Fig. 12).

The international project 'The first farmers of central Europe: Diversity in LBK lifeways' investigated 19 cemeteries from Hungary, Slovakia, Moravia, Austria, Germany (southern Bavaria, Baden-Württemberg), and France (Alsace), focusing on a combination of isotopic (principally carbon, nitrogen, strontium, and oxygen), anthropological, and archaeological analysis to determine childhood locality, water sources, differences in diet, pathologies, and trauma (Hamilton *et al.* 2013, 29-48).

The carbon and nitrogen results, which relate to diet (type of plants, differences in proportion of animal protein), show no significant differences for 16 cemeteries. Only the results from Vedrovice, Nitra, and Asparn an der Zaya (Bez. Mistelbach, Austria) show a small but statistically significant difference between male and female diets (Hedges *et al.* 2013, 348).

The strontium results, which relate to mobility, show more variability for females than for males and, in general, higher mobility of women and lower mobility for males, although the 'local' cluster included members of both sexes and the 'outlier/non-local' cluster also include males, but in lesser numbers and not necessarily from the same point of origin as the outlier females. The strontium data also show a correlation between local males and adzes (Whittle *et al.* 2013b, 119-122, 151-152; Bickle *et al.* 2013a, 178-179; 199; Hofmann *et al.* 2013, 236-238; Bickle *et al.* 2013b, 319-320; Hedges *et al.* 2013, 370).

The data on post-cranial trauma show that more than twice as many males as females were found with injuries, though whether these were acquired through specific activities or tasks cannot be determined, only inferred. Occlusal grooving of the anterior teeth, suggesting a recurring fibre or string working, was documented at two cemeteries, Polgár-Ferenci hát (Komitat Hajdú-Bihar, Hungary), in three women, and Nitra, in two men and four women. This grooving may point to an early stage of task differentiation in some sites, although not necessarily along the lines of sex; the differentiation may, instead, have been by gender or by yet different segments of society beyond sex or gender (Whittle *et al.* 2013a, 79-81; Whittle *et al.* 2013b, 146; Hedges *et al.* 2013, 371).

There is a possibility that the higher mobility of women relates to the marriage custom of patrilocality, but this scenario presupposes that males always stay at home with their fathers, and thus that there is also the possibility of patrilineality (Hedges *et al.* 2013, 368; 371; 384). However, due to the fact that both sexes included individuals who were local and from somewhere else, there are different ways to look at the data: when patrilocality is the preferred residence rule, the presence of local women would be the exception. With both sexes including individuals who were local and individuals who were outliers, it is possible to see more than one residence rule enacted in parallel, depending on clan, kinship, or lineage – for instance, patri- and matrilocality, with viri- and uxurilocality as further possibilities (Haller 2005, 226-227). These residence rules need not be exactly replicated in each area, as evidenced at Vedrovice, Nitra, and Kleinhadersdorf, where we see both males and females in the local cluster and more female than male outliers; at Rutzing (Bez. Linz-Land, Austria) and Aiterhofen, where we see males and females in the local cluster and as outliers; and Ensisheim, where we see a loose local cluster of both sexes with male outliers, just to cite from the sites mentioned in this paper (Whittle *et al.* 2013b, 119-127, 149-154; Bickle *et al.* 2013a, 176-179, 197-199; Hofmann *et al.* 2013, 205-250; Bickle *et al.* 2013b, 233-238, 317-318).

Middle Neolithic

The LBK is succeeded by several cultures: The Stichbandkeramik (STK; Stroke-ornamented Ware) culture in Bohemia, southern Poland, and central Germany; the rather short-lived Hinkelstein culture in the Rhineland; and the Großgartach and Rössen cultures, which are slightly younger than the Hinkelstein culture (Whittle 1985, 188).

The Hinkelstein burial site of Worms-Rheingewann (Germany) was discovered in 1893. It contained 69 burials, of which only 10 have been anthropologically sex-determined (Meier-Arendt 1975, 69-105; 191-213; Höckmann 1982, 46-50; 69-70).

The Hinkelstein burial site of Worms-Rheindürkheim (Germany) was discovered in 1898, with 32 burials, of which 15 adults were anthropologically sex-determined (Meier-Arendt 1975, 69-105; 213-222; Höckmann 1982, 47-49; 70-71).

The site of Trebur (Kr. Groß-Gerau, Germany) was discovered in 1939. Excavations showed two cultural levels: Hinkelstein and Großgartach (Spatz 1999a, 2; 4; chronology: Müller 2002). The Hinkelstein culture phase at Trebur yielded 24 female and 29 male burials (Fig. 13); for the Großgartach culture phase, 37 individuals were anthropologically determined (Spatz 1999a, 14-23; 1999b, 389; 393-458).

All of these graves contained grave objects. Other than Worms-Rheindürkheim, more women than men were buried with an average number of grave goods. In both the Hinkelstein culture and the Großgartach culture phases at Trebur, more males than females were buried with a high number of grave goods. At Worms-Rheingewann, the ratio of male to female burials with a high number of grave goods is staggeringly in favour of males. Yet at Worms-Rheindürkheim, only females were buried with a high number of grave goods (Fig. 14). In the Hinkelstein culture phase at Trebur, there were 20 burials containing a quern, of which 19



Figure 13. Trebur (Kr. Groß-Gerau, Germany) grave 42. Assemblage from the Hinkelstein culture phase (Heide 2003, 180).



Figure 14. Statistical distribution of grave goods by sex in Middle Neolithic cemeteries (Trebur, Hinkelstein culture; Worms-Rheingewann; Worms-Rheindürkheim; Trebur, Großgartach culture) (Daniela Nordholz).

were female burials and one a male burial. Adzes were found exclusively in male burials. A total of 21 flint artefacts were recorded, one in a female burial and 20 in male burials. At Worms-Rheingewann, 20 querns were found with female burials and two with male burials; of 21 adzes, three were found in female burials with the rest in male burials. Fourteen burials contained flint artefacts, of which four were found with female burials. At Worms-Rheindürkheim, eight burials were found with querns, six females and two males. Five burials contained flint artefacts, one male and four females. Only three adzes were present in burials, all in female burials. In the Großgartach culture phase at Trebur, adzes were given exclusively to 10 males. Six burials containing querns were recorded, five female and one male. Eleven burials contained flint artefacts, of which four were found in female and seven were found in male burials.

Summary to the Neolithic

The Neolithic burial sites presented above can only be viewed as an excerpt, since they consist altogether of 581 female and 587 male burials distributed over more than 700 years and almost all of Europe¹⁶. At best, they may convey trends, for example, that women more often than not are buried without any grave objects. Yet that should not lead to the automatic conclusion that burials without any grave goods must be female burials, as male burials may differ only in degree. The same holds true at the other end of the spectrum: even though more males than females were buried with a high number of grave goods, there are also many examples of female burials with many grave objects.

Discussion

When it comes to grave goods in general, Arene Candide and Grotta del'Uzzo, which are the oldest burial sites presented here, both representing the Mediterranean area, seem to favour males in burial practices by giving them more grave goods than females. The Iron Gorge presents a different picture, where women seem to be given equal status to males at Vlasac and in Lepenski Vir I-II and III. The Ukrainian burial sites show parallels to the Mediterranean ones, as do the Baltic ones, with the exception of Zvejnieki. In the Atlantic area, Moita do Sebastião follows the Mediterranean pattern, whereas the sites in Brittany show the exact opposite. In the LBK, both sexes are treated more or less equally until the end of the middle LBK/beginning of the late LBK, when the differences between males and females become more pronounced, to the detriment of females. The Middle Neolithic surprises by the absence of graves without any grave goods. While more males than females are found with a high number of grave goods, there are enough females represented for them not to appear an exception.

When it comes to tools – which may or may not have been used in connection to hunting and gathering, in the production of clothing, of food, and of other tools – in the Mesolithic, in 13 out of 18 burial sites, males and females were given tools as grave goods, which may indicate that both sexes had access to these goods in life. It even seems as if both sexes had access to these tools throughout their life cycle. The LBK shows a similar trend, with both sexes having access to tools that now include adzes. Yet at the beginning of the late LBK, the chances of a female being buried with tools lessened considerably. A new trend is apparent with the advent of the Middle Neolithic: querns are found predominantly though not exclusively in female

16 Mesolithic: 263 females; 270 males. – LBK: 237 females; 255 males. – Middle Neolithic: 81 females; 62 males.

burials, whereas adzes are found predominantly though not exclusively in male burials (querns: 50 female and 6 male burials, adzes: 6 female and 44 male burials).

For the Mesolithic, the one constant in regard to the distribution of grave goods in relation to male and female burials is that there is no constant. In some areas and at certain times, the inhabitants favour males in their burial practice (*i.e.* the Mediterranean and the Ukraine); at other times and in different areas, burial practices vary, sometimes favouring males, other times females.

For the Mesolithic, therefore, there is no clear picture of the gender identity of men and women. Despite progress in the past 30 years, there still persists a faint echo of ‘division of labour’, of ‘male and female spheres’, and ‘male and female grave goods’ (Lee and Devore 1968; Dahlberg 1981; Höckmann 1982, 19-20; Neugebauer-Maresch *et al.* 2013, 71-73; Grünberg *et al.* 2016, 291). However, as we have seen above, there are male burials without any grave goods, as well as male burials without any tools and therefore without any hunting-related tools, and equally there are female graves with (hunting) tools, albeit in much smaller numbers than male graves. This distribution of grave goods and in particular of tools leads to the following possible conclusions (this, alas, only pertains to the question of tool use and, by extension, to that of hunting): a) both males and females were hunting; b) only social males were hunting, thus going beyond biologically determined sex; c) sex and gender had no relevance, and only talent, experience, and ability determined who hunted. But all of these scenarios suppose that burial practices somehow reflect on the life of the individual (see Ucko 1969, 266).

Concerning the distribution of tools in burials during the LBK, a similar pattern to the Mesolithic is apparent, at least for the earliest to middle LBK phases. Towards the end of the LBK, sex relations change and seem to favour males, at least in terms of the number of grave goods given. Similarly, the number of female graves containing tools seems to decline at the end of the LBK, while the number of male graves containing tools remains relatively stable. It could be argued that women’s access to tools was more restricted than men’s.

Gender identity for females, and to a lesser extent for males, changes abruptly and significantly at the transition of the middle LBK to the late LBK, resulting in a pronounced difference between male and female burials in both kind and degree. Researchers are still speculating on the reasons for this change, looking for evidence based on the identification of isotopes values connected to places of origin as opposed to places of residence later in life. But a patrilocal residence tradition alone, even if it were exclusively practised, does not automatically point to a lesser regard for females. Perhaps the explanation lies in a marked increase in fatal complications during pregnancy¹⁷.

By the Middle Neolithic, both sexes seem to be given a similar burial ritual, yet a clear difference in the type of grave goods given emerges, which associates females with querns and males with adzes. During the Middle Neolithic, a consolidation of gender roles seems to have taken place, with specific grave goods assigned to each gender. However, there are a few exceptions, which may suggest the possibility of biologically male individuals buried as females (with querns) and biologically females buried as males (with adzes).

The results of this paper echo strongly the findings of John Robb and Oliver Harris: Little gender distinction is evident earlier on in the Neolithic, but this changes (slowly) during the course of the Neolithic. As we have seen here, the Mesolithic seems to follow a similar pattern. The authors conclude that in the Neolithic, gender is experienced differently and it changes in different contexts, or becomes

17 During the LBK period, an increase in deaths for females at a young age (juvenile and especially early adult) can be observed; conversely, there is a decrease in the number of females reaching the ages of late mature and senile (Nordholz 2015, 176-180).

more or less important (Robb and Harris 2017). I would suggest that, by inference, perhaps the same pertained in the Mesolithic as well. There is (still) no guaranty that our understanding of gender (even as this understanding changes in the modern Western world, which now includes terms such as transgender or gender-fluidity) is the same as that of 8000 to 5000 years ago.

Summary

During the course of this paper, 37 burial sites dating from the Mesolithic to the Middle Neolithic, containing 1168 anthropologically sex-determined individuals, have been studied with a focus on gender relations and identities and possible changes therein. The Mesolithic shows a variety of gender relations and possible identities, without displaying a constant development one way or another, a pattern which seems to continue somewhat during the first half of the LBK. At the transition from the middle to the late LBK, gender roles and identities seem to solidify to some extent, but with exceptions, a trend that continues during the Middle Neolithic, again with exceptions.

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References

- Alt, Kurt and Röder, Brigitte 2009. Das biologische Geschlecht ist nur die halbe Wahrheit: der steinige Weg zu einer anthropologischen Geschlechterforschung. In: Rambuscheck, Ulrike (ed.). *Zwischen Diskursanalyse und Isotopenforschung. Methoden der archäologischen Geschlechterforschung*. Bericht 3. Sitzung der AG Geschlechterforschung, Schleswig 2007. Frauen – Forschung – Archäologie 8. Münster: Waxmann, 85-129.
- Arias, Pablo 2016: Grave goods in the Mesolithic of Southern Europe: an overview. Grabbeigaben im Mesolithikum Südeuropas: ein Überblick. In: Meller, Harald, Grünberg, Judith M., Gramsch, Bernhard, Larsson, Lars, and Orschiedt, Jörg (eds). *Mesolithic Burials: Rites, Symbols and Social Organisation of Early Post-glacial Communities: International Conference Halle (Saale), Germany, 18th-21th September 2013*. Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 693-704.
- Arnold, Bettina 2007. Gender and archaeological mortuary analysis. In: Nelson, Sarah M. (ed.). *Women in antiquity: theoretical approaches to gender and archaeology*. Lanham: AltaMira Press, 75-106.
- Bickle, Penny, and Whittle, Alasdair W. R. 2013 (eds.). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow.
- Bickle, Penny, Arbogast, Rose-Marie, Bentley, Alexander, Fibiger, Linda, Hamilton, Julie, Hedges, Robert R., and Whittle, Alasdair 2013b. Alsace. In: Bickle, Penny and Whittle, Alasdair W. R. (eds.). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow, 291-342.
- Bickle, Penny, Bentley, Alexander, Blesl, Christoph, Fibiger, Linda, Hamilton, Julie, Hedges, Robert R., Lenneis, Eva, Neugebauer-Maresch, Christine, Stadler, Peter, Teschler-Nicola, Maria, Tiefenböck, Barbara, and Whittle, Alasdair 2013a.

- Austria. In: Bickle, Penny, and Whittle, Alasdair W. R. (eds.). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow, 159-204.
- Borić, Dušan. 2016. *Deathways at Lepenski Vir: patterns in mortuary practice*. Belgrade: Serbian Archaeological Society.
- Brumbach, Hetty J., and Jarvenpa, Richard 1997. Woman the hunter: ethnoarchaeological lessons from Chipewyan life-cycle dynamics. In: Claassen, Cheryl, and Joyce, Rosemary A. (eds). *Women in Prehistory: North America and Mesoamerica*. Philadelphia: University of Philadelphia Press, 17-32.
- Dahlberg, Frances 1981 (ed.). *Woman the gatherer*. New Haven: Yale University Press.
- Dohrn-Ihmig, Margarethe 1983, Das bandkeramische Gräberfeld von Aldenhoven Niedermerz, Kreis Düren. In: Bauchhenß, Gerhard (ed). *Archäologie in den Rheinischen Lössbörden: Beiträge zur Siedlungsgeschichte im Rheinland*. Rheinische Ausgrabungen 24. Köln: Rheinland, 47-190.
- Estioko-Griffin, Agnes, and Bion Griffin, Percival 1981. Woman the hunter: the Agta. In: Dahlberg, Frances (ed.). *Woman the gatherer*. New Haven: Yale University Press, 121-151.
- Grünberg, Judith M 2000a. *Mesolithische Bestattungen in Europa. Ein Beitrag zur vergleichenden Gräberkunde 1*. Internationale Archäologie 40. Rahden/Westf.: Leidorf.
- Grünberg, Judith M 2000b. *Mesolithische Bestattungen in Europa. Ein Beitrag zur vergleichenden Gräberkunde 2*. Internationale Archäologie 40. Rahden/Westf.: Leidorf.
- Grünberg, Judith M. 2016: Mesolithic burial. Rites, symbols and social organisation of early postglacial communities. In: Meller, Harald, Grünberg, Judith M., Gramsch, Bernhard, Larsson, Lars, and Orschiedt, Jörg (eds). *Mesolithic Burials: Rites, Symbols and Social Organisation of Early Postglacial Communities: International Conference Halle (Saale), Germany, 18th-21th September 2013*. Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 13-24.
- Grünberg, Judith M., Graetsch, Heribert A., Heußner, Karl-Uwe, and Schneider, Karla 2016. Analysis of Mesolithic grave goods from upright seated individuals in Central Germany. In: Meller, Harald, Grünberg, Judith M., Gramsch, Bernhard, Larsson, Lars, and Orschiedt, Jörg (eds). *Mesolithic Burials: Rites, Symbols and Social Organisation of Early Postglacial Communities: International Conference Halle (Saale), Germany, 18th-21th September 2013*. Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 291-328.
- Haller, Dieter 2005: *dtv-Atlas Ethnologie*. dtv 3259. München: Deutscher Taschenbuch Verlag.
- Hamilton, Julie, Bentley, Alexander, Bickle, Penny, Fibiger, Linda, Hedges, Robert R., Reynard, Linda, Wright, Carrie, Cullen, Philippa, Dale, Christopher, Nowell, Geoff, and Whittle, Alasdair 2013. Seeking diversity: methodology. In: Bickle, Penny, and Whittle, Alasdair W. R. (eds.). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow, 29-48.
- Hedges, Robert R., Bentley, Alexander, Bickle, Penny, Cullen, Philippa, Dale, Christopher, Fibiger, Linda, Hamilton, Julie, Hofmann, Daniela, Nowell, Geoff, and Whittle, Alasdair 2013. The supra-regional perspective. In: Bickle, Penny, and Whittle, Alasdair W. R. (eds.). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow, 343-384.
- Heide, Birgit 2003 (ed.). *Leben und Sterben in der Steinzeit*. Mainz: Zabern.
- Höckmann, Olaf 1982 Zur Verteilung von Männer- und Frauengräbern auf Gräberfeldern des Frühneolithikums und des älteren Mittelneolithikums. *Jahrbuch Römisch-Germanisches Zentralmuseum*, 29, 1982, 13-74.
- Hofmann, Daniela, Pechtl, Joachim, Bentley, Alexander, Bickle, Penny, Fibiger, Linda, Grupe, Gisela, Hamilton, Julie, Hedges, Robert R., Schultz, Michael, and Whittle, Alasdair 2013. Southern Bavaria. In: Bickle, Penny, and Whittle, Alasdair

- W. R. (eds.). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow, 205-250.
- Hofmann, Kerstin P. 2009: Grabbefunde zwischen sex und gender. In: Rambuscheck, Ulrike (ed.). *Zwischen Diskursanalyse und Isotopenforschung. Methoden der archäologischen Geschlechterforschung*. Bericht 3. Sitzung der AG Geschlechterforschung, Schleswig 2007. Frauen – Forschung – Archäologie 8. Münster: Waxmann, 133-161.
- Kahlke, Hans-Dietrich, Schwarze, Ernst, and Mädler, Jonas 2004. *Sondershausen und Bruchstedt: Zwei Gräberfelder mit älterer Linienbandkeramik in Thüringen*. Weimarer Monographien zur Ur- und Frühgeschichte 39. Weimar: Thüringisches Landesamt für Archäologische Denkmalpflege.
- Lee, Richard, and Devore, Irven 1969. *Man the hunter*. Chicago: Aldine.
- Lenneis, Eva 2016: Review 'Daniela Nordholz, Untersuchungen zum Verhältnis der Geschlechter in der Linearbandkeramik: ausgewählte Befunde aus Gräberfeldern. Internationale Archäologie 127. Rahden/Westf. 2015'. *Germania*, 94, 309-311.
- Mays, Simon 1999: *The archaeology of human bones*, London: Routledge.
- Meier-Arendt, Walter 1975. *Die Hinkelstein-Gruppe. Der Übergang vom Früh- zum Mittelneolithikum in Südwestdeutschland*. Römisch-Germanische Forschungen 35. Berlin: de Gruyter.
- Müller, Johannes 2002. Zur Belegungsabfolge des Gräberfeldes von Trebur: Argumente der typologieunabhängigen Datierungen. *Journal of Neolithic Archaeology* 4, 2002. <www.jna.uni-kiel.de/index.php/jna/issue/view/15>, e-published 01 October 2002; retrieved 17 January 2019.
- Nelson, Sarah Milledge 1997. *Gender in Archaeology*. Analyzing power and prestige. Walnut Creek: AltaMira.
- Neugebauer-Maresch, Christina, and Lenneis, Eva 2013. Introduction. In: Bickle, Penny, and Whittle, Alasdair W. R. (eds.). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow, 170-176.
- Neugebauer-Maresch, Christina, Lenneis, Eva, and Bickle, Penny 2015. *Das bandkeramische Gräberfeld von Kleinhadersdorf*. Mitteilungen der Prähistorischen Kommission der Österreichischen Akademie der Wissenschaften 82. Wien: Verlag der Österreichischen Akademie der Wissenschaften.
- Nieszery, Norbert 1995. *Linearbandkeramische Gräberfelder in Bayern*. Internationale Archäologie 16. Espelkamp: Leidorf.
- Nilsson Stutz, Liv, and Larsson, Lars 2016: Disturbing the dead. Archaeothantological analysis of the stone age burials at Zvejnieki, Latvia (excavated 2006-2009). *Journal of Archaeological Science: Reports*, 10, 715-724.
- Nordholz, Daniela 2015. *Untersuchungen zum Verhältnis der Geschlechter in der Linearbandkeramik: ausgewählte Befunde aus Gräberfeldern*. Internationale Archäologie 127. Rahden/Westf.: Leidorf.
- Robb, John and Harris, Oliver J. T. 2018. Becoming Gendered In European Prehistory: Was Neolithic Gender Fundamentally Different? *American Antiquity*, 83, 128-147.
- Sørensen, Marie Louise S. 2000. *Gender archaeology*. Cambridge: Polity.
- Sørensen, Marie Louise S. 2007: Gender, things, and material culture. In: Nelson, Sarah M. (ed.). *Women in antiquity: theoretical approaches to gender and archaeology*. Lanham: AltaMira Press, 75-106.
- Spatz, Helmut 1999a. *Das mittelneolithische Gräberfeld von Trebur, Kreis Groß-Gerau 1*. Materialien zur Vor- und Frühgeschichte von Hessen 19. Wiesbaden: Landesamt für Denkmalpflege Hessen.
- Spatz, Helmut 1999b. *Das mittelneolithische Gräberfeld von Trebur, Kreis Groß-Gerau 2*. Materialien zur Vor- und Frühgeschichte von Hessen 19. Wiesbaden: Landesamt für Denkmalpflege Hessen.

- Ucko, Peter J. 1969. Ethnography and archaeological interpretation of funerary remains. *World Archaeology*, 1, 1969, 262-280.
- Whittle, Alasdair 1985. *Neolithic Europe. A survey*. Cambridge World Archaeology. Cambridge: Cambridge University Press.
- Whittle, Alasdair, Alexanders, Anders R., Bentley, Alexander, Bickle, Penny, Cramp, Lucy, Domboróczki, László, Fibiger, Linda, Hamilton, Julie, Hedges, Robert R., Kalicz, Nándor, Kovács, Zsófia E., Marton, Tibor, Oross, Krisztián, Pap, and Raczky, Ildikó 2013a. Hungary. In: Bickle, Penny, and Whittle, Alasdair W. R. (eds.). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow, 49-100.
- Whittle, Alasdair, Bentley, Alexander, Bickle, Penny, Dočkalová, Marta, Fibiger, Linda, Hamilton, Julie, Hedges, Robert R., Mateiciucová, Inna, and Pavúk, Juraj 2013b: Moravia and western Slovakia. In: Bickle, Penny, and Whittle, Alasdair W. R. (eds.). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow, 101-158.
- Zagorska, Ilsa 2016: Mesolithic burials traditions in Latvia. A case study from Zvejnieki burial ground. In: Meller, Harald, Grünberg, Judith M., Gramsch, Bernhard, Larsson, Lars, and Orschiedt, Jörg (eds). *Mesolithic Burials: Rites, Symbols and Social Organisation of Early Postglacial Communities: International Conference Halle (Saale), Germany, 18th-21th September 2013*. Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 225-239.

Making the invisible visible. Expressing gender in mortuary practices in north-eastern Hungary in the 5th millennium BCE

Alexandra Anders and Emese Gyöngyvér Nagy

Abstract

Polgár Island, a loess-covered lag surface rising above a former floodplain, covers some 60-70 km² and lies on the outskirts of Polgár, in north-eastern Hungary, on the Great Hungarian Plain. We have excavated some 350 burials at eight sites in this territory, dating from the Middle Neolithic Linearbandkeramik to the Late Neolithic Tisza-Herpály-Csőszhalom complex (5500-4500 cal BCE). The region offers excellent potential for a detailed, in-depth study of diachronic change. We reviewed the available archaeological record of the graves – the burial rites, the objects deposited in the grave, and the bioarchaeological data on the human remains – and the figural representations from the perspective of the archaeology of gender. The overall impression of the Middle Neolithic Alföld-Linearbandkeramik period is that even though there were distinct gender differences in the socially determined lifeways and diet, these are not reflected in the funerary rites. In contrast, in the Late Neolithic (early 5th millennium BCE), there is a striking display of gender differences in the mortuary practices of at some sites on the Great Hungarian Plain. Women were laid on their left side, men on their right side. Some grave goods were only accorded to women, whereas others were exclusive to men. Male and female costume differed substantially, at least judging from the articles deposited in the burials. This differentiation is so strong that it can even be noted in child burials. Yet, there are examples that show that, despite the seemingly strict rules, the boundary between gender roles could be rather fluid at times. Previous researchers tended to link the appearance of burials reflecting gender-based differences to the emergence of formal cemeteries – a case in point being the Copper Age Tiszapolgár culture. However, it would appear that this process began at least 500 years earlier, and not necessarily within the world of formal cemeteries.

Keywords: *Middle Neolithic, Late Neolithic, Polgár Island, Polgár-Csőszhalom, archaeology of gender, mortuary practices*

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General Introduction

In a thought-provoking study published in 2018, John Robb and Oliver T. Harris explored the issue of ‘*why is there so little gender archaeology for the European Neolithic?*’ (Robb and Harris 2018, 128) and argued that very few imprints of gender have survived in the archaeological record because ‘*Neolithic gender may have operated according to very different principles than gender in later periods in European history, from the Bronze Age to present*’ (Robb and Harris 2018, 142). This contention was the inspiration for us to take a look at the increasing evidence on gender from a smaller region in Hungary and to examine whether it conforms to this broad picture.

Before discussing whether gender can be discerned in the archaeological record from north-eastern Hungary during the 6th and 5th millennia BCE, a small detour seems in order, namely, a look at the extent to which gender archaeology has made an inroad into mainstream archaeological scholarship in Hungary and to what extent it is present in Neolithic studies. Several studies reviewing the archaeology of Hungary in general, and of Neolithic studies in particular, during the communist/socialist period after the Second World War have recently been published. These studies also addressed issues regarding the extent to which research agendas and research methods were determined and influenced by the political situation and the ideology of the period (Laszlovszky and Siklódi 1991; Chapman 1997; Bartosiewicz *et al.* 2011; Bánffy 2013a; 2013b; Chapman and Palincaş 2013; Bartosiewicz 2017), although archaeology was probably the least politically committed discipline among the humanities (Bartosiewicz *et al.* 2011, 287). The ideology of Marxism or, more accurately, its misinterpreted, vulgar-Marxist version, was not conducive to any discussion of theoretical issues because these were deemed politically subversive. In this cultural and ideological environment, prehistorians were discouraged from addressing theoretical issues and prehistory remained atheoretical, dealing instead with questions of chronology, typology, and methodology as well as problems of ethnic migrations (Laszlovszky and Siklódi 1991, 272-273; Szeverényi 2014). There was very little or, at times, almost no room for manoeuvre in archaeology, part of an essentially ‘gender-free’ academic historical discipline (Chapman 1997, 137) with its century-long patriarchal tradition.

It must also be borne in mind that Hungary remained ‘gender-free’ after 1989 too, after the collapse of the communist system, and that there was no proliferation of studies in this field, despite the rapid fall of the physical and intellectual fences that, much like the Berlin Wall, enclosed the country. This shortcoming illustrates that much more time is needed for the inflow of intellectual currents than for a change in material culture¹. As John Chapman and Nona Palincaş (2013, 415) noted, ‘*archaeology continues a long patriarchal tradition*’ in the countries of Eastern Europe. It is more than telling that the first comprehensive overview of gender relations in prehistory, covering also the Neolithic, was written by Chapman (1997)². His keen eyes and Western research perspective discovered the wealth of useful data for gender archaeology in the earlier published reports on Late Neolithic tell settlements, such as the differential deposition of the dead according to sex on a few sites (Chapman

1 Hungarian historiography has much in common with archaeology in this respect, particularly since gender studies are often equated with feminism studies, and a similarly significant lag can be noted in the appearance of Western European mainstream trends (Petó and Szapor 2007). At the time of writing (15 October 2018), the government has banned MA gender courses at universities, and the government’s intention to force the Central European University, one of the theoretical centres for gender studies in Hungary, to leave the country is a clear indication of the use of political means to constrain and ban this discipline.

2 Although the term *gender* does crop up in an earlier study, it is used as a synonym of *sex* (Oravec 1988-1989).

1997, 138). The next study appeared some 10 years later and covered the burials of Polgár-Csőszhalom, a Late Neolithic tell site, addressing the concept of gender in relation to the men, women, and children interred at the site (Anders and Nagy 2007). Zsuzsanna Siklósi can be credited with applying a gender and social archaeology perspective to a broader region in her PhD thesis (Siklósi 2013), in which she analysed 591 burials uncovered at 18 Late Neolithic sites in the Carpathian Basin. Most of the burials had been uncovered in the 1970s or earlier, meaning that the real problem was not lack of evidence, but rather, lack of an appropriate approach and of a greater familiarity with this research direction for applying gender archaeology to the Hungarian material. Together with her colleagues, Siklósi also held a presentation on the potential of gender archaeology, citing several examples, at a workshop organised by the Association of Hungarian Archaeologists in 2014 (Anders 2016a, 15). Sadly, the past years have not brought a major breakthrough in this field – no more than a handful of smaller studies have explored the potential of this direction in archaeology (Anders 2016a; 2016b; Raczky and Anders 2017).

The above brief overview also reveals that most of the examples for Hungarian gender archaeology come from the context of burials and, within that, predominantly from the Late Neolithic. Other aspects of gender preserved in the archaeological record, such as iconography/imagery and activities/household archaeology, rarely appear in prehistoric studies. This imbalance can be ascribed to several reasons: on the one hand, research on burials has a long tradition in Hungarian prehistoric studies (Bognár-Kutzián 1963), while on the other, the burials of the Late Neolithic provide a sufficient amount of good quality data for meaningful analyses, in contrast to household archaeology, a field in which the first tentative steps have only been taken during the past years (Anders and Raczky 2013; Faragó 2016). The period's figural imagery has also yet to be studied from a gender archaeology perspective, although it must, in all fairness, be added that such a study would be constrained by several factors, principally that most were recovered in fragmentary condition and lack secure contexts, having been brought to light from various settlement features. Moreover, a high proportion of the figurines, and particularly the pieces from the Alföld-Linearbandkeramik (ALBK) period, are neutral in terms of sexual characteristics, and even in the case of those that are not, it is dubious to what extent the depiction of a figurine's sex (for example, by means of the breasts) genderises the object (Hansen 2007, 344). Several proposals have been made regarding the interpretation of Middle Neolithic depictions, for example, of the combination of the human face with the incised arc motif appearing on various objects, such as vessels and figurines, in which case it was suggested that the motif appearing variously on the left and right side perhaps denoted men and women (Raczky and Anders 2003, 163). László Domboróczki argued that the triangular head form of the ALBK figurines and the motifs appearing on them relate to men and women and could ultimately be seen as fertility symbols (Domboróczki 2005). Svend Hansen regarded the face pots so typical of the Szakálhát group (which is a southern regional ceramic style variant of the ALBK) as portraying the complete female body (Hansen 2007, 191).

The world of the Late Neolithic presents an entirely different picture. There are many regional variations in figural representations. Some sites virtually lack finds of this type (Berettyóújfalu-Herpály [Kom. Hajdú-Bihar, Hungary]: Kalicz and Raczky 1987, 118; Hódmezővásárhely-Gorzsa [Kom. Csongrád, Hungary]: Horváth 1987, 43), while others yielded a high number of the well-known, iconic figurines (Szegevár-Tűzköves and Hódmezővásárhely-Kökénydomb [Kom. Csongrád, Hungary]: Trogmayer *et al.* 2005, 53-64; Hansen 2007, 192-196), even if their overall number is considerably lower than in the preceding period (Hansen 2007, 192). Male imagery also makes its appearance, and its interpretation is aided by various attributes (*e.g.* the sickle axe from Szegevár-Tűzköves: Trogmayer *et al.* 2005, 53; Hansen 2007, 192-193). The imagery itself becomes

more complex and includes various costume adornments, jewellery, and a variety of applied and incised decorative designs of ‘artistic quality’ (Hansen 2007, 191), often enclosed within panels on the body of the figurine or vessel, which can be seen as part of a sophisticated set of symbols that remain undecipherable to us (Öcsöd-Kováshalom [Kom. Jász-Nagykun-Szolnok, Hungary], face pot: Raczky 2000). In a few cases, it has proven possible to examine the context of some finds (Bánffy 2015, 718-720) and to tentatively reconstruct the role of the face pot from Öcsöd-Kováshalom in the rituals practised in the settlement (Raczky and Füzesi 2016). These examples illustrate the potential for gender studies by taking a fresh look at the available source material, which has largely remained untapped.

Introduction about Polgár Island in the Neolithic

Polgár Island, a loess-covered lag surface rising above the former floodplain, covers some 60-70 km² and lies on the outskirts of Polgár (Kom. Hajdú-Bihar, Hungary), in north-eastern Hungary (Fig. 1; Sümegi *et al.* 2005; 2013). The boundaries of the micro-region reflect the past natural palaeogeographic conditions. As part of our investigations, we were able to reconstruct the sequence of human occupation and the changes in the micro-region’s settlement patterns between the 6th and 5th millennium BCE, based on the information gained from many different sources (field surveys, magnetometer surveys, palaeoenvironmental studies: Raczky and Anders 2009; Moskal-del Hoyo *et al.* 2018, 338-339). Following several rescue and research excavations carried out during the past two decades, we now have a fairly detailed picture of the Neolithic of this region. We have excavated 37 settlements and some 350 burials on eight sites in the Polgár area, dating from the Middle Neolithic Linearbandkeramik to the Late Neolithic Tisza-Herpály-Csőszhalom complex, dating to between 5500 and 4500 cal BCE (Raczky and Anders 2009; Anders 2016b). The burials were not deposited in independent formal cemeteries; all of them were settlement burials.

In view of the environmental conditions and the previous archaeological research, the region offers excellent potential for a detailed, in-depth study of diachronic changes, the manifestation or expression of gender among them. In the following, the issue of gender will be addressed at greater length in the context of burials, with regard to the body/skeleton itself, as well as the burial rites and the grave goods during the Middle and the Late Neolithic.

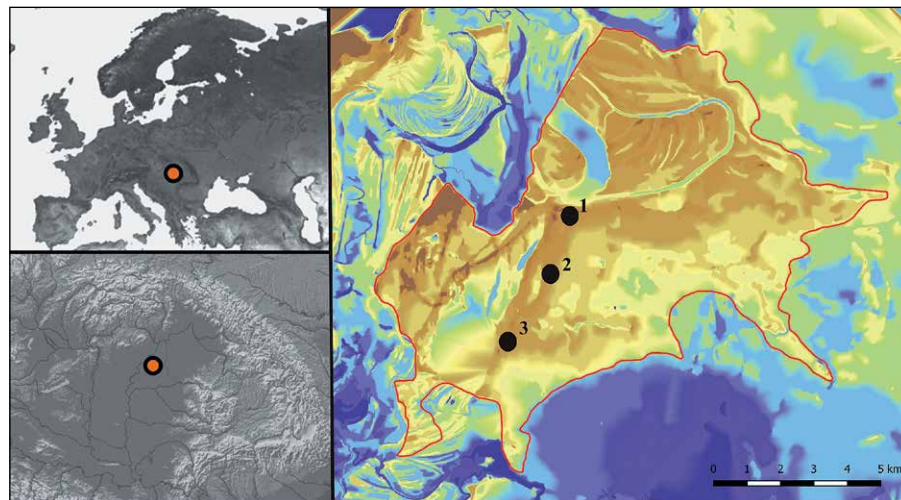


Figure 1. Polgár Island (Kom. Hajdú-Bihar, Hungary), with the sites mentioned in the text. 1 Polgár-Csőszhalom; 2 Polgár-Ferenci-hát; 3 Polgár-Piócásidűlő (Füzesi *et al.* 2016, 3, Fig. 3).

The evidence for gender in the Alföld-Linearbandkeramik

Burials: The grave goods

In most cases, we cannot explicitly define the gender of the individuals: neither the burial rites nor the deposited objects reflect significant differences between the individuals identified as males or females during the physical anthropological assessment. Both men and women were interred in a crouched position, laid on their left side. Although only a few burials yielded grave goods, it must be noted that beads, which were relatively frequent, occurred in both male and female graves (Raczky and Anders 2013, 73-78; Anders 2017).

Yet, there are some noteworthy exceptions at the Neolithic settlement at Polgár-Ferenci-hát. The earliest burial could be assigned to the formative ALBK I period (previously labelled the Szatmár group). The grave contained the south-east to north-west oriented burial of a 22- to 28-year-old woman laid to rest in a crouched position. The objects deposited in her burial eclipse by far those from the other known graves of the period in terms of their composition, their number, and their quality. There were eight clay beads on and in the region of the head. Another unusual trait of the grave inventory was the deposition of 11 vessels, seven of which are miniature vessels and two of which are small-sized vessels. The most remarkable find in this burial was undoubtedly the small anthropozoomorphic cattle figurine (Raczky and Anders 2018). Since the richness of this burial is unparalleled in this period, we have no way of knowing whether any significance should be attached to the fact that this rich array of grave goods was deposited in a grave containing the burial of a young woman.

The burials of two men from the ensuing period, the second phase of the Middle Neolithic (ALBK II-IV), are of particular significance owing to the 10 cm long obsidian cores placed beside them (Raczky and Anders 2013, 75), because similar objects have not been brought to light from other burials of this period to date. Although children are usually almost invisible in the archaeological record, they are relatively well represented in the ALBK II-IV. Of the 120 examinable individuals, 41 had passed away before reaching 15 years of age, while 79 had died during adulthood (K. Zoffmann 2011, 22-24). Seven burials contained jewellery items. A total of 38 *Spondylus* shell articles were recovered from seven burials (six large beads, two armrings, three necklaces, and two bracelets). The fact that, with the exception of a single bead, all *Spondylus* jewellery items (including the quite large and heavy pieces) were exclusively recovered from child burials of the *infans* I age category suggests that some of them had played a prominent role in their community (Anders 2017). The size and weight of some of these objects suggest that they were not real adornments worn on the body, but, rather, signs of social status.

Burials: The skeletons

Bioarchaeological micro-methods provide information about the deceased relating to the various aspects of their lifestyle. They shed light on the daily lives, diet, and workloads of prehistoric communities. The height and body mass estimates on the samples from the Polgár region reveal that women were smaller in stature and lighter than men, to an extent which cannot be solely ascribed to sexual dimorphism, but also to dietary stress in childhood (Whittle *et al.* 2013, 78; Macintosh *et al.* 2016). Likewise, the higher incidence of *cribra orbitalia* (Whittle *et al.* 2013, 83; Ash *et al.* 2016) and the higher proportion of dental caries among women (Whittle *et al.* 2013, 79-80; Bickle 2016, 101) is another indication of an inadequate protein

intake, in terms of both quantity and quality, from childhood onward. Their general health condition was further impaired by pregnancy and the increasing stress of breastfeeding children. Moreover, women also undertook physically demanding, although not precisely definable, tasks that caused visible alterations on their upper arm bones, more so than on men's (Macintosh *et al.* 2014).

In contrast, we have quite limited information on the lifestyle of children: according to the isotope results, they may have been breastfed for a long time, up to the age of four. However, as they usually had one or two decayed teeth already in their earlier years, it seems likely that they may have consumed meals high in carbohydrates at the same time (Whittle *et al.* 2013, 80-84).

Iconography

Compared with the Early Neolithic, there is a notable decrease in the number of human representations, predominantly figurines, and they also become more schematic – and more frequently genderless. The exemplars on which sex is denoted exclusively depict females. No more than a handful of figural depictions were brought to light on Polgár Island, namely, three slab figurines (Nagy 1999, 31-32) and the fragment of a face pot with the incised arc motif (Raczky and Anders 2012, Fig. 5,1). The large vessel found at Polgár-Piócási-dűlő is therefore all the more remarkable for its unique depiction of the female body (Fig. 2). The vessel is decorated with different types of incisions and five appliquéd human representations. The five figures can be divided into two types. The figure standing in the centre of the composition and the other figures, arranged symmetrically to its right and left, although not exactly in line with each other, fill the central, most prominent portion of the vessel. The central figure is more realistically modelled, with finer details than the others, while the other figures are more schematic and only bear incisions and fingertip impressions. The central figure is clearly a woman, whose breasts are indicated with two small knobs, while the sex of the others is not indicated. The central figure wears easily identifiable jewellery: a necklace graces her neck, and she wears a girdle. The vessel appears to have been intentionally broken before its deposition in one of the settlement's pits (Nagy *et al.* 2014). The vessel is remarkable on several counts: one unusual feature is the curious arrangement of its partly unfinished ornamentation (for a detailed discussion, see Anders *et al.* in press), another is the relief-like female figure, which is unparalleled during this period and has no analogies until much later. The joint depiction of a necklace and girdle on the female figure is also quite unique, even more so because the combination of these two adornment types is unattested to in the ALBK burials.

Figure 2. Polgár-Piócási-dűlő (Kom. Hajdú-Bihar, Hungary). 1 Large decorated vessel from Feature 27 (Nagy *et al.* 2014, 11, fig. 1); 2 Detail of the decoration with the five appliquéd human representations (electrographic photomontages: András A. Király).



The evidence for gender in the Late Neolithic

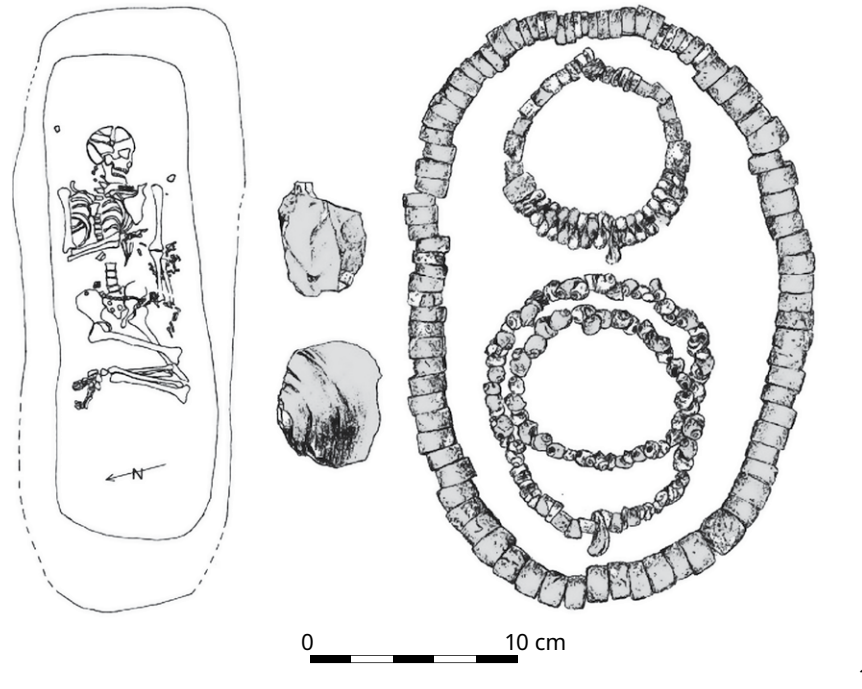
Burials: The rite and the grave goods

This picture changed radically around the mid-5th millennium BCE. Late Neolithic burials have quite different characteristics. The expression of gender is most obvious in the mortuary domain, where strict rules emerged that affected both the ritual and the grave goods. This is especially true at Polgár-Csőszhalom, where the activity began in 4875-4845 cal BCE (95% probability), probably in 4870-4850 cal BCE (68% probability) and the activity ended 4675-4590 cal BCE (95% probability), probably in 4655-4625 cal BCE (68% probability). (Raczky and Anders 2017, 74). Although the crouched position remained the usual body placement, males were consistently laid on their right and women on their left side (Fig. 3; Anders and Nagy 2007), a practice generally confirmed by the physical anthropological examination of the human skeletal remains (K. Zoffmann 2012).

The individuals were buried with several objects made from various materials. Some of these objects, including, for example, *Spondylus* armrings and necklaces, occurred in association with both genders, while other objects and raw materials were clearly gender-specific. Thus, while beads fashioned from red deer canines were unrelated to gender, imitations of red deer canines occurred exclusively in female graves. At the same time, exactly the opposite can be noted in the case of large-sized *Spondylus* beads and wild boar mandibles, which were distinctive to male burials (Anders and Nagy 2007). The most common object types were girdles of strung *Spondylus* or marble beads, which were obviously female attributes. We examined the possible correlation between girdles or axes (x-axis) and age (y-axis) and sex in the furnished burials using correspondence analysis (46 in all; Fig. 4; Table 1)³. Individuals interred with a girdle appear on the left side of the x-axis and those with a polished stone tool on the right side. This statistical analysis confirmed that there is a correlation between girdles and women (left side) and between axes and men (right side). Girdles were typical pieces of female attire, as shown by the 20 exemplars recovered from the 26 female burials. The custom of wearing girdles was not only gender-specific, but also age-specific: although two child burials contained girdles, they were typically recovered from older women's burials; all 2 of the women of the *senior* age group and eight of the 10 women of the *adultus* group had a girdle of beads around their waist. In contrast, only three of all 7 of the women of the *maturus* group were accorded girdles (Anders 2017). With the exception of a single burial, all the rest 24 polished stone axes were recovered from male burials. The deposition of polished stone axes had a relatively even distribution in terms of age groups compared with that of girdles. Both objects had a fixed place within the burial: girdles were worn around the waist or the hips, while axes were deposited immediately in front of the individual's head, on the right side.

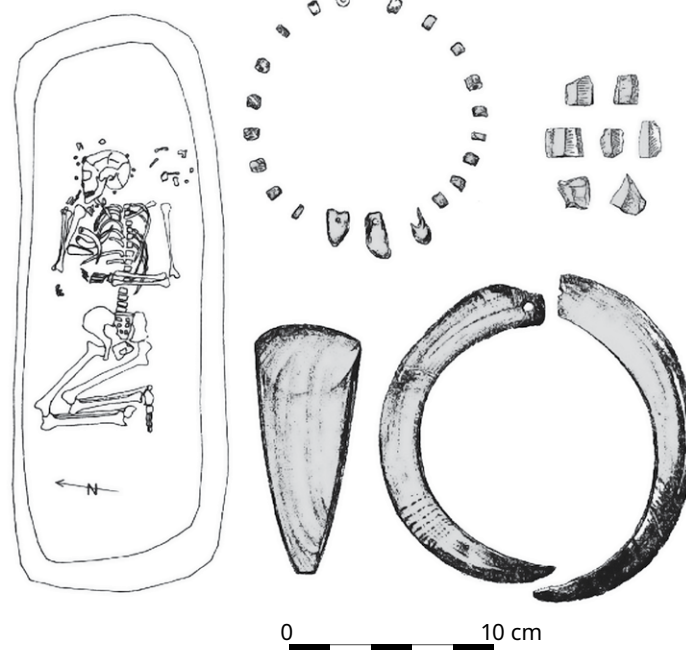
Bead girdles were a typical element of female attire: they were not accessories made for mortuary purposes, but, rather, personal objects, which can also be interpreted as a sign of womanhood. Similarly, the axes, which usually bear use-wear traces, can be considered as tokens of manhood. Applying Marie Louise S. Sørensen's (2010) classification of Bronze Age bodiness, the former can be categorised as attached objects, the latter as body extensions. These rules were so strict that they even affected child burials: the youngest girl laid to rest with her girdle was three years old at most, while the youngest boy interred together with an axe died around the age of four to six. (Of course, one may speculate whether gender roles had already become differentiated at such a young age, or whether these burials should,

3 Using the program PAST 3.20 (Hammer *et al.* 2001).



1

Figure 3. Polgár-Csőszhalom (Kom. Hajdú-Bihar, Hungary). Burials of the single-layer settlement. 1 a typical female burial (feature 362) with inventory (necklace made of bone/antler and Spondylus shell beads; bracelet made of red deer canine teeth, marble, Spondylus shell and snail shell beads; girdle belt made of Spondylus beads; stone splinters); 2 a typical male burial (feature 406) with inventory (string of beads made of red deer canine teeth, Spondylus shell and marble beads; chipped stone implements; chisel blade made from green slate; boar tusk plates). (Raczky et al. 2014, 324, fig. 5:1-2).



2

rather, be interpreted as cases in which we are dealing with the markers of the end of their constructed life histories, which, so to speak, anticipated their adulthood).

In some cases, the sex of the individuals as defined by the physical anthropological examination did not correlate with the binary division of gender roles suggested by the burial rite and the grave goods. These exceptions include a male (by sex) laid to rest on his left side and four females laid on their right side, that is, on the gendered male side. Only one of these individuals had grave goods: a female accompanied by four vessels, which, incidentally, is a rather uncharacteristic practice at

	Grave identification number	Sex	Age group	Position of the body in the grave	Girdle or axe
1	70	female	senile	left side	girdle
2	86	?	juvenile	right side	axe
3	126	child	<i>infans</i> II	right side	axe
4	138	female	mature	left side	girdle
5	145	male	mature	right side	axe
6	196	female	juvenile	left side	girdle
7	207	female	adult	left side	girdle
8	213	female	mature	left side	girdle
9	214	male	adult	right side	axe
10	226	child	<i>infans</i> II	left side	girdle
11	262	male	mature	right side	axe
12	297	female	mature	left side	axe
13	355	female	mature	left side	girdle
14	362	female	adult	left side	girdle
15	398	male	mature	right side	axe
16	406	male	adult	right side	axe
17	472	male	adult	right side	axe
18	484	male	senile	right side	axe
19	486	male	adult	right side	axe
20	489	male	adult-mature	right side	axe
21	502	child	<i>infans</i> II	left side	girdle
22	547	male	adult	right side	axe
23	612	female	mature	left side	girdle
24	613	female	mature	left side	girdle
25	618	male	juvenile	right side	axe
26	619	female	adult	left side	girdle
27	630	male	adult	right side	axe
28	642	male	mature	right side	axe
29	645	male	senile	right side	axe
30	666	child	<i>infans</i> I	right side	axe
31	754	child	<i>infans</i> I	left side	girdle
32	785	male	senile	right side	axe
33	828	female	juvenile	left side	girdle

Table 1 (continued on next page). Polgár-Csőszhalom (Kom. Hajdú-Bihar, Hungary). Basic data for the graves from the single-layer settlement used for the correspondence analysis in Figure 4. (Age groups: *infans* I: 0-7 years, *infans* II: 8-14 years, juvenile: 15-20/23 years, adult: 24-40 years, mature: 41-60 years, senile: 60+ years).

34	836	female	mature	left side	girdle
35	886	female	senile	left side	girdle
36	902	female	adult	left side	girdle
37	906	male	adult	right side	axe </td
38	913	female	adult	left side	girdle
39	921	male	mature	right side	axe
40	936	male	mature	right side	axe
41	1024	male	adult	right side	axe
42	1057	child	infans II	left side	girdle
43	1083	male	adult	right side	axe
44	1181	male	juvenile	right side	axe
45	1183	child	infans II	right side	axe

Table 1 (continued).

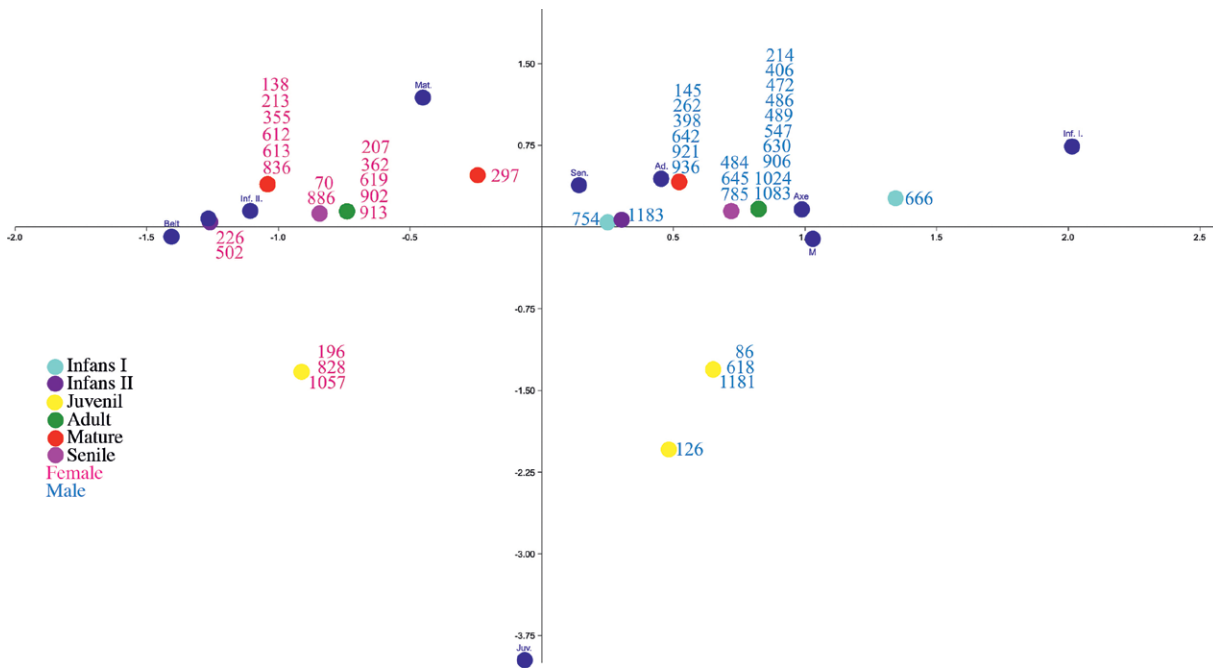


Figure 4. Polgár-Csőszhalom (Kom. Hajdú-Bihar, Hungary). Correspondence analysis of the possible correlation between girdles or axes and the age groups of the deceased in the single-layer settlement.

this site. Another grave contained the burial of a young female who was interred with a typically masculine object, a large stone blade, and with a dog (Raczky and Anders 2017, 69). Yet another exception was the burial of a six- to eight-year-old child with a reverse, that is, north-south, orientation lying on the right side like a boy but wearing a girdle like a girl. Of course, we have to bear in mind the limitations of sexing using physical anthropological methods; however, it would appear that in the case of Polgár-Csőszhalom, we have to reconsider the model of binary gender oppositions, as we already noted in an earlier publication (Anders and Nagy 2007), even if it does it appear to have been the norm in most cases. The above examples are an indication that despite the seemingly strict rules, the boundary between gender roles could be rather fluid at times. It is also remarkable that this fluidity may have principally affected and altered female roles, since five of the six recorded cases relate to the roles of women. According to this interpretation, male roles could be

much more fluidly and flexibly adopted by biological females, while female roles were less open to biological males. At the same time, these cases highlight the need to look beyond the often misleading construct of the now-criticised three-fold categorisation of man, woman, child (Chapman and Palıncaş 2013; Stratton 2016), in order to gain a better understanding of the diversity of a prehistoric world that was no less colourful than our own.

In a previous study, we made an attempt to compare the incomparable by estimating relative the values of the prestige items deposited in male and female burials (Raczky and Anders 2008). We also tried to determine whether there was any significance to the number of grave goods and, if so, what (Raczky and Anders 2017). Both comparisons indicated that prestige items were more abundant in female burials than in male ones, and an extravagantly richly furnished burial was the interment of a *maturus* woman (Raczky and Anders 2017, 66-69).

Polgár-Csőszhalom is an unusually complex site. The settlement complex is made up of a tell, a multiple enclosure system ringing the habitation mound, a single-layer settlement, and another double-enclosure system. At this site, even the spatial distribution of the burials has gendered aspects: while only male and child graves have been found in the tell settlement to date, the single-layer settlement has yielded female graves as well. As a matter of fact, the single-layer settlement was dominated by female graves (Raczky and Anders 2008, 45-49).

Burials: The skeletons

A total of 147 burials have been uncovered in the various spatial segments of the Polgár-Csőszhalom site (K. Zoffmann 2012; Raczky and Anders 2017, 65-66): 22 in the tell settlement (15 child burials, five male burials, one incomplete adult laid on the back, and one symbolic male burial) and 125 burials in the single-layer settlement (48 female burials, 33 male burials, 26 child burials, one symbolic burial, and 16 burials of indeterminate sex; K. Zoffmann 2012; Raczky and Anders 2017, 65-66). In our previous studies, we argued that the latter were hardly representative of the settlement's population, based on the population figures calculated from the number of buildings and the duration of the settlement's occupation (Raczky and Anders 2017, 74). Moreover, children are underrepresented, while the number of *maturus* women is much higher than the expected normal age distribution in the single-layer settlement (Anders and Nagy 2007; Raczky and Anders 2017, 76-77).

The palaeopathological analyses of the burials uncovered in the single-layer settlement at Polgár-Csőszhalom yielded the following results: *cribra orbitalia* could be identified in the case of 12 women but only five men. Pathologies of the spine and inflammation of the joints were also frequent (10 men, 12 women), and bone tumours were also identified. Elderly men and women both suffered from spondylosis and arthritis, the latter usually in the knees and pelvic joints, as well as sometimes in the mandible and elbows. Enthesopathy, involving the inflammation of the attachment of a tendon or ligament to a bone, one of the concomitant symptoms of osteoporosis, was identified among both men and women, meaning that their movement was often impaired by joint pain. One of the *adultus-maturus* women had probably limped because of the osteochondrosis of the tarsal bones, and the life of another *maturus* woman had no doubt been impaired by a congenital dislocated hip. Dental caries was observed in 19 cases (12 women and seven men) (K. Zoffmann 2012; Anders 2017).

Julia I. Giblin sampled 10 individuals for strontium ($^{87}\text{Sr}/^{86}\text{Sr}$), carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) isotope analyses as part of her doctoral thesis (Giblin 2011). Unfortunately, the sampling was imbalanced because eight of the graves contained female burials (one of the child burials was assigned to the female burials on the strength of the grave goods and the body placement) and only two

contained male burials. With the exception of a single sample, the other samples reflected a diet that generally included meat and dairy products. The strikingly low $\delta^{15}\text{N}$ values for the girl interred with an unusual grave good, a necklace of strung genuine and imitation deer canines, indicate a wholly different diet, based on plant protein (Giblin 2011, 249).

Iconography

While the number of figural representations from Polgár-Csőszhalom is not particularly high, the form and the diversity of their types – anthropomorphic vessels and free-standing figurines of men and women as well as animals (Raczky 2002; Sebők 2007, 107-108) – are comparable to the similar finds from tell settlements on the southern Hungarian Plain (Hansen 2007, 192). A remarkable find was recovered from one of the pits of the single-layer settlement (Fig. 5; Raczky 2002, 82 Fig. 2,1a-d): a fragment of the left arm, bent at the elbow that had once been part of a carefully made, barely 4.5 cm high miniature statuette portraying a seated figure. The small depression on the shoulder suggests it underwent a similar modelling as figurine V from Szegvár-Tűzköves and the figurines bearing various implements from Crkvine in Stubline (Belgrade, Serbia; Borić 2015, 946-947). Representations that can be securely identified as portrayals of women and anthropomorphic vessel fragments

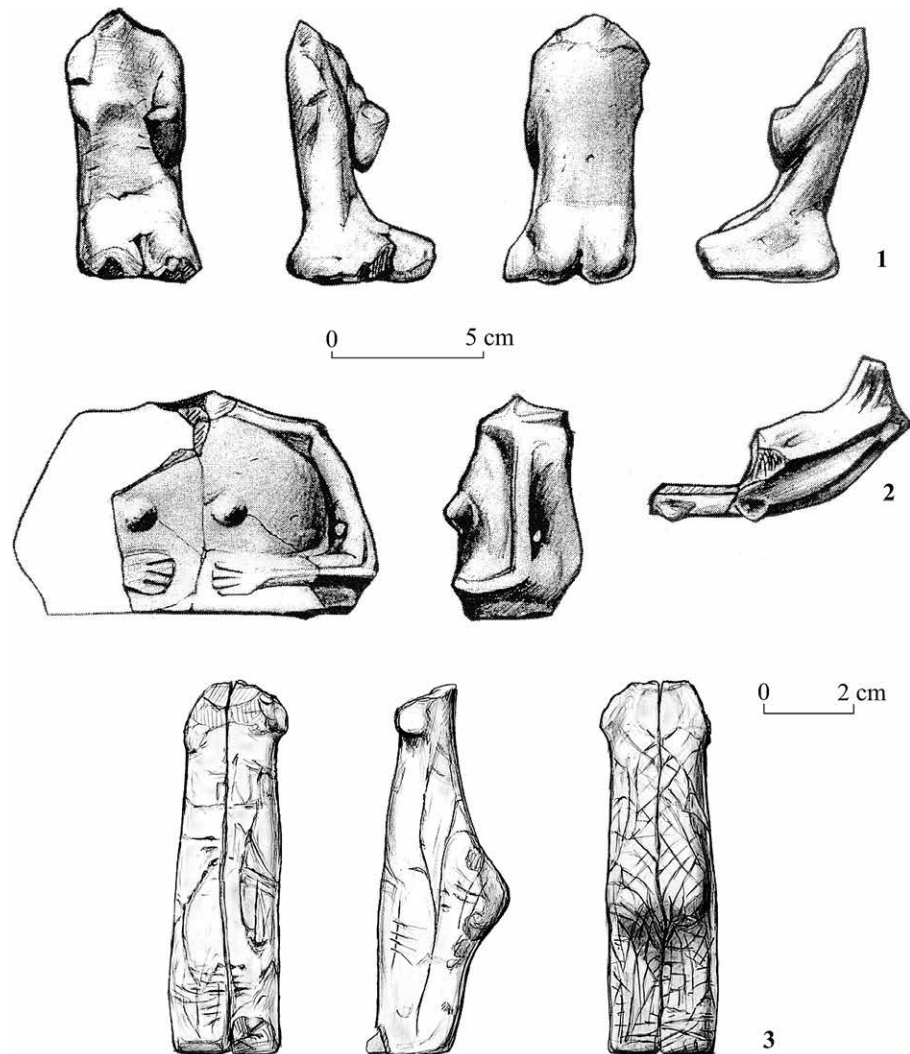


Figure 5. Anthropomorphic representations from Neolithic settlements on Polgár Island (Kom. Hajdú-Bihar, Hungary). 1 Polgár-Csőszhalom, single-layer settlement, feature 242; 2 Polgár-Csőszhalom, single-layer settlement, feature 751; 3 Polgár-Csőszhalom, tell settlement, feature 888 (1-2 Raczky 2000, 90, Fig. 2,1-2; 3 Raczky and Anders 2008, 41, Fig. 3,9).

are known from both the single-layer settlement and the tell settlement (Raczky 2002, Fig. 1; Fig. 2,2). At the same time, a steatopygous female figurine fitted together from two halves, evoking the figurines of the Early Neolithic, came to light on the tell as part of an assemblage containing a variety of unusual objects, such as miniature clay sun discs, miniature clay vessels, stone tools, and a *Spondylus* armring (Raczky and Anders 2008, Fig. 3).

Discussion

In the foregoing, we reviewed roughly 1000 years of a relatively small region in eastern Hungary with a focus on what we can learn about gender from the available archaeological record (burial rites, the articles deposited in the grave, and the bioarchaeological data from the human remains). The available archaeological record differs for the Middle and the Late Neolithic: in the case of the former, there is a greater abundance of bioarchaeological data, while in the case of the latter, the archaeological evidence is far richer. There is no traceable continuity between the settlements of the two periods; at the same time, we witness the appearance of fewer but considerably more concentrated settlements during the investigated time span. Similarly, we can note major differences in burial customs.

The burial rites of the Middle Neolithic ALBK period offer few clues relating to gender: the deceased were interred in a crouched position and generally laid on their left side; men and women thus could not be distinguished based on body placement. Nevertheless, there were some prominent individuals among them who, for some reason or other, were accorded considerably more and/or unusual objects, such as the woman with the cattle figurine and numerous vessels or the male burials containing obsidian cores. Similarly, the high number of *Spondylus* beads and *Spondylus* armrings found in the burials of six children under the age of seven at Polgár-Ferenci-hát is a sign of their probably prominent role in their community. Although we do know of other richly furnished child burials from the ALBK distribution, there are no more than one or two burials of this type in any given site (Oravec 1998-1999, 59). Looking at the entire LBK distribution, most of the similarly richly furnished burials were interments of older, 7- to 13-year-old children (Siemoneit 1977, 35; Hedges *et al.* 2013, 380). An indication of sex appears indirectly among the depictions, in the form of the arc motif on the right or left side or the unusual, unique modelling of the female relief on the vessel from Polgár-Piócási-dűlő. There are considerably more data on the health and diet of the interred individuals, in which we can also discern gender differences. For example, women consumed starchier food (Whittle *et al.* 2013, 87; 97). Their workload probably differed from men's, and their arms were heavily loaded owing to other demanding physical activities, possibly because they were more often engaged in sowing, reaping, grinding cereals, potting, and caring for livestock (Macintosh *et al.* 2014).

Our overall impression of this period is that even though there were distinct gender differences in the socially determined lifeways and diet, these are not reflected in the funerary rites and remain hidden for some reason. It would appear that the scarcity of grave goods is an indication that the mortuary domain did not play an important role in signalling wealth, gender, or age differences (Borić 2015, 932), which again highlights the need for local-level research (see Houghton 2018) because in the western LBK distribution, polished stone tools were deposited in male burials far more frequently than in female burials and typically accompanied individuals in their older rather than younger life stage (Hedges *et al.* 2013, 378-379). An uncustomary funerary rite was more of a singular phenomenon, a distinction with which a particular individual was honoured, not a recurring custom distinctive to a specific group. The other elements of the funerary rite are similarly

diverse and differ from one site to the next, as shown by the cremation burials, the deceased lacking the head, and the interments in simple pits as well as the post-mortem manipulations of the body (Raczky and Anders 2013; Anders 2017). This period was marked by the simultaneous existence of several settlements on Polgár Island (Raczky and Anders 2009), and the diversity of the funerary rites was possibly an expression of their instability or of competition among them. The vessel decorated with the figure of a woman wearing different pieces of jewellery is particularly intriguing because examples for combining jewellery in this manner are not known from the burials, suggesting that, in this case, the figurines do not fit conceptions of the human body as expressed in burial treatment, contrary to what was customary in the LBK world (Hofmann 2017, 135). It is possible that necklaces and girdles were not worn in daily life and that they were only worn together on special occasions by certain chosen women as part of their ceremonial or ritual costume.

A radical change can be noted during the Late Neolithic, when accentuating the difference between men and women in costume and in the burial rite became important. We witness the appearance of strict rules relating not only to individuals, but also to larger groups of the community in general. It is in itself quite remarkable that while the male gender role was signified by an object that can be associated with various, mostly masculine activities – such as harvesting, wood cutting, and warring – the female gender role was marked by spectacular body ornaments. Since these girdles were quite heavy, weighing 0.5 kg on average, the individuals wearing them would have been continuously reminded of their roles. Similar circumstances of identity construction can be conceptualised, as in the case of the *Spondylus* armrings worn since childhood (Chapman and Gaydarska 2007, 145; Hofmann 2015, 9). Moreover, owing to their colour and the large size of the beads, these girdles marked a strict boundary between the upper and lower parts of the female body (Chapman 2000, 54). In this case, then, it was not the activity, but, rather, a biological trait, namely, the sex of the individual, that constructed gender. The extension of the gender role is reflected in the fact that even young girls and women of *maturus* and *senior* age wore such belts; in other words, they were worn by females who were not yet or no longer capable of bearing children, respectively. Simultaneously, the scarce data would suggest that diet became more balanced and women consumed roughly the same proportion of protein as men (Giblin 2011). We thus witness an entirely contrary process to that seen in the preceding period. At the beginning of the 5th millennium BCE, burial offerings provide ample evidence for exploring how gendered roles were structured in communities; at the same time, age-related roles appear to have been less significant or articulated to a lesser extent. It is as yet unclear whether we are dealing with the mere transformation of the (formerly) invisible into the visible, or whether the changes in display also imply changes in gender roles. Currently, we do not know the reasons underlying these changes. The inequality model proposed by Colin P. Quinn and Jess Beck (2016), in which the mortuary complex and the bioarchaeological record of the human remains are interpreted as a complex model, seems to offer a feasible approach. It would appear that, with the exception of a few cases diverging from this pattern, the Middle Neolithic can best be described as Dissonance (Scenario 2: lived inequality and performed equality). Regrettably, the bioarchaeological record for the Late Neolithic is too scanty to enable a correlation with any of their scenarios (Quinn and Beck 2016, 21-22).

The patterns deviating from the norm stand out sharply exactly because of the otherwise strictly observed rules: reverse orientation and grave goods typical for the opposite sex, which are again an indication of the fluidity and flexibility of gender roles, which did not necessarily form binary oppositions. A gendered difference between the settlement's two main spatial segments, the tell and the single-layer settlement, can only be detected in the mortuary realm – the presence of female figurines in both spatial segments indicates that other rituals were conducted

according to other rules. (The decidedly non-random composition of recurring ritual sets is indicated by the presence of a similar female figurine in the cult assemblage from Vésztő-Mágor (Kom. Békés, Hungary; Hansen 2007, 197).

Yet the site of Polgár-Csőszhalom is not unparalleled, since comparable phenomena can be noted on the regional and interregional levels. While the burial rites were evidently governed by strict rules on several contemporaneous sites on the Hungarian Plain, we also have evidence for the opposite, for example, instances when body placement did not correlate with the individual's sex (Siklósi 2013, 174-177). The axes deposited in male burials can be considered as a general south-eastern European tendency, since a similar practice has been reported from the cemetery of Gomolava-Hrtkovci (Prov. Vojvodina, Serbia; Borič 2015, 946) for the same time period.

The Late Neolithic period saw major social changes and the transformation of settlement patterns both on Polgár Island and on the Hungarian Plain. Settlement nucleation is attested to on Polgár Island, with the complex Polgár-Csőszhalom site growing into a central place, a genuine megalith covering some 68 ha (Füzesi *et al.* 2016). Another characteristic feature of this phase is the appearance of tells on the Hungarian Plain, marking the northernmost area of their distribution (Raczky 2015). Thus, we are justified in assuming that significant social changes had also occurred in this region. The question of why these were so prominently reflected in the mortuary world calls for further studies.

Conclusion

And, finally, our last question: Are we now in a position to answer whether we can apply the 'contextual gender' model to the Neolithic, as has been recently proposed by Robb and Harris (2018)?

'Neolithic deathways were rarely clearly gendered' (Robb and Harris 2018, 15). This contention, with some restrictions, indeed holds true for the Early and Middle Neolithic and is in line with the conclusion of Robb and Harris (2018, 15). However, we now have a wealth of data for the easterly regions of Hungary during the 5th millennium BCE, corresponding to the Late Neolithic, to the extent that we can say that traces of gender differentiation during this period are actually comparable with those of the Bronze Age. Considering body placement and orientation, as well as costume and grave goods, we can make a solid case for the existence of clear-cut binary categorisation. Although one may claim that this is an exceptional situation, it is nevertheless noteworthy, and has already been highlighted by others (Kadrow 2008, 58; Chapman and Palincas 2013, 423; Siklósi 2013, 175). Previous researchers tended to link the appearance of burials reflecting gender-based differences to the emergence of formal cemeteries, a case in point being the Copper Age Tiszapolgár culture (Chapman 2000, 75; Häusler 2000, 342-343). (The eponymous site of Tiszapolgár-Basatanya lies in the southern corner of Polgár Island. The cemetery's exemplary gender-based assessment was undertaken by Joanna Sofaer [Sofaer-Derevenski 1997], based on Ida Bognár-Kutzián's detailed description of the cemetery's burials [Bognár-Kutzián 1963]). However, it would appear that this process began at least 500 years earlier, and not necessarily within the world of formal cemeteries (Chapman and Palincas 2013, 423; Raczky *et al.* 2014, 328-329).

The goal of this brief overview, describing in part the first findings of a biosocial archaeological research project launched in 2018⁴, was not to provide a detailed discussion of all aspects of the reviewed problems, since most of these call for further studies. Rather, our main intention in this article was to demonstrate the potential offered by the richness and variety of the available source material. Our understanding of life among the prehistoric communities who interred their dead on Polgár Island will no doubt be enriched by studies yet to be undertaken regarding their lifeways (diet, daily workloads, diseases). We hope these will shed light on the changes during the lifetime of various individuals; on possible gender differences; on whether there are any correlations with the deposition of various articles into burials, or, indeed, an absence of grave goods; and on the relation between lived and performed identities and any changes in this relation.

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References

- Anders, Alexandra 2016a. Újkőkori nőtörténet – bioszociális régészet Polgáron [Neolithic women's history – biosocial archaeology in Polgár]. *Tisicum*, 25, 15-24.
- Anders, Alexandra 2016b. From bones to human beings. New advances in the study of Neolithic burials in the Polgár area I. *Hungarian Archaeology Online*, 2016 Summer. <files.archaeolingua.hu/2016NY/Anders_E16NY.pdf>, e-published 2016; retrieved 12 January 2019.
- Anders, Alexandra 2017. *Emberek az újkőkorbán. Polgár környéki neolitikus temetkezések bioszociális feldolgozásának első eredményei* [People in the Neolithic. The first results of the biosocial assessment of the Neolithic burials in the Polgár area]. [Habilitation Thesis, Eötvös Loránd University]. Budapest.
- Anders, Alexandra, and Nagy, Emese 2007. Late Neolithic burial rites at the site of Polgár-Csőszhalom-dűlő. In: Kozłowski, Janusz K. and Raczky, Pál (eds). *The Lengyel, Polgár and Related Cultures in the Middle/Late Neolithic in Central Europe*. Kraków: Polish Academy of Arts, 83-96.
- Anders, Alexandra, and Raczky, Pál 2013. Háztartások és települési egység viszonya Polgár-Csőszhalom késő neolitikus lelőhelyén [The relation between households

4 'Neolithic life histories. Bioarchaeological investigations on burials of the Polgár micro-region'. The goal of our research is to examine the c. 340 burials from the 5th millennium BCE that were excavated on Polgár Island with bioarchaeological and biosocial methods. The multidisciplinary approach includes traditional archaeological (examination of the *chaîne opératoire* and use-wear analyses of grave goods) and physical anthropological (pathology, enthesopathies, and dental analyses) as well as biochemical investigations and analyses (aDNA, isotopes). The results of these complex analyses will complement each other and thus we will be able to trace the possible changes in lifestyle and address questions of gender and social inequality through space and time at the level of particular sites, as well as in the broader research area, from the Middle Neolithic to the Late Neolithic. By integrating the findings of these analyses, we will be able to reconstruct both the lifestyle of the studied communities and individual life histories.

- and settlement units at the Late Neolithic settlement of Polgár-Csószhalom]. *Ős-régészeti Levelek*, 13, 78-101.
- Anders, Alexandra, Gucci, László, and Nagy, Emese Gyöngyvér (in press). *Chapters from the life history of an ALBK vessel in Polgár (NE Hungary)* [Epizódok egy vonaldíszes edény életéből]. *Dissertationes Archaeologicae*.
- Ash, Abigail, Francken, Michael, Pap, Ildikó, Tvrdý, Zdeněk, Wahl, Joachim, and Pinhasi, Ron 2016. Regional differences in health, diet and weaning patterns amongst the first Neolithic farmers of central Europe. *Scientific Reports*, 6, article 29458. doi: <10.1038/srep29458>, e-published 7 July 2016.
- Bánffy, Eszter (2013a). Disarmed post-socialist archaeologies? Social attitudes to interpreting the past – An interim report from Hungary. In: Niklasson, Elisabeth, and Meier, Thomas (eds). *Appropriate narratives. Archaeologists, Publics and Stories*. *Archaeolingua Series Minor* 33. Budapest: Archaeolingua, 271-293.
- Bánffy, Eszter (2013b). *Theoria est ancilla rationis politicae?* The “Neolithic revolution” in the archaeological research of socialist Hungary. In: Bergerbrant, Sophie, and Sabatini, Serena (eds). *Counterpoint: Essays in Archaeology and Heritage Studies in Honour of Professor Kristian Kristiansen*. *BAR International Series* 2508. Oxford: Archaeopress, 623-630.
- Bánffy, Eszter 2015. Neolithic Eastern and Central Europe. In: Insoll, Timothy (ed.). *The Oxford Handbook of Prehistoric Figurines*. Oxford: Oxbow, 705-728.
- Bartosiewicz, László 2017. Archaeology in Hungary 1948-1989. In: Lozny, Ludomir R. (ed.). *Archaeology of the Communist Era*. Cham: Springer, 195-233.
- Bartosiewicz, László, Mérai, Dóra, and Csippán, Péter 2011. Dig up-Dig in: Practice and theory in Hungarian Archaeology. In: Lozny, Ludomir R. (ed.). *Comparative archaeologies. A sociological view of the science of the past*. New York: Springer, 273-337.
- Bickle, Penny 2016. Capturing diversity in Neolithic diets. In: Amkreutz, Luc, Haack, Fabian, Hofmann, Daniela, and van Wijk, Ivo (eds). *Something Out of the Ordinary? Interpreting Diversity in the Early Neolithic Linearbandkeramik and Beyond*. Newcastle upon Tyne: Cambridge Scholars Publishing, 89-119.
- Bognár-Kutzián Ida 1963. *The Copper Age cemetery of Tiszapolgár-Basatanya*. *Archaeologia Hungarica* 42, Budapest: Akadémiai Kiadó.
- Borić, Dušan 2015. Mortuary Practices, Bodies and Persons in the Neolithic and Early-Middle Copper Age of Southeast Europe. In: Fowler, Chris, Harding, Jan, and Hofmann, Daniela (eds). *The Oxford handbook of Neolithic Europe*. Oxford: Oxford University Press, 927-957.
- Chapman, John 1997. Changing gender relations in the later prehistory of Eastern Hungary. In: Moore, Jenny, and Scott, Eleanor (eds). *Invisible People and Processes. Writing Gender and Childhood into European Archaeology*. London: Leicester University Press, 131-149.
- Chapman, John 2000. *Tension at funerals. Micro-Tradition Analysis in Later Hungarian Prehistory*. *Archaeolingua Series Minor* 14, Budapest: Archaeolingua.
- Chapman, John, and Gaydarska, Bisserka 2007. *Parts and Wholes. Fragmentation in Prehistoric Context*. Oxford: Oxbow Books.
- Chapman, John, and Palincas, Nona 2013. Gender in Eastern European Prehistory. In: Bolger, Diane (ed.). *A Companion to Gender Prehistory*. Chichester: Wiley-Blackwell, 413-437.
- Domboróczki, László 2005. A háromszögletű AVK-fejek szimbolikája [The symbolism of triangular ALP heads]. *Agria*, 41, 5-44.
- Faragó, Norbert 2016. Houses, households, activity zones in the post-LBK world. Results of the raw material analysis of the chipped stone tools at Polgár-Csószhalom, Northeast Hungary. *Open Archaeology* 2, 346-367. doi: <10.1515/par-2016-0024>, e-published 29 December 2016.

- Füzesi, András, Mesterházy, Gábor, Serlegi, Gábor, Márkus, Gábor, and Raczky, Pál 2016. Polgár-Csőszhalom. Results of the new multidisciplinary investigations of a Late Neolithic settlement in the Tisza region. *Hungarian Archaeology Online*, 2016 Autumn. <files.archaeolingua.hu/2016O/Fuzesi_et_al_E16OSZ.pdf>, e-published 2016; retrieved 12 January 2019.
- Giblin, Julia 2011. *Isotope analysis on the Great Hungarian Plain: An exploration of mobility and subsistence strategies from the Neolithic to the Copper Age*. [PhD Dissertation, Ohio State University]. Ohio.
- Hammer, Øyvind, Harper, David A.T., and Ryan, Paul D. 2001: PAST: Paleontological statistics software package for education and data analysis. *Palaeontologia Electronica*, 4(1). <palaeo-electronica.org/2001_1/past/issue1_01.htm>, e-published 22 June 2001; retrieved 12 January 2019.
- Hansen, Svend 2007. *Bilder vom Menschen der Steinzeit. Untersuchungen zur anthropomorphen Plastik der Jungsteinzeit und Kupferzeit in Südosteuropa*. Archäologie in Eurasien 20. Mainz: von Zabern.
- Haughton, Mark 2018. Social relations and the local: Revisiting our approaches to finding gender and age in prehistory. A case study from Bronze Age Scotland. *Norwegian Archaeological Review*, 51, 64-77.
- Häusler, Alexander 2000. Zu den Kulturbeziehungen Südosteuropas im Neolithikum und Äneolithikum im Lichte der Bestattungssitten. *Germania*, 78, 319-354.
- Hedges, Robert, Bentley, R. Alexander, Bickle, Penny, Cullen, Philippa, Dale, Christopher, Fibiger, Linda, Hamilton, Julie, Hofmann, Daniela, Nowell, Geoff, and Whittle, Alasdair 2013. The supra-regional perspective. In: Bickle, Penny and Whittle, Alasdair (eds). *The First Farmers in Central Europe: Diversity in LBK Lifeways*. Oxford: Oxbow Books, 343-384.
- Hofmann, Daniela 2015. Intimate connection: bodies and substances in flux in the early Neolithic of Central Europe. In: Watts, Christopher (ed.). *Relational Archaeologies: Humans, Animals, Things*. London: Routledge, 154-72.
- Hofmann, Daniela 2017. Figurines and other bodies: A matter of scale. In: Schwarzberg, Heiner, and Becker, Valeska (eds). *Bodies of Clay on Prehistoric Humanised Pottery. Proceedings of the Session at the 19th EAA Annual Meeting at Pilsen, 5th September 2013*. Oxford: Oxbow Books, 121-139.
- Horváth, Ferenc 1987. Hódmezővásárhely-Gorzsa. A settlement of the Tisza culture. In: Tálas, László, and Raczky, Pál (eds). *The Late Neolithic of the Tisza Region. A Survey of Recent Excavations and Their Findings: Hódmezővásárhely-Gorzsa, Szegvár-Tűzköves, Ócsöd-Kováshalom, Vésztő-Mágor, Berettyóújfalu-Herpály*. Budapest, Szolnok: Kossuth Press, 31-46.
- Kadrow, Sławomir 2008. Gender-differentiated burial rites in Europe of the 5th and 4th millennia BC: attempts at traditional archaeological interpretation. *Analecta Archaeologica Ressorviensia*, 3, 49-95.
- Kalicz, Nándor and Raczky, Pál 1987. Berettyóújfalu-Herpály. A settlement of the Herpály culture. In: Tálas, László, and Raczky, Pál (eds). *The Late Neolithic of the Tisza Region. A Survey of Recent Excavations and Their Findings: Hódmezővásárhely-Gorzsa, Szegvár-Tűzköves, Ócsöd-Kováshalom, Vésztő-Mágor, Berettyóújfalu-Herpály*. Budapest, Szolnok: Kossuth Press, 105-125.
- Laszlovszky, József and Siklódi, Csilla 1991. Archaeological Theory in Hungary since 1960: Theories without theoretical Archaeology. In: Hodder, Ian (ed.). *Archaeological Theory in Europe. The Last Three Decades*. London: Routledge, 272-298.
- Macintosh, Alison A., Pinhasi, Ron and Stock, Jay T. 2014. Divergence in male and female manipulative behaviors with the intensification of metallurgy in Central Europe. *PloS ONE* 9, 11, article e112116. doi: <10.1371/journal.pone.0112116>, e-published 12 November 2014.
- Macintosh, Alison A., Pinhasi, Ron, and Stock, Jay T. 2016. Early life conditions and physiological stress following the transition to farming in Central/Southeast

- Europe: Skeletal growth impairment and 6000 years of gradual recovery. *PLoS ONE* 11, 2, article e0148468. doi: <10.1371/journal.pone.0148468>, e-published 4 February 2016.
- Moskal-del Hoyo, Magdalena, K. Magyari, Enikő, Lityńska-Zajac, Maria, Raczky, Pál, and Anders, Alexandra 2018. Character of the Atlantic oak-woods of the Great Hungarian Plain. *Quaternary International*, 463, 337-351.
- Nagy, Emese Gyöngyér 1999. Középső neolitikus idolkok Hajdú-Bihar megyéből [Mittelneolithische Idole aus dem Komitat Hajdú-Bihar]. *Déri Múzeum Évkönyve*, 1997-1998, 31-47.
- Nagy, Emese Gyöngyér, Kaczanowska, Małgorzata, Kozłowski, Janusz. K., Moskal-Del Hoyo, Magdalena, and Lityńska-Zajac, Maria 2014. Evolution and environment of the Eastern Linear Pottery Culture: a case study in the site of Polgár-Piócásidűlő. *Acta Archaeologica Academiae Scientiarum Hungaricae*, 65, 217-284.
- Oravec, Hargita 1998-1999. Middle Neolithic burials at Tiszaföldvár. Data to the burial customs and social relations of the Alföld Linearband Pottery Culture [Középső újkőkori temetkezések Tiszaföldváron. Adatok az Alföldi Vonaldíszes Kerámia Kultúra temetkezési szokásainak és társadalmi viszonyainak vizsgálatához]. *Folia Archaeologica*, 47, 43-62.
- Pető, Andrea, and Szapor, Judith 2007. The State of Women's and Gender History in Eastern Europe: The Case of Hungary. *Journal of Women's History*, 19, 1, 160-166.
- Quinn, Colin P., and Beck, Jess 2016. Essential tensions: A framework for exploring inequality through mortuary archaeology and bioarchaeology. *Open Archaeology*, 2, 18-41. doi: <10.1515/opar-2016-0002>, e-published 1 March 2016.
- Raczky, Pál 2000. An unique face pot from the Öcsöd-Kováshalom settlement of the Tisza culture. *Acta Archaeologica Academiae Scientiarum Hungaricae*, 51, 9-22.
- Raczky, Pál 2002. Evidence of contacts between the Lengyel and the Tisza-Herpály Cultures at the Late Neolithic site of Polgár-Csőszhalom (Relationship between Central European and Balkan ritual practice and sacral thought in the Upper Tisza Region) [A lengyeli és a tiszai-herpályi kulturális érintkezés régészeti emlékei Polgár-Csőszhalom késő neolitikus lelőhelyén (a rituális gyakorlat és szakrális gondolkodás közép-európai, illetve balkáni eredetű elemeinek összefüggései a Felső-Tisza-vidéken)]. *Budapest Régiségei*, 36, 79-92.
- Raczky, Pál 2015. Settlements in South-East Europe. In: Fowler, Chris, Harding, Jan, and Hofmann, Daniela (eds). *The Oxford handbook of Neolithic Europe*. Oxford: Oxford University Press, 235-253.
- Raczky, Pál and Anders, Alexandra 2003. The internal relations of the Alföld Linear Pottery culture in Hungary and the characteristics of human representation. In: Jerem, Erzsébet, and Raczky, Pál (eds). *Morgenrot der Kulturen. Frühe Etappen der Menschheitsgeschichte in Mittel- und Südosteuropa. Festschrift für Nándor Kalicz zum 75. Geburtstag*. Archaeolingua 15. Budapest: Archaeolingua, 155-182.
- Raczky, Pál and Anders, Alexandra 2008. Late Neolithic spatial differentiation at Polgár-Csőszhalom, eastern Hungary. In: Bailey, Douglas, W., Whittle, Alasdair, and Hofmann, Daniela (eds). *Living Well Together? Settlement and materiality in the Neolithic of south-east and central Europe*. Oxford: Oxbow Books, 35-53.
- Raczky, Pál and Anders, Alexandra 2009. Settlement history of the Middle Neolithic in the Polgár micro-region (The development of the Alföld Linearband Pottery in the Upper Tisza Region, Hungary). In: Kozłowski, Janusz K. (ed.). *Interactions between different Models of Neolithisation North of the Central European Agro-Ecological Barrier. Papers Presented on the Symposium Organized by the EU project FEPRE*. Prace Komisji Prehistorii Karpat PAU 5. Kraków: Polish Academy of Arts, 31-50.
- Raczky, Pál, and Anders, Alexandra 2012. Neolithic enclosures in Eastern Hungary and their survival into the Copper Age. In: Bertemes, François, and Meller, Harald (Hrsg.), *Neolithische Kreisgrabenanlagen in Europa* [Neolithic Circular

- Enclosures in Europe]. *Internationale Arbeitstagung 7.-9. Mai 2004 in Goseck (Sachsen-Anhalt) [International Workshop 7th-9th May 2004 in Goseck (Saxony-Anhalt, Germany)]*. Tagungen des Landesmuseums für Vorgeschichte Halle 8. Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 271-309.
- Raczky, Pál, and Anders, Alexandra 2013. Polgár-Ferenci-hát. In: Bickle, Penny, and Whittle, Alasdair (eds). *The First Farmers in Central Europe: Diversity in LBK Lifeways*. Oxford: Oxbow Books, 73-78.
- Raczky, Pál, and Anders, Alexandra 2017. The chosen ones. Unconventional burials at Polgár-Csőszhalom (NE Hungary) from the fifth millennium BC. In: Bickle, Penny, Cummings, Vicki, Hofmann, Daniela, and Pollard, Joshua (eds). *The Neolithic of Europe: Essays in Honour of Professor Alasdair Whittle*. Oxford: Oxbow, 63-80.
- Raczky, Pál, and Anders, Alexandra 2018. The woman, the pots, and the cattle figurine. New materiality of an early ALP burial from Polgár-Ferenci-hát. In: Valde-Nowak, Pavel, Sobczyk, Krisztof, Nowak, Marek, and Żrałka Jarosław (eds). *Multas per gentes et multa per saecula: Amici magistro et collegae suo Ioanni Christopho Kozłowski dedicant*. Cracow: Alter, 317-328.
- Raczky, Pál, and Füzesi, András 2016. A múlt szimbolikus eseményeinek rekonstrukciója. Régészeti esettanulmány Öcsöd-Kováshalom késő neolitikus településéről [The reconstruction of symbolic events from the past. The archaeological study of a Late Neolithic site at Öcsöd-Kováshalom]. *Tisicum*, 25, 25-32.
- Raczky, Pál, Anders, Alexandra, and Siklósi, Zsuzsanna 2014. Trajectories of Continuity and Change between the Late Neolithic and the Copper Age in Eastern Hungary. In: Schier, Wolfram, and Draşovean, Florin (eds). *The Neolithic and Eneolithic in Southeast Europe. New approaches to dating and cultural Dynamics in the 6th to 4th Millennium BC*. Prähistorische Archäologie in Südosteuropa 28. Rahden/Westf.: Leidorf, 319-468.
- Robb, John, and Harris, Oliver J. T. 2018. Becoming Gendered In European Prehistory: Was Neolithic Gender Fundamentally Different? *American Antiquity*, 83, 128-147.
- Sebők, Katalin 2007. Ceramic forms of Polgár-Csőszhalom: a case study. In: Kozłowski, Janusz K., and Raczky, Pál (eds). *The Lengyel, Polgár and Related Cultures in the Middle/Late Neolithic in Central Europe*. Kraków: Polish Academy of Arts, 97-116.
- Siemoneit, Beate 1977. *Das Kind in der Linienbandkeramik. Befunde aus Gräberfeldern und Siedlungen in Mitteleuropa*. Internationale Archäologie 42, Rahden/Westf.: Leidorf.
- Siklósi, Zsuzsanna 2013. *Traces of social inequality during the Late Neolithic in the Eastern Carpathian Basin*. Dissertationes Pannonicae IV, 3. Budapest: L'Harmattan.
- Sofaer-Derevenski, Joanna 1997. Age and gender at the site of Tiszapolgár-Basatanya, Hungary. *Antiquity*, 71, 875-889.
- Sørensen, Marie Louise S. 2010. Bronze Age Bodiness – Maps and coordinates. In: Rebay-Salisbury, Katharina, Sørensen, Marie Louise S., and Hughes, Jessica (eds). *Body Parts and Bodies Whole: Changing Relations and Meanings*. Oxford: Oxbow Books, 54-63.
- Stratton, Susan 2016. “Seek and you shall find.” How the analysis of gendered patterns in archaeology can create false binaries: a case study from Durankulak. *Journal of Archaeological Method and Theory*, 23, 854-869.
- Sümeği, Pál, Csökmei, Bálint, and Persaits, Gergő 2005. The evolution of Polgár Island, a loess covered lag surface and its influences on the subsistence of settling human cultural groups. In: Hum, László, Gulyás, Sándor, and Sümeği, Pál (eds). *Environmental Historical Studies from the Late Tertiary and Quaternary of Hungary*. Szeged: University of Szeged, 141-163.

- Sümegei, Pál, Csökmei, Bálint, and Persaits, Gergő 2013. The geoarcheological evolution of the loess-covered alluvial island of Polgár and its role in shaping human settlement strategies. In: Anders, Alexandra, and Kulcsár, Gabriella (eds). *Moments in Time: Papers Presented to Pál Raczky on His 60th Birthday*. Ósrégészeti Tanulmányok Prehistoric Studies 1. Budapest: L'Harmattan, 901-912.
- Szeverényi, Vajk 2014. Az őskori régészet politikája. *Századvég*, 73, 3, 5-30.
- Trogmayer, Ottó, Paluch, Tibor, and Koncz, Margit 2005. *Hétezer éves kerámiaművészet. „Az újkőkor és a rézkor művészetet” című hódmezővásárhelyi állandó régészeti kiállítás (1970-2003) tárgyainak katalógusa [Seven Thousand Years Old Ceramic Art. Catalogue of the permanent archaeological exhibition “Art of the Neolithic and the Copper Age” in Hódmezővásárhely (1970-2003)]*. Tornyai János Múzeumi Műhely 4. Hódmezővásárhely: Móra Ferenc Múzeum.
- Whittle, Alasdair, Anders, Alexandra, Bentley, R. Alexander, Bickle, Penny, Cramp, Lucy, Domboróczki, László, Guba, Zsuzsanna, Fibiger, Linda, Hamilton, Julie, Hedges, Robert, Kalicz, Nándor, Marton, Tibor, Oross, Krisztián, and Raczky, Pál 2013. Hungary. In: Bickle, Penny, and Whittle, Alasdair (eds). *The First Farmers in Central Europe: Diversity in LBK Lifeways*. Oxford: Oxbow Books, 49-100.
- K. Zoffmann, Zsuzsanna 2011. Kárpát-medence területéről származó neolitikus, réz-, bronz- és vaskori antropológiai sorozatok halandósági táblái (Adatközlés) [Life tables of anthropological series from the Neolithic, Copper, Bronze and Iron Ages from the Carpathian Basin]. *Folia Anthropologica*, 10, 17-57.
- K. Zoffmann, Zsuzsanna 2012. Polgár M3/6 jelzésű lelőhelyen feltárt kései neolitikus temető embertani vizsgálatának eredményei [The results of the anthropological studies of the Polgár M3/6 marked site in Late Neolithic cemetery]. *Déri Múzeum Évkönyve*, 2011-2012, 105-126.

Copper Age transformations in gender identities. An Essay

Jan Turek

The author dedicates this study to Ivana Pleinerová, doyenne of Czech archaeology, on the occasion of her important life jubilee.

Abstract

A reconsideration of some previous archaeological interpretations of gender may offer much more variability and freedom to our current understanding of gender identity. The perception of gender in archaeological interpretations commonly reflects our current social reality. In the Western Christian worldview, the traditional gender categories of men and women were based on biology and presume the primacy of reproduction in human societies. Alternative social roles were judged as deviations by the biased majority. The extremely difficult position of homosexuals in 20th-century Western society was caused mainly by the lack of an appropriate and commonly recognised gender category that could accommodate them. Not surprisingly, the concept of transsexualism developed in cultures that only recognised and valued two gender categories, based on biological sex. Tribes in North America and Siberia had gender categories ready for such cases. We should change our approach to the interpretation of past societies, because our current gender categories do not always correspond to those of a former reality.

Keywords: *Copper Age, Central Europe, Middle East, burial rites, ancient DNA, gender identity, gender interpretation*

Gender concepts and paradigms in archaeological theory

The perception of gender in former societies is very closely tied with present-day socio-political circumstances (Bolger 2013; Crass 2001; Hofmann 2009). The current cultural and social norms shape not only the way we organise our present-day gender relations and identities, but also how we perceive the gender reality of

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ancient civilisations. However, because changes in archaeologists' understanding of gender identities in the past parallel changes within their own society, the social development of Western society naturally raises questions about gender identities in the past. With the growing respect towards human rights – including those of the lesbian, gay, bisexual, and transgender (LGBT) community – and the overall liberalisation of the perception of gender identities, archaeologists are discussing questions that they never asked before, such as: Was the perception of gender categories in prehistoric society different to present-day mainstream social norms?

Gender is expressing the wide range of characteristics pertaining to femininity and masculinity, and differentiating between them. The psychologist and sexologist John Money introduced the terminological distinction between biological sex and gender as a role in 1955 (Money 1955). Money's meaning of the word gender, however, did not become widespread until the 1970s, when mainly feminist theory comprised the concept of a distinction between biological sex and the social construct of gender. Since then, the distinction has been systematically followed in certain contexts of the social sciences. In the past three decades, gender issues have become an integral part of social archaeology.

The paradigm of processual archaeology perceived gender in an objective and conceptual context. The individuality of past peoples was not the main focus of the processual archaeology. Rather, the interpretation of culture and social norms was mainly focused on social tradition, and change in social tradition was mainly seen as a process of adaptation to the changing natural environment. Post-processual archaeology claims that, for the most part, since theories of cultural change cannot be independently verified experimentally, what is considered 'true' is simply what seems the most reasonable to archaeologists as a whole. Since archaeologists are not perfectly objective, the conclusions they reach will always be influenced by personal biases (Trigger 1989, 379). Post-processual archaeologists state that personal biases inevitably affect the very questions archaeologists ask – and direct them to the conclusions they are predisposed to believe. What is an important post-processual contribution towards the gender debate, is the emphasis on the role of individuals and personhood in the changing of social norms?

In this article, I am going to present different perceptions of gender in the seemingly geographically distant contexts of the Middle East, in the form of ancient Egyptian and modern case studies, and central Europe, in the form of the Copper Age communities of the third millennium BCE. In both cases, we can see the employment of material culture in gender symbolism as an attribute of gender identities, and in both cases we may observe that the obvious structures that are seemingly clearly defined in fact represent a much more complex social reality.

The social position of women in the Middle East – past and present

Women in ancient Egypt had a status that significantly contrasts with the status of most women in the region today (Pehal 2011). In many aspects of art, religion, and propaganda, the social dominance of men over women was explicitly demonstrated. When a woman was depicted in a funerary context, it was mostly in a position subordinate to that of the male. However, it seems that this emphasis on the male worldview does not necessarily represent the social position of women in everyday life in ancient Egypt. There were female pharaohs, but they were represented using the male imagery that is traditionally connected with the office. One of the earliest examples, whose status has long been debated, is Khentkaus I (Pehal 2011). She was the daughter of King Menkaure and the wife of King Shepseskaf (last king of the 4th Dynasty, who ruled 2510-2502 BCE), and she bore two future kings of the



Figure 1. Central Abusir (Egypt). Queen Khentkaus II with the cobra crown, as symbol of her rule over Lower Egypt (photograph: Jan Turek).

5th Dynasty (Veserkaf and Sahure) – and there is new evidence supporting the possibility that she herself also ruled Egypt. One of her successors of the same name played a similar role: Queen Khentkaus II (Bárta *et al.* 2018, 50-52), with a cobra as symbol of her rule over Lower Egypt (see Fig. 1). Because she was the wife of a king (King Neferirkare, 2446-2426 BCE), after his death, she, as mother of the future kings Raneferef and Niuserre, became their regent and ruled Egypt.

What was the social position of women in everyday relations of ancient Egypt? Here we can observe some examples. Already since the Old Kingdom, on the death of her husband, the woman inherited two thirds of their communal property. The other one third was divided among their children, followed by the brothers and sisters of the deceased (Pehal 2011). Daughters were obliged to look after their parents, while

for sons it was a voluntary choice. However, it was a matter of prestige for a son to build his mother's tomb, attached to the main family *mastaba* tomb. This was even more emphasised in the case of the royal family and the structure of their burial rites. Only once a prince had become king did he build a tomb for his mother, because her status increased as the mother of a king.

The principles of male-female relations are also reflected in ancient Egyptian mythology. Female deities used to play a role as companions helping the masculine gods (Pehal 2011). At the same time, we have to bear in mind that the female deities also include a fiercely destructive and devious aspect surpassing the power of male gods.

Women in ancient Egypt participated in social power in ways that is unknown in most historical and contemporary societies (Mark 2016). Although at least since the beginning of dynastic period men and women in ancient Egypt had distinct powers in society, there was no rigid barrier preventing those who wanted to deviate from this pattern. In some respects, Egyptian society recognised women as equal to men, but emphasising an essential complementarity, especially in terms of motherhood. This respect is expressed clearly in ancient Egyptian theology and morality. In the social norms of ancient Egypt, women occasionally had the opportunity to rule the country and have the same basic human rights as men. This was the case until the rise of Islamic monotheism, which dramatically changed the position of women in society (Tyldesley 1995).

In this context, I would like to share my personal experience from present-day Egypt. Part of the co-operation with and supervision by the Egyptian Ministry of Antiquities involves hosting trainees on our excavations. They are usually archaeology and heritage students or recent graduates. As the majority of them were women, I thought this might be a case of the common pattern in Egypt of boys studying engineering, law, or medicine and girls studying art and social sciences, as they are expected to be financially dependent on their husbands. However, daughters from middle-class Egyptian families study archaeology and related subjects not only because they want to be employed in the heritage or academic spheres, but as I gathered from discussions with my Egyptian colleagues this is



Figure 2. Anousheh Ansari (photograph: NASA press kit).

mainly to boost their chances of marrying into a well-positioned family. As homemakers, they would be looking after their family and would not need to seek a job. I sincerely apologise to everyone in Egypt who is studying archaeology with the intention to develop their skills and conduct research, but currently the first scenario seems to me to be more common.

Still, there are exceptions in the Middle East, such as the exclusive position of married women in historical Persian society (19th and 20th Century), who can share some of the family wealth and start their own business, independent on their husband's finances (Leila Papoli-Yazdi, personal communication 2016). In this context, it is interesting to note the extraordinary life story of Anousheh Ansari (Fig. 2; Ansari and Hickam 2010). She was born in 1966 in the Iranian city of Mashhad and immigrated to America. After settling down in Texas, Anousheh built a computer technology firm from the ground up, which eventually realised a net worth of \$750 million and ultimately allowed her to achieve her childhood dream of spaceflight. In 2006, she became the fourth-ever commercial spaceflight participant, the first self-funded woman, and the first-ever Muslim woman to fly into space. After her return to Earth, Anousheh Ansari started The Ansari Foundation, a quickly growing non-profit organisation that supports social entrepreneurship, and that is especially committed to ensuring the freedom of women around the world and supporting female entrepreneurs (Ansari and Hickam 2010). I believe Ansari's story, despite of the American business opportunity, shows how deep the tradition of Iranian women's emancipation reaches. Especially after the Islamic revolution in 1979, the role of women was seemingly diminished. However, that is only a superficial expression of control over women's rights; deep inside, Iranian women are strong and powerful.

The gender structure of Copper Age burials

During the third millennium BCE, some regions of Europe shared elements of material culture and burial rites. Vast areas of central, northern, and Eastern Europe shared in the Corded Ware/Single Grave culture (2900-2500 cal BCE; for a definition, see Beckerman 2015). The Bell Beaker phenomenon (2500-2300/2200 cal BCE; for a definition and synthesis, see Turek 2006), which followed it, also extended into southern and Western Europe. Both of these archaeological cultures exhibit a degree of uniformity in their material culture, as demonstrated by a specific range of symbolic prestige goods found mainly in funerary contexts. The principles of the Corded Ware and Bell Beaker burial rites arise from the same symbolic system, probably reflecting a similar social and economic background for these Late Eneolithic communities.

Corded Ware cemeteries in central Europe include primarily single flexed inhumations (Buchvaldek 1967). In the Corded Ware period, female burials were usually placed on the left side, with the head oriented to the east. For male burials, the typical orientation was to the west, with the body placed on the right side. As a result of this practice, the burials of both sexes face south. This orientation may have been symbolically related to the location of some cemeteries in the landscape. A common location of Corded Ware cemeteries is on the edge of terraces or slopes, most of which face south-east. Bell Beaker cemeteries occurred in similar locations, but with a preference for north-east slopes (Turek 1996). Although the locations of these cemeteries may reflect some ritual commitment to the direction of the sunrise, the sheltered location of nearby habitation sites may also have been important. Possible evidence for a solar cult may be inferred from the shell disc amulets with motifs of double crosses or concentric circles (known from several Corded Ware cemeteries in Bohemia, cf. Buch-

valdek 1967), presumed symbols of the solar wheel. The same motif also appears on some of the bone/antler/amber V-perforated buttons of the subsequent Bell Beaker period (known from several Bell Beaker cemeteries in Bohemia, cf. Turek 2006). The Bell Beaker females were buried on their right side, head oriented to the south, and males on their left side, head oriented to the north (Havel 1978; Turek 2006). Therefore, people buried in the Beaker period were facing east.

The position of the arms appears to have been highly symbolic within the Corded Ware burial rite (Turek 1990), even though this placement was not specific to gender and age groups or the amount of grave goods. The positioning of the arms was also important in the Bell Beaker period, even though the number of varieties decreased (Havel 1978). As such, the positioning of the arms may well relate to an alternative social category/identity, but we have been unable, given our limited knowledge, to establish the meaning behind this placement of the upper limbs.

Male and female burials appear to be accompanied by different ‘gendered’ artefacts (Buchvaldek 1967; Turek 1990). Female burials include necklaces made of perforated animal teeth (such as wolf, dog, wild cat, and fox teeth in Corded Ware burials), as well as imitation teeth made from bone. Necklaces were also made from small, perforated, circular discs of freshwater shell. Another artefact appearing in female graves is the afore-mentioned shell ‘solar’ disc symbol. The pottery assemblage commonly found in female burials consists of ovoid pots and this is also the case of female burials in the subsequent Bell Beaker period. Male burial assemblages include weapons symbolic of social power, such as battle axes, maceheads, or axes. In later Bell Beaker burials, these weapons were replaced by copper daggers and archery equipment. The Corded Ware funerary pottery attributed to males consists of beakers that have been decorated with a cord impression or the so-called herring bone motif. In both periods, the funerary ceramics were different from those found in domestic settlement contexts.

Beakers are not exclusively male artefacts, even though the majority of them were found in the graves of Corded Ware men. In Bohemia and Moravia, beakers make up 19 per cent of the pottery assemblages found within Corded Ware male graves and only 5 per cent of those in female graves (Turek 1987, 38). A similar observation was made by J. Havel (1978, Fig. 5) in the case of the Bell Beaker cemeteries in Bohemia and Moravia, where 20 per cent of decorated beakers were associated with men and 11 per cent with women. It is important to note that ‘gendered’ artefacts need not reflect the social status of the dead alone, because, in some cases, they may serve as symbolic representations of the relations between the deceased and other members of the community. That is, some artefacts may represent the mourners and their relationship with the dead. A beaker or copper dagger in a Bell Beaker female grave, for example, may be a symbolic gift from a father or husband, rather than an artefact used by the deceased in day-to-day practice. Brodie (1997, 300-301) observed: *‘Upon the occasion of burial it might have been the domestic duty of female relatives to provide the deceased with a serving of food and drink, together sometimes with their ceramic container [whereas] male relatives would be expected to provide weapons, ornaments or tools’*.

Corded Ware and Bell Beaker funerary practices seem to be a symbolic reflection of the division of labour within the family and a reflection of the different social status of men, women, and children. The individuality expressed within the context of a single burial is indicative of an individual’s association with a particular social category, rather than a celebration of someone’s special skills or the status achieved during their lifetime. The composition of the Corded Ware funeral assemblages seems to be quite uniform, as is the average number of items included in the grave. Thus, in Bohemia and Moravia, the average number of artefacts in the graves of adult males is 3.7, whereas in the graves of adult females, it is 3.4 and in children’s graves, 2.7 (Turek 1990).

The symbolic expression of male and female status in burial rites probably reflects different the social roles for each sex within society. The evidence for the Corded Ware burial rite may also be considered to be a reflection of social diversification among members of a society, including children.

Gender differentiation among child burials

Despite the perceived invisibility of children in the archaeological record (cf. Sofer-Derevenski 1996) analysis of Corded Ware and Bell Beaker burial rites in Bohemia and Moravia (Havel 1978; Neustupný 1973; Turek 1987; 1990) has provided evidence that may help to evaluate the position of children within Late Eneolithic society (Turek 2000). It seems very likely that the main feature of the Corded Ware and Bell Beaker burial rites, which is the symbolic differentiation of male and female, even applied to child burials. The sexual dimorphism of sub-adult skeletal remains is not sufficiently developed to enable us to determine their sex. However, the position of the body in the grave, the head orientation, and the 'gendered' grave goods seem to reflect the same system of sexual distinction observed among adult burials. Taking into account the high mortality rate expected in the age category *infans* I (0-6 months; cf. Neustupný 1983), which is well documented for pre-industrial societies, there is a relative lack of archaeological evidence for burials of these children. Within the Bohemian Corded Ware cemeteries, only four burials of this age category have been recorded (Vikletice, Okr. Chomutov, Czech Republic; Buchvaldek 1967). One was a new-born child probably buried together with its mother (Blšany, Okr. Louny, Czech Republic; Hnízdová and Šimůnek 1955, 579, Fig. 256). The majority of the youngest children were thus probably disposed of in alternative ways, as documented by various ethnographic studies, such as those conducted among the Dajaga and Nandi tribes in Kenya (Häusler 1966; Holý 1956). It may also be that children under a certain age were not fully accepted as members of a community and therefore did not have the right to a proper funeral. The situation changes in the age category *infans* II (six months to five years), where, from the age of two years, there is an increase in the number of child burials. Before the age of two, children are particularly vulnerable to dehydration due to infection, as indicated by the mortality pattern in developing countries today. At this age, vital life changes happen as the child begins to communicate verbally, to walk unaided, and to eat solid food as a supplement to breast milk. In some primitive societies, it is also believed that children below a certain age (usually two years) have no soul (cf. Häusler 1966). This perception justifies, for example, infanticide or the use of similar non-ritual methods for the disposal of children's remains. In some groups (e.g. the Dajaga people of Kenya; Holý 1966), children are named only after this critical period, when their chance of survival increases.

The pottery assemblages included in child burials during the Corded Ware period seem to reflect their age, as some of the pots are miniature versions of the real-size common vessels. Similar observations were made in the context of Bronze Age child burials in Ireland (so-called '*pygmy cups*'; Donnabháin and Brindley 1989). The examination of Bell Beaker cup volumes from north-western Bohemia provided evidence of a possible utilitarian division according to use (type of drink?) or user (Turek 1998, 108-109 Fig. 5). However, it is important to put these data into the context of the age and sex category of the persons buried with those cups, such as was done with the British and Irish beakers (Case 1995; Brodie 1998, Fig. 2). Unfortunately, the majority of the cups from north-western Bohemia lack contextual data due to the early date of their discovery. It appears that Corded Ware child burials in Bohemia and Moravia were more often accompanied by bowls (one in four child burials) than those of adults (one in thirteen burials).

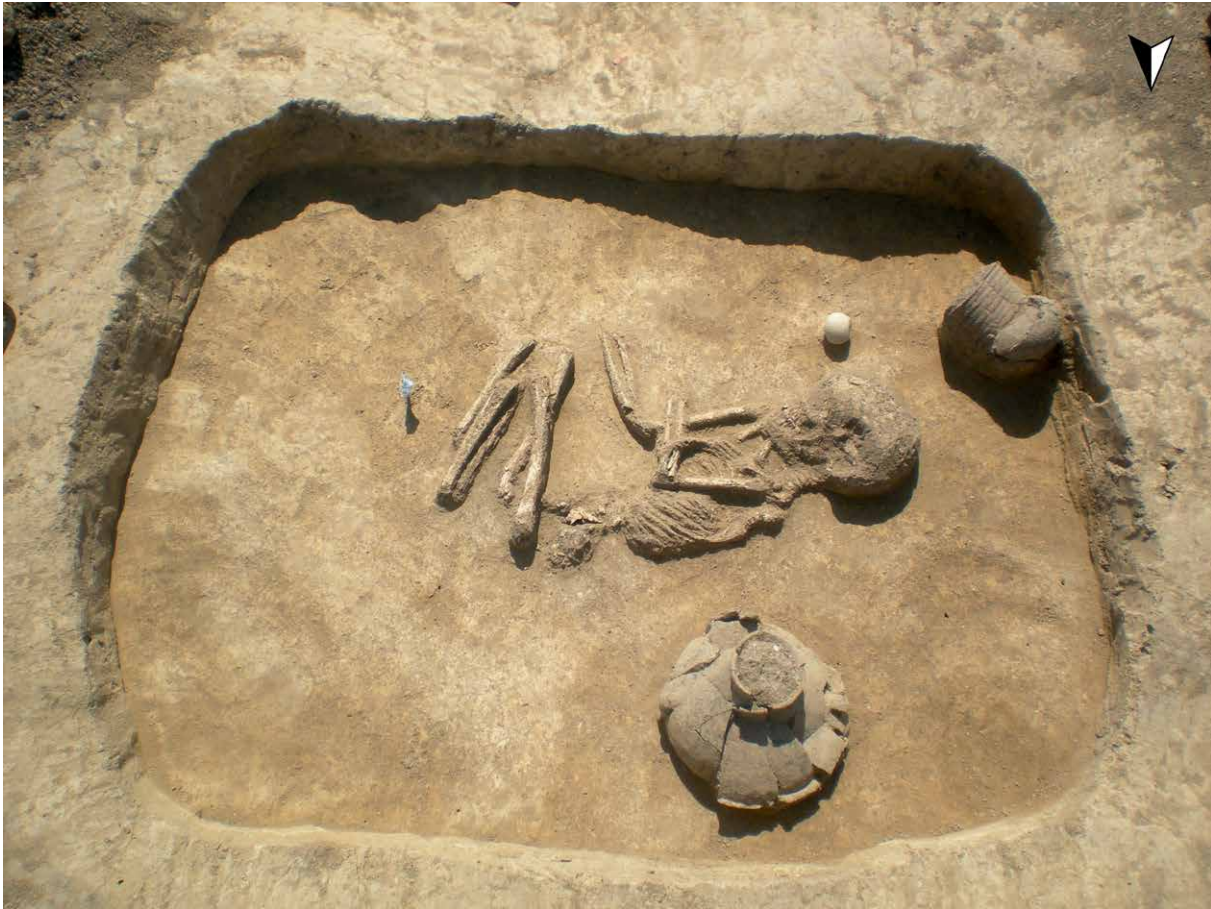


Figure 3. Libeznice (district Prague-East, Czech Republic) grave 6. Corded Ware child burial in male position (head pointing to the west, facing south), with a siltstone macehead (photograph: Jan Turek).

However, this may reflect the practical use of bowls for the consumption of food by individuals in the respective age categories.

Differential survival of one sex over another is caused by uneven parental investment given the socio-economic conditions of the parents or the entire community, as was documented, for example, among the Mukogodo, a pastoral tribe in Kenya with a lower socio-economic status relative to neighbouring groups (Cronk 1989). Because girls have a better chance of marrying out of the tribe, they have a greater reproductive potential for the Mukogodo community. Therefore, Mukogodo girls receive better medical care than boys.

In order to examine the possible preference of one sex (or gender?) over another in the context of Corded Ware and Bell Beaker burials, I have compared the number of children buried in male and female positions given the symbolism associated with burial orientation. The number of Corded Ware girls and boys buried in Bohemia and Moravia is almost equal, with 21 girls (42.9 per cent) and 19 boys (38.8 per cent), not counting the nine child burials in non-diagnostic positions ($n = 49$ burials in total). There is a similar record for Bell Beaker child burials in Bohemia, where 24 of the 27 children were buried in diagnostic positions, with 13 (54 per cent) identified as male and 11 (46 per cent) as female (Turek 1987; 1990). Similarly, there is an almost equal number of child burials in female and male positions in a Corded Ware cemetery in central Germany (Siemen 1992, 231). This record challenges any assumptions that sex-biased infanticide existed in the Late Eneolithic period in central Europe. A similar balance seems to exist in the number of grave goods found within male and female child burials in Bohemian and Moravian Corded Ware cemeteries (girls seems to be slightly richer). This raises the question: Is there any evidence of differential social status of certain children within Late Eneolithic burial rites?

Excavations have revealed that stone tools or weapons accompany some of the children's burials, especially those with a male orientation. In the context of children's graves, these artefacts clearly were of symbolic importance and may have well have been anticipating their social roles as adults. In Bohemian and Moravian Corded Ware burials, the bodies of very young boys (six months to six years old) are accompanied by hammer axes or maceheads (see Fig. 3; e.g. Libeznice, Okr. Prague-East, Czech Republic; Turek 2011). In Moravia, for example, there is the burial of a five-year-old child from Dětkovice (Okr. Prostějov, Czech Republic) with a hammer-axe. In Bohemia, grave 130/63 from Vikletice, the burial of a six-year-old child, included a macehead, whereas grave 47/64, containing the skeleton of a child in the *infans* II category, was accompanied by a battle axe (Buchvaldek and Koutecký 1970, 52-53). A similar pattern has been identified the Corded Ware period in central Germany (Siemen 1989). The pattern for the Moravian Bell Beaker burials appears to be very similar. For example, the grave of a 9- to 10-year-old boy (?) accompanied by a copper dagger, gold and copper spirals, and amber beads was present at Lechovice (Okr. Znojmo, Czech Republic; Turek 1990), whereas the cremated remains of a child (burial 53/80-II) from Radovesice (Okr. Teplice, Czech Republic; Turek 2006) were found with flint arrowheads, a stone wristguard, a bow-shaped amulet, and V-perforated buttons.

Child burials accompanied by objects that may be interpreted as symbols of wealth and social status do not necessarily reflect prehistoric social relations simply because these children died so young. Because other male child burials do not include such symbolic artefacts, it can be assumed that this group of sub-adult male burials may represent socially favoured individuals of some sort. They may have been firstborn sons and thus potential heirs of social status and wealth within a family or a community. Similar observations were made by Susan Shennan (1975) at the cemetery of the Nitra culture at Branč (Okr. Nitra, Slovakia), where a small group of sub-adult women was buried with rich copper necklaces and other jewellery. On the other hand, the majority of girls' burials on this site were accompanied by ordinary artefacts. On the basis of this evidence, Shennan inferred the existence of a system of ascribed hereditary wealth. In fact, this evidence may indicate the initial stages in the development of social differentiation that persisted in Bronze Age communities. Such social differentiation may have been a result of progressive changes in the system of agriculture and food production, namely, the introduction of ploughing implements and teams, and the secondary products revolution (Neustupný 1967; Sherratt 1981).

Ancient DNA and gender identities

The order of gender identities was perhaps even more complex. The DNA analysis of 53 child burials from the largest Bell Beaker cemetery in Moravia – Hoštice-I (Okr. Prostějov, Czech Republic) – produced some amazing data (Vaňharová 2011, 104-120; 195-196). Containing 155 graves, the cemetery is exceptionally large in the context of Moravia and Bohemia (Matějčková *et al.* 2012) and can be compared only with even larger Bell Beaker-Csepel Group cemeteries at Budakalász (Kom. Pest, Hungary) and Szigetszentmiklós (Kom. Pest, Hungary), in the area of present-day Budapest (Turek 2006). DNA sexing was successful in 21 individuals. Out of 14 burials with male gender position and/or grave goods, 12 were biologically male and two were biological female (Vaňharová 2011, 116 Table 17). This may be evidence of two girls who were supposed to be brought up as boys. Such crossing in position vs. sex (by bone analysis) is already a known pattern in third millennium BCE burial customs (Turek 2006), but the DNA analysis results for the burials with female gender attributes are very surprising. Out of seven children buried in the female position, only



Figure 4. The future British King Edward VIII as a toddler (Turek 2016, Fig. 2).

one was actually biological female (a juvenile, aged 15-20) and six were in fact male (two of whom were also juvenile, aged 15-19/20 years). So, that means that four boys (aged 3-4, 7, 8-12, and 15 years) had been buried in the female position. It is important to note that there are gender clues not only in the positioning and orientation of bodies in those graves, but also in the presence of gendered artefacts, such as V-perforated bone buttons (at least one exemplar).

These results, though surprising, are perhaps in line with some earlier observations on the demographic unbalance caused by missing female burials in the Bohemian and central German Bell Beaker group (Turek 2002). This would mean that most of the young girls were not buried in the communal cemetery (at Hoštice I there is not a single DNA-sexed case of a sub-juvenile female) and that a considerable number of boys (one third of the total amount of successfully DNA-sexed individuals) were buried in the female fashion. The masculine attributes seem to be downplayed in the burial customs. It is currently hard to establish whether these individuals were supposed to be brought up as women or whether, instead, they had not yet acquired the right to act as men, unlike some other male sub-adult boys, perhaps members of families with ascribed hereditary warrior status. It almost seems that some young boys were socially considered to be girls, perhaps until they had undergone a ceremonial rite of passage or social initiation of some kind.

This observation should not be that surprising to us if we think of the position of very young boys in some traditional societies. Before rite of passage rituals (that were perhaps organized in certain boy's age) boys were treated as no-gender child individuals or as girls. It is interesting to look at some early 20th-century family photos albums where boy toddlers are dressed in girls' dresses, which was in fact unisex clothing for children of that age (such as the future British King Edward VIII as a toddler [Fig. 4], after Turek 2016). Only later on did boys start to wear male-gendered clothes and were treated accordingly by their family.

The Beaker 'Amazons'

I would like to emphasise the small collection of Bell Beaker female burials accompanied by artefacts normally connected with men, namely, three female burials equipped with an archer's stone wristguards, artefacts usually present in men's graves. One such female 'archer' comes from the Moravian grave 12/34 at Šlapanice II (Okr. Brno-venkov, Czech Republic; see Dvořák and Hájek 1990, 10 pl. 16), which includes a rich burial assemblage of seven vessels, including two decorated bell beakers, four V-perforated buttons, and a copper awl. Another female archer was discovered in grave III at Prague-Vršovice, Bohemia, while the third case comes from an isolated burial chamber (no. 77/99; see Figs. 5 and 6) at Tišice (Okr. Mělník, Czech Republic; Turek 2002). The latter burial was accompanied by two stone wristguards, an amber bead, a copper awl and dagger, and six vessels, including four decorated bell beakers. Significantly, most of the daggers found in female graves are miniature versions (37-94 mm) of those associated with male burials. These miniature daggers may have been used in other ways than the full-size artefacts or their function may have been purely symbolic. I believe that these exceptional cases of 'rich' female burials belong to a socially preferred elite group within these populations.

The mixed-gender assemblages seem to be characteristic of the 'rich' female burials with decorated beakers and burial chambers surrounded by a circular ditch. I presume that the relationship between decorated beakers, the internal construction of the grave, and the package of prestigious goods is more likely to be a reflec-



Figure 5. Tišice (District Mělník, Czech Republic) grave 77/99. Bell Beaker 'Amazon' burial (photograph: Jan Turek).



Figure 6. Tišice (District Mělník, Czech Republic) grave 77/99. Reconstruction of 'Amazon's' burial (photograph: Petr Berounský).

tion of a social distinction than a chronological difference. In addition, the blending of male- and female-gendered assemblages in the ‘rich’ graves seems to reflect this social differentiation. We should bear in mind that not every item in the burial assemblage must indicate the social status of the deceased. Instead, such ‘gendered’ artefacts could be a symbolic demonstration of the relations between the deceased and other members of the community. In this context, it is important to note that the wristguards in grave 77/99 at Tišice were detached from the body, one being located near the western wall of the burial chamber and the other being laid on the left forearm with the inside facing up (post-depositional movement?). Such placement could reflect the actions of other community members during the funerary ritual in order to emphasise the social status of the deceased and to reinforce community identity. Under these circumstances, the male-gendered artefacts may have been ‘delegated’ to women (or, rarely, the other way around) to reinforce social norms, social relations, and rules of differentiation. As such, the female burials with archery equipment represent members of a social elite, possibly female warriors or the ‘Bell Beaker Amazons’.

Beaker *berdache*?

In some cases, such as grave 60/1964 at Vikletice, which contains the body of a man aged 55-60 years, there are elderly men buried with body orientation and grave goods typical of female burials, suggesting that some elderly men switched their gender to female. Roland Wiermann (1998) compared this evidence to the norms of some Siberian and North American tribes. Based on the presence of such a gender category among the Chukchee, Koryak, and Yakut in Siberia and the Mohave and Navaho in North America, Wiermann assigns the term *berdache* (two-sprits) to such women-men. Some aged men may have decided to ‘retire’ as women for symbolic and practical reasons. Such old men would symbolically give up their masculine attributes and social power while at the same time abandoning the practical need to compete with other male members of their community. In this way, his new gender status set them free of certain social obligations and competition. One finds evidence of similar role changes in the spatial clustering of graves by age and gender within some Copper Age funerary areas (cf. also Matic 2012; Sprenger 1995).

Gender identities

Reconsidering gender perspectives on past societies

Most of the archaeological discussions on gender traditionally deal with the concept based on biological sex. This is, however, in many respects a misleading approach. Among some native communities in Siberia and North America, there are more than just two gender categories, with most groups recognising three or four genders, such as man, woman-man, woman, man-woman (Lang 1996, 183-196). The Chukchi in Siberia recognise as many as seven gender categories apart from man and woman (Lang 1996). Such categories are not evidence of institutionalised homosexuality – that is, the gender ‘switch’ is usually not a result of sexual orientation but, rather, of occupational preferences and personality traits. Among the Ojibwa in north-eastern America, for example, one daughter may be raised as boy, a practice also common among the Kaska in Alaska and the Inuit in Canada (Lang 1996). Such practices usually occur in regions where subsistence activities focussed on hunting, a typical male activity in the normal division of labour. Among the Mohave, a woman-man is called *Alyha* (see Fig. 7) and a man-woman is referred to as *hwame* (see Fig. 8).



Figure 7. A Mohave alyha, a male-bodied person living as a woman (Turek 2016, Fig. 6).



Figure 8. A Mohave hwame, a female-bodied person living as a male hunter and warrior (Turek 2016, Fig. 5).

The men who changed their identity usually dressed as women and changed their hairstyle and tattooing pattern (Lang 1996). They also act as women, adopting their manners and gestures, even adjusting their voices accordingly. Further, they take on women's jobs, such as spinning and weaving blankets and raising children in extended families. Some even pretend to have menstrual cycles together with other women. Men-women, on the other hand, deny female physiological functions. They never menstruate, they hide their breasts, and they may marry a woman or remain single. They also use weapons and take up men's tasks, including fighting. In certain cultures, people can even mix the culturally defined roles.

Understanding gender concepts of prehistoric societies

The perception of gender in archaeological interpretations commonly reflects our current social reality. In our Western Christian worldview, the traditional gender categories of men and women are based on biology and presume the primacy of reproduction in human societies. Alternative social roles were judged as deviations by the biased majority. The extremely difficult position of homosexuals in 20th-century Western society was caused mainly by the lack of an appropriate and commonly

recognised gender category. Not surprisingly, the concept of transsexualism developed in cultures that only recognised and valued two gender categories based on biological sex. The tribes in North America and Siberia had gender categories ready for such cases. In Western Christian society, religious norms instigated a social neglect of homosexuals mainly due to the absence of appropriate gender categories. As archaeologists, we should change our approach to the interpretation of past societies, because our gender categories do not always correspond to those of a former reality.

References

- Ansari, Anouseh, and Hickam, H. Homer 2010. *My Dream of Stars. From Daughter of Iran to Space Pioneer*. New York: St. Martin's Press.
- Bárta, Miroslav, Bareš, Ladislav, Krejčí, Jaromír, Megahed, Mohamed, and Varadzinová, Lenka 2018 (eds). *Stvořené pro věčnost: Největší objevy české egyptologie*. Praha: Filozofická Fakulta Univerzity Karlovy.
- Beckerman, Sandra Mariët 1995. *Corded Ware coastal communities. Using ceramic analysis to reconstruct Third Millennium BC societies in the Netherlands*. Leiden: Sidestone.
- Bolger, Diane 2013 (ed.). *A companion to gender prehistory*. Chichester: Wiley-Blackwell.
- Brodie, Neil 1997. New Perspectives on the Bell Beaker Culture. *Oxford Journal of Archaeology* 16, 297-314.
- Brodie, Neil 1998. British Bell Beakers: Twenty-Five Years of Theory and Practice. In: Benz, Marion, and Willigen, Samuel van (eds). *Some New Approaches to The Bell Beaker 'Phenomenon' Lost Paradise...?* BAR International Series 690. Oxford: BAR Publishing, 43-56.
- Buchvaldek, Miroslav 1967. *Die Schnurkeramik in Böhmen*. Praha: Karlova univerzita.
- Buchvaldek, Miroslav, and Koutecký, Drahomír 1970. *Vikletice, ein schnurkeramisches Gräberfeld*. Praehistorica 3. Praha: Universita Karlova.
- Case, Humphrey 1995. Beakers: loosening a stereotype. In: Kinnes, Ian, and Varndell, Gillian (eds). *'Unbaked Urns of Rudley Shape'. Essays on British and Irish Pottery for Ian Longworth*. Oxbow Monograph 55. Oxford: Oxbow, 55-67.
- Cronk, Lee 1989. Low socioeconomic status and female/biased parental investment: the Mukogodo example. *American Anthropologist*, 91, 414-429.
- Donnabháin, Barra Ó., and Brindley, Anna L. 1989. The Status of Children In A Sample of Bronze Age Burials Containing Pygmy Cups. *Journal of Irish Archaeology*, 5, 19-24.
- Dvořák, Petr, and Hájek, Ladislav 1990. *Die Gräberfelder der Glockenbecherkultur bei Šlapanice (Bez. Brno-venkov)*. *Katalog der Funde*. Mährische archäologische Quellen. Brno: self-published.
- Häusler, Alexander 1966. Zum Verhältnis von Männern, Frauen und Kindern in Gräbern der Steinzeit. *Arbeits- und Forschungsberichte zur Sächsischen Bodendenkmalpflege*, 14/15, 25-73.
- Havel, Josef 1978. *Pohřební ritus kultury zvoncovitých pohárů v Čechách a na Moravě* [The Burial Rite of the Bell Beaker Culture in Bohemia and Moravia]. Praehistorica 7 = Varia Archaeologica 1. Praha: Univerzita Karlova, 91-117.
- Hnízdová, Ivana, and Šimůnek, Jiří 1955. Hrob se šňůrovou keramikou v Blšanech. *Archeologické rozhledy*, 7, 577-582.
- Hofmann, Kerstin P. 2009. Grabbefunde zwischen sex und gender. In: Rambuscheck, Ulrike (ed.). *Zwischen Diskursanalyse und Isotopenforschung. Methoden der archäologischen Geschlechterforschung*. Bericht 3. Sitzung der AG Geschlechterforschung, Schleswig 2007. Frauen – Forschung – Archäologie 8. Münster: Waxmann, 133-161.

- Holý, Ladislav 1956. Pohřby na sídlišťích v Africe. *Archeologické rozhledy*, 8, 236-249.
- Lang, Sabine 1996. Gender variance in North American Indian Cultures. In: Ramet, Sabrina P. (ed.). *Gender Reversals and Gender Cultures. Anthropological and historical perspectives*. London: Routledge. 183 – 196.
- Money, John 1955. Hermaphroditism, gender and precocity in hyperadrenocorticism: psychologic findings. *Bulletin Johns Hopkins Hosp.*, 96, 6, 253-264.
- Neustupný, Evžen 1967. *K počátkům patriarchy ve střední Evropě* [On the beginning of patriarchy in Central Europe]. Rozpravy Československé akademie věd. Praha: Academia.
- Neustupný, Evžen 1973. Factors affecting the variability of the Corded Ware culture. In: Renfrew, Colin (ed.). *The Explanation of Culture Change*. London: Duckworth, 725-730.
- Neustupný, Evžen 1983. Demografie pravěkých pohřebišť [The demography of prehistoric cemeteries]. *Památky Archeologické*, 74, 7-34.
- Mark, Joshua J. 2014. Women in Ancient Egypt. *Ancient History Encyclopedia*. <www.ancient.eu/article/623/>, e-published 4 November 2016; retrieved 17 November 2018.
- Matějčková, Andrea, Dvořák, Petr, and Baleluva, Tatjana 2012 (eds). *Pohřebišťe s období zvoncovitých pohárů na trase dálnice D1 Vyškov-Mořice* [Funerary areas of the Bell beaker period on the D1 Vyškov-Mořice motorway]. *Pravěk, Supplementum* 24. Brno: Ústav archeologické památkové péče.
- Matić, Uroš 2012. To queer or not to queer? That is the question: Sex/gender, prestige and burial no. 10 on the Mokrin necropolis. *Dacia*, 56, 169-185.
- Pehal, Martin 2011. Mocné bezmocné: Ženy ve společnosti a mytologii starověkého Egypta [The Powerful Powerless: Women in the Society and Mythology of Ancient Egypt]. *Prague Egyptological Studies*, 8, 49-54.
- Shennan, Susan E. 1975. The social organisation at Branc. *Antiquity*, 49, 279-288.
- Sherratt, Andrew G. 1981. Plough and pastoralism: aspects of the Secondary Products Revolution. In: Hodder, Ian, Isaac, Glynn, and Hammond, Norman (eds). *Pattern of the Past: Studies in Honour of David Clark*. Cambridge: Cambridge University Press, 261-305.
- Siemen, Palle 1989. Køns- og aldersrelationer i snorekeramik kultur i Saaleområdet [Sex and age relations of the Corded Ware Culture in the Saale District]. In: Larsson, L. (ed.). *Stridsyxekultur i Sydsandinavien. rapport från det andra nordiska symposiet om stridsyxetid i Sydsandinavien, 31.X – 2. XI 1988*. University of Lund, Institute of Archaeology report series 36. Lund: Historiska museet, 185-217.
- Siemen, Palle 1992. Social structure of the Elbe-Saale Corded Ware Culture. A preliminary model. In: Buchvaldek, Miroslav, and Strahm, Christian (eds). *Die kontinentaleuropäischen Gruppen der Kultur mit Schnurkeramik*. Schnurkeramik-Symposium 1990, Praha-Štířín 1.-6.10.1990. *Præhistorica* 19. Praha: Univerzita Karlova, 229-240.
- Sofaer-Derevenski, Joanna 1996. Where are the Children? Accessing Children in the Past. *Archaeological Review from Cambridge* 13, 2, 1994, 7-20.
- Sprenger, Sylvia 1995. Untersuchungen zu Sozialstruktur und Geschlechterrollen am frühbronzezeitlichen Gräberfeld von Singen. *Ethnographisch-Archäologische Zeitschrift*, 36, 191-200.
- Trigger, Bruce G. 1989. *A History of Archaeological Thought*. Cambridge: Cambridge University Press.
- Turek, Jan 1987. *Sociální struktura kultury se šňůrovou keramikou v Čechách a na Moravě ve světle pohřebního ritu* [The social structure of the Corded Ware Culture in Bohemia and Moravia. An analysis based on Burial rite]. Praha: unpublished manuscript.

- Turek, Jan 1990. Pohřební ritus a otázky sociální struktury kultury se šňůrovou keramikou [The burial rite and a question on social structure of the Corded Ware culture]. *Archaeologia Iuvenis*, 1, 6-10.
- Turek, Jan 1996. Osídlení Pražské, kotliny v závěru eneolitu. Nástin problematiky období zvoncovitých pohárů (The Prague region in the Late Eneolithic period). *Archeologica Pragensia*, 12, 5-58.
- Turek, Jan 1998. The Bell Beaker Period in north-west Bohemia. In: Benz, Marion, and Willigen, Samuel van (eds). *Some New Approaches to The Bell Beaker 'Phenomenon' Lost Paradise...?* BAR International Series 690. Oxford: BAR Publishing, 107-119.
- Turek, Jan 2000. Being a beaker child. The position of children in late eneolithic society. In: Pavlů (eds). *In memoriam Jan Rulf*. Památky archeologické Supplementum 13. Praha: Institute of Archaeology, 424-238.
- Turek, Jan 2002. "Cherche la femme!" Archeologie ženského světa a chybějící doklady ženských pohřbů z období zvoncovitých pohárů v Čechách ["Cherche la femme!" The Archaeology of woman's world and the missing evidence of female burials in the Bell Beaker Period in Bohemia]. In: Neustupný, Evžen, and Vencl, Slavomil (eds). *Archeologie nenalézaného. Sborník přátel, kolegů a žáků k životnímu jubileu Slavomila Vencla*. Plzeň, Praha: Západočeská univerzita v Plzni, 217-240.
- Turek, Jan 2006. Období zvoncovitých pohárů v Evropě [Bell Beaker period in Europe]. *Archeologie ve středních Čechách*, 10, 275-368.
- Turek, Jan 2011. Dětský pohřeb z období šňůrové keramiky v Líbeznicích u Prahy [Corded Ware child burial at Líbeznice]. *Archeologie ve středních Čechách*, 14, 183-189 Fototab. 8.
- Turek, Jan 2016. Sex, Transsexuality and Archaeological Perception of Gender Identities. *Archaeologies*, 12, 3, 340-358.
- Tyldesley, Joyce A. 1995. *Daughters of Isis: Women of Ancient Egypt*. London: Penguin Books.
- Vaňharová, Michaela 2011. Určení pohlaví dětí prostřednictvím analýzy DNA na pohřebišti Hoštice I Za Hanou, Sex Determination of the Children from the Burial Place Hoštice I by Means of DNA Analysis. In: Drozdová, Eva (ed.). *Hoštice I Za Hanou. Výsledky sntropologické analýzy pohřebiště lidu zvoncovitých pohárů*. Brno: Masarykova Univerzita, 104-120; 195-196.
- Wiermann, Roland R. 1998. An Anthropological approach to burial customs of the Corded Ware Culture in Bohemia. In: Benz, Marion, and Willigen, Samuel van (eds). *Some New Approaches to The Bell Beaker 'Phenomenon' Lost Paradise...?* BAR International Series 690. Oxford: BAR Publishing, 129-140.

Gender symbolism in female graves of the Bronze Age evidenced by the materials from the Lisakovsk burial complex of the Andronovo cultural horizon

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Abstract

This paper concerns the reconstruction of female gender in the Andronovo culture of the Eurasian steppe zone, currently dated from the 18th to the 15th century cal BCE. Interpretations are based on the analysis of rituals and grave goods of the Andronovo burial site located near the city of Lisakovsk, Kostanay province, north-western Kazakhstan. Special attention is given to the concept of the outstanding female individual represented by the Alakul cultural traditions of the Andronovo cultural family. This idea is relevant for the burials of women who died after reaching 18-20 years of age and were accompanied by children. Other features marking adult female burials are headgear and headdress ornaments, which are absent in child burials. Gender equality is argued based on the placement of a dagger in both male and female burials. We suggest that gender symbolism represented by burial artefacts indicated a female's social status as a mother, a priestess (shaman), or a professional weaver, and that this symbolism was associated with the institutions of power in the Andronovo cultural community.

Keywords: *Alakul, Andronovo, Kazakhstan, child burial, headdress ornaments, status, gender symbolism, weaver*

Introduction

The Andronovo cultural community is a collection of similar local Bronze Age cultures that flourished c. 2000-1300 BCE in western Siberia and the west Asiatic steppe. It is probably better termed an archaeological complex or archaeological horizon. At

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Figure 1. Location of the Lisakovsk Andronovo burial complex in Kazakhstan (map: Mikhail Antonov).

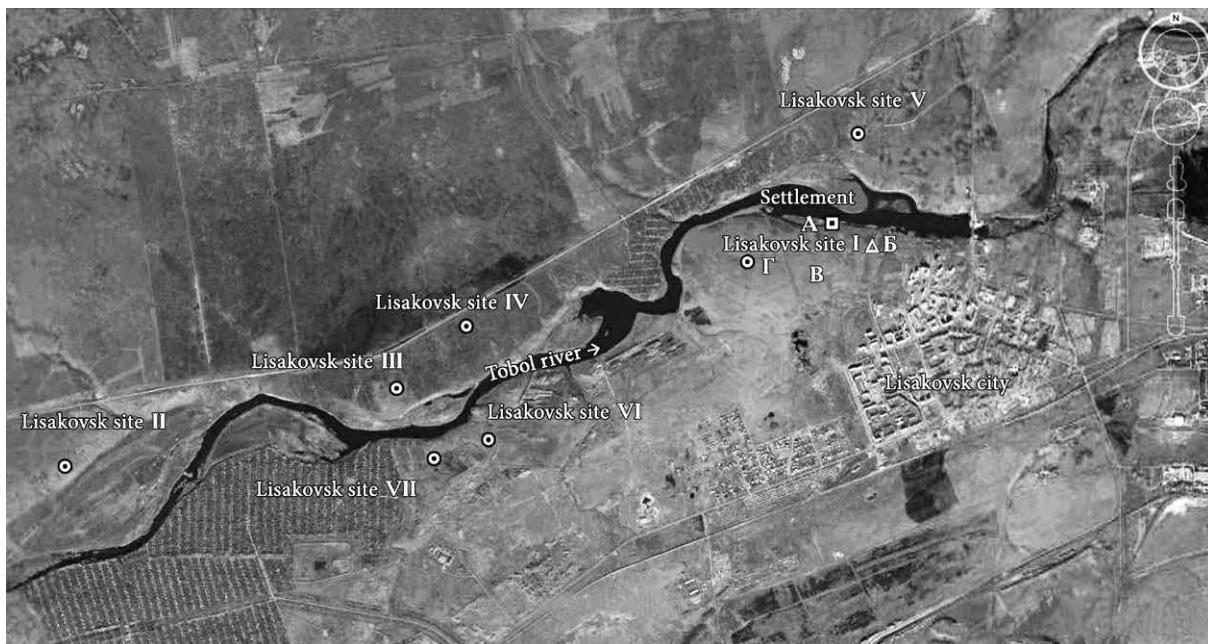


Figure 2. Location of cemeteries on banks of the river Tobol in Kazakhstan (base: Google Maps; additions: Vitaly Lukashov [Petropavlovsk, Kazakhstan]).

least three sub-cultures of the Andronovo horizon, which represent the culture's expansion southwards and eastwards, have been distinguished. They are known as Sintashta-Petrovka-Arkaim, Alakul, and Fyodorovo (Koryakova and Epimakhov 2007, 123-151). The Alekseyevka-Sargary-Begazy cultural group is considered to

be an independent cultural complex of the final Bronze Age (1300-1100 BCE) (Varfolomeev 2013, 190). *'The Andronovo culture spread around a vast area of the steppe and forest-steppe of western Asia, played an important role in the formation of prehistoric human civilization. Investigations carried out at sites of Andronovo culture have resulted in recovery of a significant amount of archaeological material and artefacts, which allow us to analyse various aspects of social organization from economy and subsistence to the ideology and rituals'* (Koryakova and Epimakhov 2007, 126). Reconstruction of the female status in Andronovo society was discussed in the research of some scholars. Bryan Hanks and Alicia Ventresca Miller came to conclusions about the social structure of the Andronovo community of the Eurasian steppes based on the analysis of the burial ritual carried out at various archaeological sites (Hanks 2008; Ventresca Miller 2013).

The following study is based on documented observations and published data from the Lisakovsk burial complex of the Andronovo cultural horizon by Emma R. Usmanova (2005; 2013), who has been excavating at the site for more than 30 years. The Lisakovsk burial complex is located in the Kostanay province of north-western Kazakhstan, adjacent to the modern-day city of Lisakovsk, which lies about 105 km south-west of the regional capital, Kostanay (Fig. 1). The local landscape is characterised by the boundary between the steppe and forest-steppe zones. The complex consists of seven individual cemeteries located approximately 3-20 km from the city of Lisakovsk, on the left and right banks of the river Tobol, a tributary of the river Irtysh. The Andronovo settlement of Lisakovsk is situated near the Lisakovsk I burial site (Fig. 2). The burial site Novoyilinovsky is located 25 km downstream from the city of Lisakovsk. This group of burial sites is archaeologically defined as the Lisakovsk burial complex of Andronovo cultural horizon, and dates back to 1780-1660 cal BCE. *'The chronological order of the Lisakovsk burial sites provides strong evidence of contemporaneity with the Alakul and Fyodorovo cultures in the Tobol River Valley for a portion of the 120-yr period of occupation'* (Panyushkina *et al.* 2008, 459-469).

Archaeological data

In total, 111 barrows and 233 burials of the Alakul culture and Fyodorovo culture funeral traditions have been excavated during the period 1986-2017 (see Usmanova 2005; 2013). According to the anthropological analyses and burial inventory, 33 burials may belong to females. Some burials were identified as female graves based on the presence of typically feminine adornments among the grave goods (Usmanova 2005, 221, 224 Table 26, 43). Most of them are associated with the Alakul cultural tradition of the Andronovo horizon (25 burials). These data open up an opportunity to reconstruct the position of the female gender within Late (?) Bronze Age Andronovo society. The main Alakul cemetery of the Lisakovsk complex is Lisakovsk I A. The northern part of Lisakovsk I A consisted of a line of four central barrows (diameter more than 15 m) with circular ditches. The barrows were surrounded by individual burials (27 graves) and 16 small mortuary enclosures (diameter less than 10 m) without ditches (Fig. 3). The southern part of Lisakovsk I A consisted of two barrows and nine mortuary enclosures. The central, barrow burials held more adult females than adult males or children, while the individual graves held mostly children one to five years old (Tables 1; 2). Such a composition of the cemetery space is characteristic of the Alakul burial tradition (Koryakova and Epimakhov 2007, 131).

In this paper, we consider principally the Alakul female burials of the sites Lisakovsk I A (Usmanova 2005, 219 Tables 1; 2), II, III, and V (Usmanova 2013, 20-88) and Novoyilinovsky II (Usmanova, forthcoming). Two groups of Alakul female burials were distinguished according to the character of the burial and the interval between

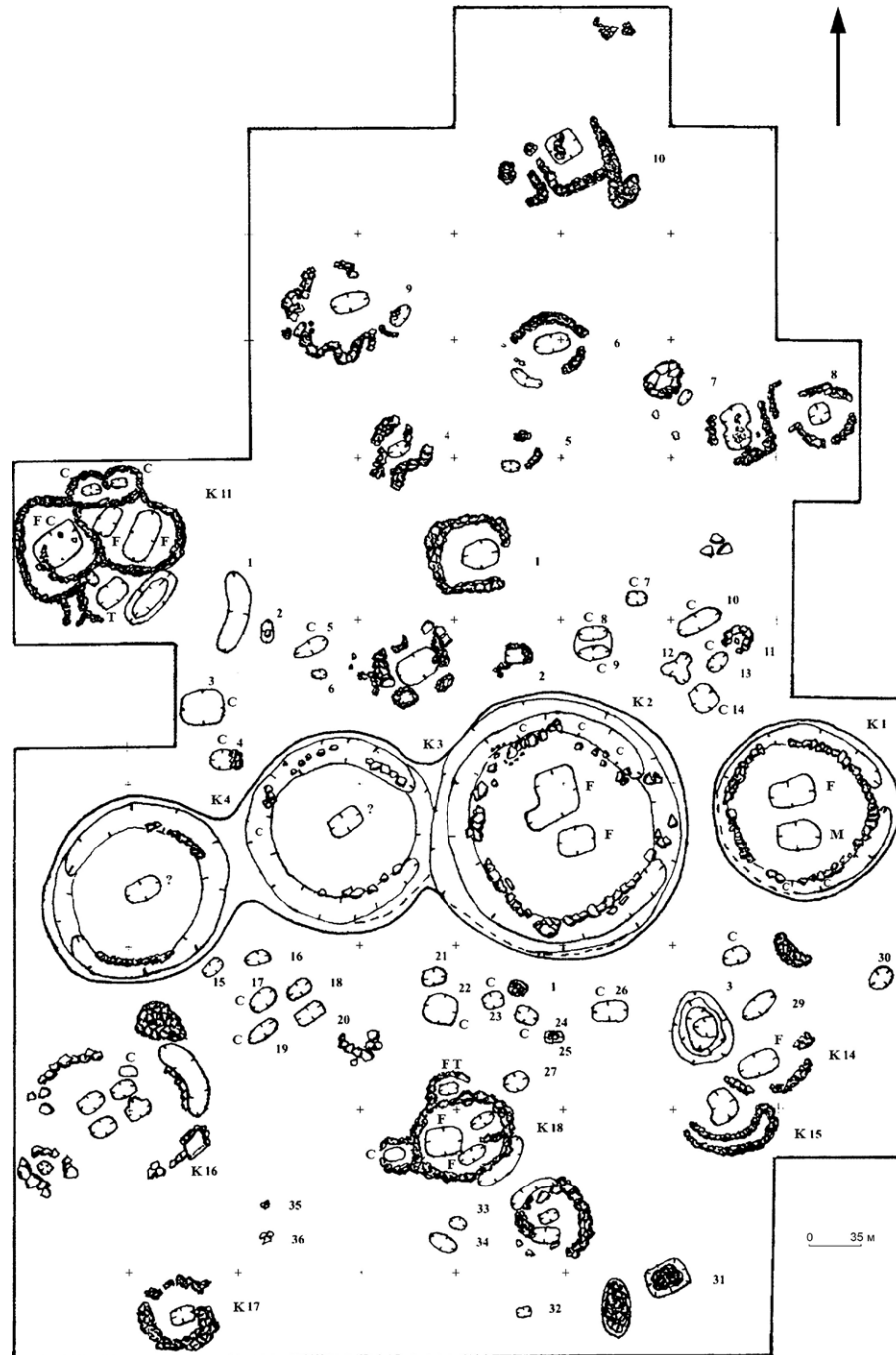


Figure 3. Lisakovsk I A (Kostanay province, Kazakhstan). Location of barrows and mortuary enclosures. Legend: F adult female burial, M adult male burial, C child burial, T teenage burial, K barrow (drawing: Emma Usmanova).

the burials: primary burial or secondary burial, presumably taking place a long time after death, as indicated by the deposition of disarticulated skeletal elements (skull, bones of the arms and legs) (Table 1).

The typical set of Alakul culture female grave goods is represented by hand-made vessels, beads, amulets made from animal canines, gutter-shaped bronze bracelets of two types (with spiral-like ends and with open ends), rings, pendants, flat plaques, forged hollow earrings, among other items (Usmanova 2010). In this paper, we suggest that specific artefacts of the burial inventory emphasised the female's social position in the context of the Alakul burial rite.

Barrow/ grave	Biological data		Type of burial		Inventory			Child also con- tained	Long burial process	Completeness
	Age	Sex	Barrow with ditch	Mortuary enclosure	Headdress	Jewellery	Weaponry (dagger unless indicated)			
Lisakovsk I A										
1	adult, 20	f	•		•	•	•	•	•	+
2/1	adult, 22-25	f	•		•?	•?		•		-
2/2	adult, 20	f	•		•	•	•	•	•	+
3/1	?	?	•					•		-
11/1	?	f		•	•?	•?	•?	•		-
11/2	adult	f		•	•	•		•	•	+
11/3	?adult	f		•	-	•	-	•	-	-
12	?adult	f		•	•?	•	-	-	-	-
14	adult	f		•	•	•	-	-	•	+
18/2	adult	f		•	•?	•	-	•	-	-
5	?, 18-20	f	•							-
6/1	?	f	•		•?	•?	-	•	-	-
22	?	f		•	•?	•				-
23/2	adult	f		•	•	•	•	•	crema- tion	+
Lisakovsk I B										
1	?	f?		•	?	•				-
2	adult	f		•						-
4/1	adult, 25-30	f		•	•	•				+
4/2	adolescent, 13-14	f		•	•?	•?				-
Lisakovsk II										
5/3	adult	f	•			•			unusual pose	+
Lisakovsk III										
3	adult	f	•		•?	•?	axe-hammer	• (2)		-
4/5	adult	f	•		•			•	crema- tion	+
Lisakovsk V										
1/1	adult	f	•		•	•	•		•	+
4/1	adult	f		•		•			•	+
Novoyilinovsky II										
4	adult	f	•		•?	•	•			-
Total: 25			11	14	8/? 10	14 / ?6	4/?1/ axe-ham- mer 1	13	6 / 2 crema- tion / 1 unusual pose	+ 10 / - 15

Table 1. Lisakovsk Andronovo burial complex. Alakul culture. Female burials in Lisakovsk I A, I B, II, III, and V and in Novoyilinovsky II. Barrow with ditch and child burials. Sex: f female; mortuary enclosures with child burials; completeness: + undisturbed, - disturbed; long burial process means in this context a burial ceremony that was taking many days as evident through the condition of the remains and the burial chamber.

Barrow / grave	Biological data		Type of monument			Inventory		Completeness
	Age	Sex	Barrow with ditch	Mortuary enclosure	Single grave	Headdress	Jewellery	
Lisakovsk IA								
1/3	child inf. ^A ?							+
1/4	child inf. ?		•					+
2/4	child inf. ?		•					+
2/5	child inf. ?		•					+
2/7	child inf. ?		•					+
3/2	child inf. ?		•					+
3 grave	child				•			+
4 grave	teenager				•		•	+
8 grave	teenager	f			•		•	+
11/5	teenager, 13-14			•				-
11/6	teenager			•				-
11/7	teenager	f		•			•	+
14 grave	teenager, 14				•			+
16 grave	teenager ?				•			-
17 grave	teenager, 12-15	f			•			-
18 grave	teenager; teenager	f; m			•		•	-
21 grave	teenager	f			•		•	+
23 grave	teenager				•			-
27 grave	child, 2				•			+
16/5	child			•			•	+
18/1	teenager, 13-14	f		•		•?	•?	-
18/4	teenager			•			•	+
18/6	child, 8-9			•				+
18/7	child, 3			•				+
19/2	child, 7-8	m		•				+
32 grave	child				•			+
6/2	child inf. ?		•					+
6/3	child inf. ?		•				•	+

Table 2. Lisakovsk Andronovo burial complex. Alakul culture. Child burials in Lisakovsk IA, II, and III. Sex: f female; m male. Completeness: + undisturbed, - disturbed. ^A Child under 3 years.

6/4	child inf. ?		•					+
6/5	child, c. 7		•				•	+
6/6	child inf. ?		•					+
24/3	child, 3-4				•			+
Lisakovsk II								
14/2	child		•					+
Lisakovsk III								
5 grave	teenager	f			•	•	•	+
4/5	child, 10; child, 10	m; m	•					+
Total: 35			13	10	12	2	11	+ 28 / - 7

Table 2 (continued).

Discussion

Women holding the social status of married woman and mother

The complex female headgear adornments for braids (*nakosniki*) and face pendants (headdress ornaments) deserve specific attention. These are ethnographic markers of the Alakul culture (Usmanova 2010, 58-62). Twelve sets of hairdressing decorations were found in complete form or as individual components at the Lisakovsk burial site (Usmanova 2010, 33-35). Two types of hairdressing decorations attached to the headgear are defined: 1 – simple, consisting of two or three paste and bronze beads with leaf-shaped bronze pendants at the ends; 2 – complex, consisting of a few paste and bronze beads with variously shaped bronze pendants (Fig. 4). Fragments of headgear with hairdressing ornaments and pendants are known from other Alakul burial grounds of the Ural-Kazakhstan region, including the cemeter-

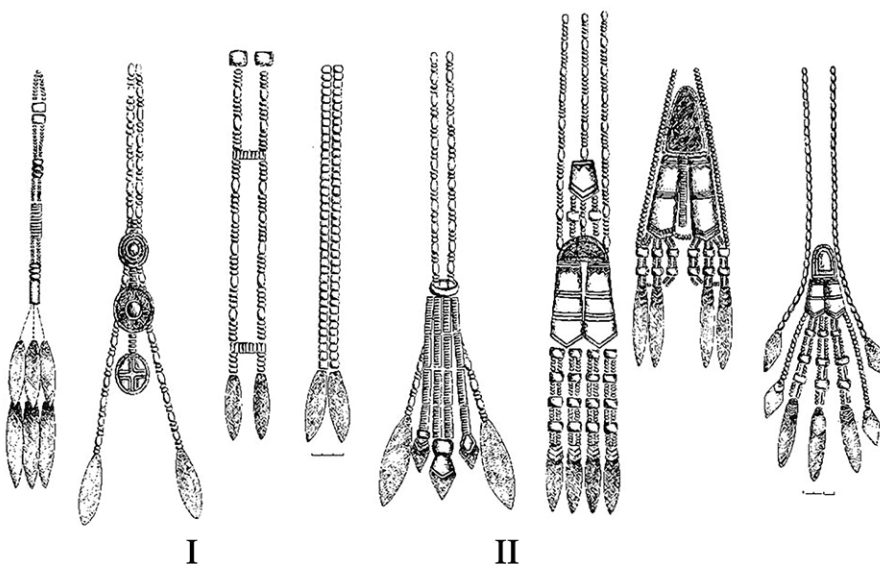


Figure 4. Reconstructions of the Alakul female headdress ornaments, type I and II. Material: bronze and faience paste; spacing 30-60 cm (Usmanova and Logvin 1998, 30-34 Fig. 13-16).

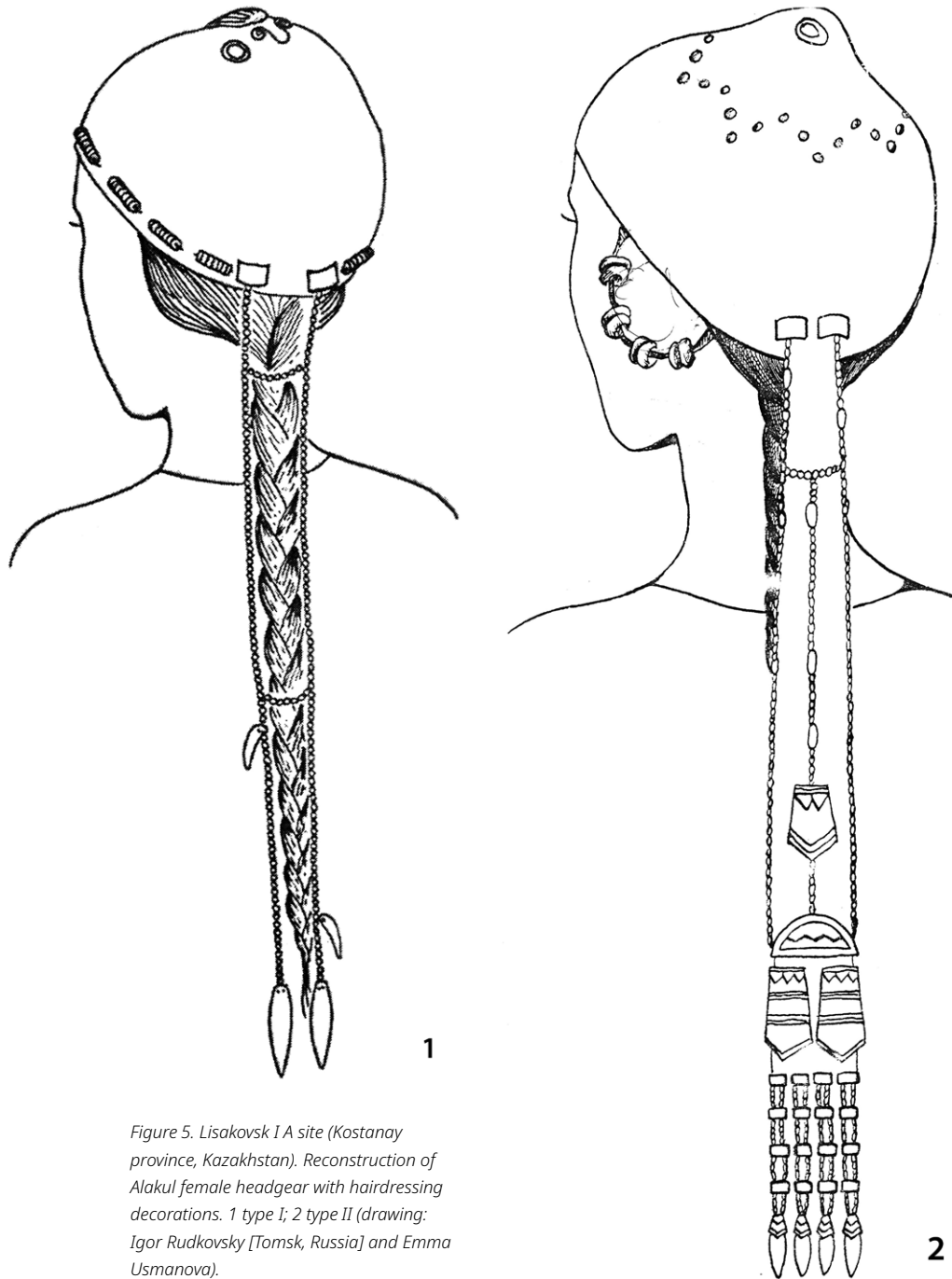


Figure 5. Lisakovsk I A site (Kostanay province, Kazakhstan). Reconstruction of Alakul female headgear with hairdressing decorations. 1 type I; 2 type II (drawing: Igor Rudkovsky [Tomsk, Russia] and Emma Usmanova).

ies of Bozengen, Takanay, Bestamak, and Kulevchi (Usmanova, Logvin 1998, 30-33; Usmanova 2010, 71-71 Tab. 1).

The correlation between archaeological and anthropological data suggests that headgear with simple decoration belonged to girls under 10 years old who had not reached puberty, while complex headgear ornaments belonged to female individuals who had passed puberty and were more than 15 years old (Table 1). According to the ethnography of traditional Eurasian nations, headgear indicated females' status in society (Suslova 1980; Sycheva 1984). The costumes of women of the Kazakh, Tatar, Finno-Ugric, and other Eurasian ethnic groups have similar hair decorations, which reflect her status as a bride and a married woman (Tokhtabayeva 2005). According

to the ethnographer Nina Hagen-Thorne (1933), a change in ornamented headgear and hairdressing decorations demonstrated the transition from an adolescent girl to the status of a bride and a married woman. Richly decorated headgear with braids is a symbol of the wedding ritual and the change of social status from unmarried to married woman. Headdresses reflect the key points in the life of a woman in traditional society.

According to the Andronovo archaeological evidence, headgear with hairdressing decorations is absent in the burials of girls under the age of 10 and present in the burials of older females (Usmanova 2010, 68-69 Tab. 1). Perhaps an adolescent girl became eligible for marriage at the age of 12-15 years in Andronovo society (Fig. 5). Perhaps the headgear and hairdressing artefacts among the grave goods indicated the social status and age of a buried female in the Alakul cultural tradition.

Deceased women older than 18 years were buried in the central barrows surrounded by one ditch, whereas deceased children aged from one to five years old were placed in ditches (Lisakovsk I A; Tables 1; 2). It is unlikely that the child graves located in a barrow's ditch were secondary or additional burials. Quite possibly they were made in the same season as the female burials, with only a small time interval or even as part of the same funeral ceremony.

The following main features differentiate the burials of children and adolescents:

- individual grave in barrow ditch (1-5 years old)
- individual grave in barrow (10-12 years old)
- individual grave in mortuary enclosure (10-12 years old; rarely 5-7 years old)
- individual burial elsewhere in the cemetery (5-14 years old)

Children of one to five years old buried in barrow ditches probably signified the female's social status as mother. According to ethnographic data, children under three to five years old are associated with the first stage of childhood, which did not have the same social status as that of adulthood (Shakhanova 1996, 64-71). A child of this age required the protection of the mother. A similar ideology potentially existed in Bronze Age society, reflected in the mortuary rites of placing a child's burial in the barrow ditch to signify that the child was in need of maternal protection. A child buried near its own mother, or a female of that status but descended from another family, was thus symbolically placed under maternal protection. On the basis of the archaeological data alone, we cannot accurately establish a biological relationship between a woman and a child buried in the same barrow. We assume that in the funeral ritual the motherhood status of a female has of greater sacred significance than a any biological relationship. Unfortunately, it is not yet possible to argue about the biological connection between a buried child and a woman because the DNA analyses is absent. At this point on the basis of the archaeological evidence, only two burials are known that can be possibly identified as the graves of biological mothers and children. In this case, the woman and the children were buried together in the same grave (Lisakovsk I A, 23/2; Lisakovsk III, 3; Table 1).

Leadership and high status

Only four female burials that can be associated with positions of social management in the Alakul community are known from the Lisakovsk burial complex (Table 3). Females were buried with males in the following ways: together in one grave (one case, Lisakovsk V, barrow 1: diameter 12 m, height 1 m) or separately, in different graves, but in one barrow (one case, Lisakovsk I A, barrow 1: diameter 12 m, height 0.6 m). These barrows differ from the others by their large size (diameter 5-8 m, height 0.2-0.3 m) and their central position in the cemetery area (Usmanova 2005, 219 Table 1). In two cases, female burials with a dagger were not accompanied

Site and barrow / grave	In one barrow together	In one grave together	In one barrow individually
Lisakovsk I A - 1	female + male		
Lisakovsk I A - 2/2			female
Lisakovsk I A - 11/1			female
Lisakovsk V - 1/1		female + male	
Lisakovsk I A - 24	male + male		
Novoyilinovsky II - 4			female

Table 3. Lisakovsk Andronovo burial complex. Alakul culture. Female and male burials containing a dagger.

by male burials (Lisakovsk I A, barrow 2: diameter 12 m, height 0.5 m; Novoyilinovsky II, barrow 4: diameter 16 m, height 0.5 m).

According to the archaeological data, the majority of the barrow burials had not been intentionally disturbed by later activity (Table 1). Probably, a ritual taboo existed in the funeral practice of this Alakul community on the intentional disturbance of burials where people of unique or high social status were buried. Note that such disturbance is distinct from excavation for the purpose of robbery. Apparently there were certain reasons for disturbing particular burials while leaving others untouched. It seems that intentional penetration into a burial can be considered as part of a ritual carried out by representatives of this population some time later than the initial funeral ceremony was completed (Usmanova 2018, 1134).

Undisturbed female barrow burials were identified from the position of a bronze dagger in a particular orientation, towards the head of the deceased female (Fig. 6). The daggers in male burials were placed in the hands of the deceased or near the body. These female burials have the common feature of placement of additional female body parts into the burials a long time after the initial interment. A single head or skull or fragments thereof had been added to two burials (Lisakovsk I A, barrow 1, 2). A skull and the bones of the hands and feet arranged in a crouched position were put into a grave at Lisakovsk V barrow 1 and Novoyilinovsky II barrow 4). Potentially, the Andronovo burials indicate universal patterns of post-mortem treatment of the dead displayed by the cultures of both the Eurasia and the Americas (Smirnov 1997, 54-70).

Based on historical and ethnographic data, some scholars (Berseneva 2008; McHugh 1999; Parker Pearson 1999) believe that the burial of females with 'male' artefacts (daggers, arrowheads, etc.) can be suggestive of a female's high status. For example, high social status of females is suggested by the presence of weapons and jewellery in female burials of the Sargat culture, in western Siberia. Gendered symbolism mattered in the presentation of the deceased person in the funerary rituals of the Sargat population (Berseneva 2008).

Alakul female burials with a dagger also contained richly ornamented headgear with hairdressing ornaments. The features of funeral rites, such as central position and large size of a barrow and presence of a dagger or headgear, indicated the high status of a buried woman, perhaps associated with the stratum of community leaders.

All these features together may demonstrate the existence of gender equality in the Andronovo (Alakul) funerary rite. The main symbolic marker of gender equality was the placement of a dagger near the head of a deceased woman. Nevertheless, the question of gender equality in the Andronovo community has to remain open due to a lack of other cultural evidence.

Priestess-shaman status

The notion of the woman as a priestess-shaman (healer) or perhaps cult servant is proposed due to the presence of items that were potentially used in the ritual life of the Alakul population. From our point of view, two female burials with unique vessels could represent the status of a priestess-shaman. These burial vessels do not have analogies in the collection of ceramics from elsewhere in the Lisakovsk burial site or the settlement.

One unique vessel was found in a distributed burial ground (Lisakovsk III, mortuary enclosure 3). The bone remains belonged to a middle-aged woman and an adolescent (preliminary anthropological analysis by Albina Kolbina, personal communication 2013). Fragments of ornamental accessories and shards of three vessels were scattered along the bottom of the grave pit. A vessel with lugg handles and a polished stone axe-hammer were found in situ. The lugg-handled vessel was designed to be suspended and lacked traces of burning (Fig. 7). Perhaps the vessel was used as a container for liquid or bulk materials, such as herbs or seeds. Ethnographic data have allowed researchers to associate similar vessels with some kinds of cult functions. The vessels could be used by healers during treatment. According to Olga D. Bubnove (personal communication 2018) handle-ears vessels are used by the Mansi of western Siberia during the treatment sessions at holy places.

The next unique item from the Lisakovsk burial site is an axe-hammer (Fig. 8). The polished and drilled stone axe-hammer (potentially made of gabbro stone) was lying in situ in the disturbed burial. Such polished axe-hammers are a rare find among Andronovo antiquities of the Ural-Kazakh steppe, and it may have been imported (Chenchenkova 2004, 246-251). Its utilitarian function as a combat weapon is limited. The polished blade is blunt; therefore, only the hammer part could be used to strike. The axe-hammer was specifically left in the female's burial, under a wooden cover. It seems that in this case we are also observing the idea of a ritual taboo.

It can be suggested that some funeral deposits could not be touched, while other deposits could be taken away or intentionally penetrated by representatives of the Alakul population. Probably, the axe-hammer remained untouched due to its special ritual character and association with the priest's personal accoutrements. It is an atypical artefact for women's burials and, in general, a unique item; the presence of this object may indicate the special role of the woman as a priestess.

Another detail indicating the specific character of the burial was the disarticulated skull of a child

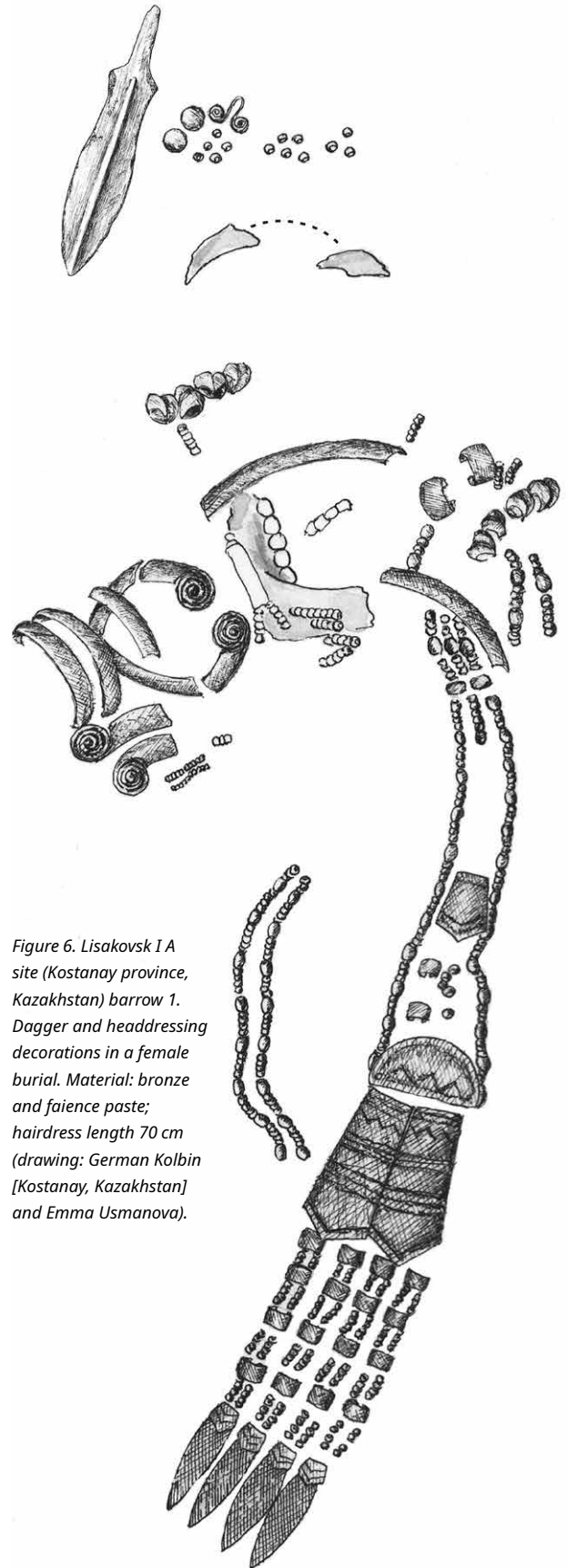


Figure 6. Lisakovsk I A site (Kostanay province, Kazakhstan) barrow 1. Dagger and headressing decorations in a female burial. Material: bronze and faience paste; hairdress length 70 cm (drawing: German Kolbin [Kostanay, Kazakhstan] and Emma Usmanova).



Figure 7. Lisakovsk III (Kostanay province, Kazakhstan) mortuary enclosure 3. Lugg-handled ceramic vessel, height 32 cm, diameter 18 cm (photograph: Emma Usmanova).



Figure 8. Lisakovsk III (Kostanay province, Kazakhstan) mortuary enclosure 3. Stone axe-hammer. No scale (photograph: Emma Usmanova).



Figure 9. Lisakovsk III (Kostanay province, Kazakhstan) mortuary enclosure 3. Position of the axe-hammer and the child's skull in situ in the burial (photograph: Emma Usmanova).

(three years old) placed in a niche made in the wall of the burial chamber (Fig. 9). It supports the gender-specific arrangement of this burial. In traditional cultures, the cult of the skull is often combined with a cult of fertility in ceremonies of a magical and protective nature (Usmanova 2003, 152-156; Usmanova 2018, 1134). Probably, the installed child's skull symbolised the participation of the buried women in family fertility rituals.

Only one undisturbed female grave has been discovered at the Lisakovsk II burial site, barrow 5a; the remaining 22 burials were disturbed (Usmanova 2013, 21-43). A deceased woman was buried in a very unusual mortuary pose for the Alakul funeral rite. The body of the deceased was laid on its belly, legs flexed, arms bent at the elbows, and the palms were laid under the face (Fig. 10). The deceased and the grave inventory were covered by felt, fragments of which were discovered in the form of bluish grey fibres. One pot was found near the head of the buried woman. A second vessel, of tall cylindrical shape (~ 40 cm in height), was placed near the knees of the deceased. This vessel presents a unique example in the ceramic collection from the Lisakovsk burial site and settlement (Fig. 11). According to ethnographic data, cylindrical vessels or containers are typically used in the process of preparing fermented milk beverages in traditional nomadic cultures (Usmanova



Figure 10. Lisakovsk II burial site (Kostanay province, Kazakhstan) barrow 5a. Female burial in unusual mortuary pose (photograph: Emma Usmanova).



Figure 11. Lisakovsk II burial site (Kostanay province, Kazakhstan) barrow 5a. Tall ceramic vessel, height 13 cm, diameter 14 cm (photograph: Emma Usmanova).

2013, 109-110). The world of shamanic spirits can be imagined as a realm turned upside-down, like the opposite of real life (Dashibalov 1993). The shaman's ritual activity leading to exaltation was accompanied by the use of special drinks or other entheogens as a psychoactive substance (Wikipedia contributors, Shamanism#Entheogens. In: Wikipedia, The Free Encyclopedia, <en.wikipedia.org/w/index.php?title=Shamanism&oldid=896814069>, retrieved 13 May 2019). We suppose that the female buried in an unusual, upside-down pose with a vessel for the preparation of a fermented drink was related to shamanism.

Women holding the professional status of weaver

Fragments of woven textiles founded at the Lisakovsk burial site indicate the development of weaving technologies in Andronovo society. Alakul weavers spun a high quality wool thread, from which they wove braid, which they then wove into cloth (Usmanova, Mitschke 2013, 315-323). Headgear and clothing elements were sewn from the wool braids. It might be assumed that such well-developed weaving craft would contribute to the placement of a larger number of items used for weaving into the burials. However, weaving tools are very rare among the grave goods. A few spindle whorls, awls, and needles are among the artefact collection from the Lisakovsk settlement, but in the burials there was only one spindle (Lisakovsk I G, mortuary enclosure 16/2), an awl (Lisakovsk I A, mortuary enclosure 12), and a needle (Lisakovsk I G, mortuary enclosure 13/3) (Usmanova 2010, 106).

The status of a female weaver, marked by the presence of professional tools, was presented in the centre of barrow 4, with diameter of 12 m and height 1 m, at Novoyilinovsky II (Usmanova, forthcoming). As a result of intentional penetration into the burial, the head and hand decorations had been pulled out of the grave. Their fragments were found in a corner of the grave. The skull, without the lower jaw, was left in the location of the head (Fig. 12). The lower part of the human skeleton and

Figure 12. Novoyilinovsky II (Kostanay province, Kazakhstan) barrow 4. General view of the female burial (photograph: Emma Usmanova).





Figure 13. Novoyilinovsky II (Kostanay province, Kazakhstan) barrow 4. A crocheting hook, a bronze awl in a bone case, a bone spindle whorl. No scale (photograph: Emma Usmanova).



Figure 14. Reconstruction of a female weaver based on data from the Lisakovsk Andronovo burial complex, in the Almaty Museum, Kazakhstan. The concept for the reconstruction came from Emma Usmanova (2010, 34; 76) (photograph: Emma Usmanova).

the professional tools related to weaving, knitting, and sewing – such as a crocheting hook, a bronze awl in a bone case, a bone piercer, a bone spindle whorl, and a grindstone – remained in situ (Fig. 13). A bronze dagger was discovered lying on the other half of the grave's floor, opposite the skeleton of the deceased.

Six holes for wooden (?) pillars were located in the western and eastern portions of the grave's floor. Perhaps they once supported a canopy inside the burial, which was removed when the funeral ceremony ended. This is the first documented case of a burial of a woman that could be associated with weaving and knitting activi-

ties carried out in the Andronovo community (Snitkovskaya and Usmanova 2019). Professional tools deposited as burial inventory demonstrate the professional status of the female (Fig. 14). Other features of the burial, such as the central position of the large-sized barrow and the presence of a dagger and headgear adornment, may also point to the high social position of the deceased female. The creative image of a weaver has an important meaning in world mythologies. Examples of this are the images of the patroness of weaving, the goddess Athena, and of three Moirai goddess of fate keeping the threads of destiny in their hands (Losev 1982, 169; Weaving/Spinning. Sewing 2010, 456-461).

Conclusions

Engendered female symbolism connected with a cult of fertility, as well as social and professional activities, are reflected in the female burials of the Lisakovsk Alakul burial complex of the Andronovo cultural horizon in the Eurasian steppe zone. The archaeological evidence demonstrates that Alakul funerary rituals were associated with gender and indicated some female social statuses. In this paper, we outlined the following markers of gender symbolism observed in the Alakul burial rite: Richly decorated headgear and hairdressing ornaments indicated the age and social status of a bride or married woman. Child graves located in barrow ditches symbolised the motherhood status of a deceased woman, and potentially a family relationship. The large size and central position of a barrow, the presence of a dagger, and richly ornamented headgear indicated a woman's association with the stratum of community leaders. Unusual ceramic vessels, a unique axe-hammer, and the unusual position of the deceased female represented a servant of a fertility cult as a shaman-priestess or a healer. Weaving and knitting tools among the burial inventory potentially reflected a professional and mythological female figure.

In this paper, we discussed one specific archaeological complex dating to 1780-1660 cal BCE. In general, our conclusions about the major status characteristics of females inhumed with a rich grave inventory and in central mounds are in line with the ideas presented by other researchers.

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References

- Chenchenkova, Olga P. 2004. *Kamennaiia skul'ptura lesostepnoi Azii epoxy paleometalla III-I tys. do n.é.* Ekaterinburg: Tezis, 246-251.
- Dashibalov, Bayir B. 1993. Perevernutyj sosud – put v “drugojmir”. In: Konovalov, A. V., and Tafincev, A. I. (eds). *Žizn', smert', bessmertie: materialy naučnoj konferencii, provedennoj v dekabre 1993 goda v g. Sankt-Peterburge gosudarstvennym muzeem istorii religii.* Sankt-Peterburg: Obrazovanie, 11-12.

- Hagen-Thorne, Nina I. 1933. Magicheskoe znachenie volos I golovnogo ubora v svadebnyx obryadax Vostochnoj Evropy. *Soviet Ethnography*, 5-6, 76-88.
- Hanks, Bryan 2008. Reconsidering Warfare, Status, and Gender in the Eurasian Steppe Iron Age. In: Linduff, Katheryn M., and Rubinson, Karen S. (eds). *Are All Warriors Male? Gender Roles on the Ancient Eurasian Steppe*. Gender and Archaeology 16. Lanham: AltaMira Press, 15-35.
- Koryakova, Ludmila N., and Epimakhov, Andrej V. 2007. *The Urals and Western Siberia in the Bronze and Iron Ages*. Cambridge: Cambridge University Press.
- Losev, Alexei F. 1982. Mojry. In: Tokarev, Sergeĭ Aleksandrovich (ed.). *Mify narodov mira 2*. Moskva: Sovetskaia entsiklopediia, 169.
- McHugh, Feldore 1999. *Theoretical and Quantitative Approaches to the Study of Mortuary Practice*. BAR International Series 785. Oxford: Archaeopress.
- Panyushkina, Irina P., Mills, Barbara J., Usmanova, Emma R., and Cheng, Li. 2008. Calendar Age of Lisakovskiy Timbers Attributed to Andronovo Community of Bronze Age in Eurasia. *Radiocarbon*, 50, 3, 459-469.
- Parker Pearson, Michael 1999. *The Archaeology of Death and Burial*. Stroud: Sutton.
- Shakhanova Nurilya, 1996. Polovozrastnaya stratifikatsiya traditsionnogo obshchestva kazakhov. *Evolutsiya gosudarstvennosti Kazakhstana*, 64-71.
- Smirnov, Yuriy, A. 1997. *Labirint: Morfologiya prednamerennogo pogrebeniyayu. Issledovaniye, teksty, slovar'*. Moskva: Vostochnaya literature.
- Suslova, Svetlana V. 1980. *Zhenskiye ukrasheniya kazanskikh tatar serediny nachala XX veka*. Moskva: Nauka.
- Snitkovskaya, Polina A., and Usmanova, Emma R. 2019. Pogrebal'naya praktika petrovskoy kul'tury po materialam mogil'nika Novoil'inovskiy 2. *Vestnik Permskogo universiteta. Istoriya. Vypusk*, 1, 44, 73-86.
- Sycheva, Natalya 1984. *Yuvelirnyye ukrasheniya narodov Sredney Azii i Kazakhstana XIX-XX vekov*. Moskva: Sovetsky Khudozhnik Publishers.
- Tokhtabayeva, Shayzada Kh. 2005. *Serebryanij put' kazakhskikh masterov*. Almaty: Dayk Press.
- Usmanova, Emma and Mitschke, Sylvia 2013. Frauenkleidung – Zum Stand der Textiltechnologie in der Bronzezeit. In: Stöllner, Thomas, and Samašev, Zajnolla (eds). *Unbekanntes Kasachstan Archäologie im Herzen Asiens 1*. Veröffentlichungen aus dem Deutschen Bergbau-Museum Bochum 192. Bochum: Deutsches Bergbau-Museum, 315-323.
- Usmanova, Emma R. 2003. Andronovcy – oxotniki za cherepami? (ob odnoj detail nekrologicheskogo cikla mogil'nika Lisakovska). In: Zholdasbekov, M. (ed.). *Stepnaya civilizaciya Vostochnoj Evrazii 1*. Drevnie epoxy. Astana: Kultgin, 152-156.
- Usmanova, Emma R. 2005. *Mogil'nik Lisakovskii I: fakty i paralleli*. Karaganda: Karagandinskii gos. Universitet.
- Usmanova, Emma R. 2010. *Kostium zhenshchiny epokhi bronzy Kazakhstana: opyt rekonstruktsii*. Karaganda: Karagandinskii gos. Universitet.
- Usmanova, Emma R. 2013. *Pamjatniki Lisakovskoj okrugi: archeologičeskie sjužety. Mogilniki epoxy bronzy Lisakovskoj okrugi*. Karaganda: Tengri.
- Usmanova, Emma R. 2018. Intentional ritual penetration of burials (in the case of Lisakovsk Andronovo Burial Site, the Bronze Age, Kazakhstan). In: *24th EAA Annual Meeting, Barcelona 2018. Reflecting Futures*. Abstract book 2. Barcelona: European Association of Archaeologists, 1134.
- Usmanova, Emma R., and Logvin, Viktor N. 1998. *Ženskie nakosnye ukrašenija Kazachstana epokha bronzy*. Lisakovsk: Lisakovsk Museum.

- Varfolomeev, Victor V. 2013. Ceramics of superstratual appearance from the monuments of Begaz-Dandybai culture. In: Beysenov A.Z., *Begazy-dandybay culture Steppe Eurasia*. Almaty: Begazy-Tazmola, 167-197.
- Ventresca Miller, Alicia 2013. *Social organization and interaction in Bronze age Eurasia: A Bioarchaeological and Statistical Approach to the Study of Communities*. [PhD thesis University of Pittsburgh]. <d-scholarship.pitt.edu/18386/>, e-published 25 July 2013, retrieved 11 February 2019.
- Weaving/Spinning, Sewing 2010. In: Ronnberg, Ami and Martin, Kathleen (eds). *The book of symbols: Reflections on Archetypal Images. The Archive for Research in Archetypal Symbolism*. Berlin: Taschen, 456-461.

Male gender identity during the Ural Bronze Age. On the way down?

Natalia Berseneva

Abstract

This study concerns the Sintashta, Petrovka, and Alakul cultural groups, currently dated from the 21st to the 15th centuries cal BCE. Their sites are located in the steppe part of the Southern Urals. This paper has two purposes. The first is to investigate the context of the Sintashta, Petrovka, and Alakul male burials in dynamics during the Bronze Age. The second is to define the possible reasons for the gradual disappearance of gender markers from male burials during the Late Bronze Age. My investigation allows me conclude that it could be related to reorientation of burial rituals towards the reflection of family values, presumably related to the female gender. Social and environmental circumstances that got better during the Bronze Age may have stimulated the Alakul population to stop investing huge resources in the creation of great burial complexes and supporting excessive chariot technologies. A part of male social roles (*e.g.* that of warrior-charioteer) gradually disappeared from life and then from burial rites. Male identity in the burials became latent in comparison to the female 'look', which became very accented in the Alakul period.

Keywords: *Bronze Age, southern Urals, burial grounds, male gender*

This study concerns the Sintashta, Petrovka, and Alakul cultural groups, currently dated from the 21st to the 15th centuries cal BCE (Molodin *et al.* 2014; Chechushkov and Epimakhov 2018). The sites are located in the steppe part of the southern Urals (Figs. 1; 2). The Urals area can be defined in terms of its geographic location as a natural boundary between Europe and Asia. In terms of administrative divisions, this area covers several provinces of the Russian Federation: the Chelyabinsk and Kurgan regions, as well as the north-western part of Kazakhstan. It is characterised by great landscape and environmental diversity: steppe, forest-steppe, forests, and mountains. The beginning of the Bronze Age in the steppe and the southern forest-steppe was marked by the emergence of food-producing economies, based primarily on livestock breeding, which periodically changed their form over a period of almost 2000 years (Koryakova and Epimakhov 2007, 12).

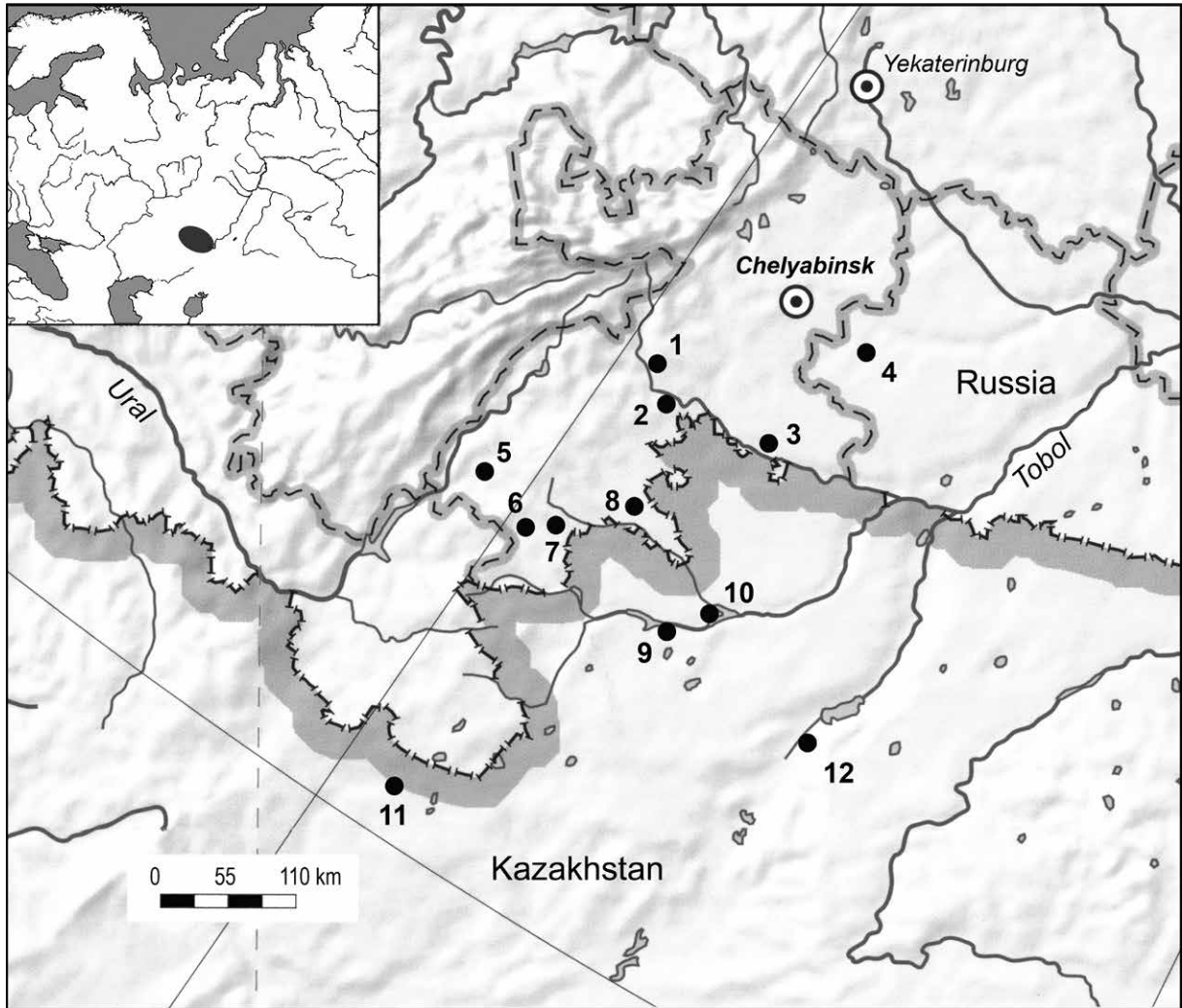
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Figure 1. Map of cultural developments of the Bronze Age in northern Eurasia (redrawn after Chechushkov and Epimakhov 2018, Fig. 1).

	Sintashta period	Petrovka period	Alakul period
Absolute chronology (calibrated)	21st-18th centuries BCE	19th-18th centuries BCE	17th-15th centuries BCE
Settlement types	Fortified settlements, round or rectangular in form	Fortified settlements	Open settlements
Burial ground types	Barrow groups or flat cemeteries, sporadic burials at settlements	Barrows in multiphase cemeteries, sporadic burials at settlements	Barrow groups or flat cemeteries, sporadic burials at settlements
Burial types	Both multiple and individual inhumation graves for all ages	Predominantly single inhumation burials for children, multiple tombs for adults	Predominantly single inhumation burials for children, multiple tombs for adults
Grave good types	Sintashta ceramics, tools, ornaments, weaponry, horse harness, traces of chariots	Petrovka ceramics, ornaments, weaponry, tools, horse harness	Alakul ceramics, ornaments
Animal sacrifice types	Abundance of whole sacrificed animals (horses, sheep, calves, dogs) in graves	Sacrificial deposits 'head and extremities', paired sacrifices of whole horse carcasses	Sacrificial sheep deposits 'head and extremities' or, to a much lesser extent, separate bones
Key burial ground sites	Kamennyi Ambar-5, Bolshekaraganskiy, Krivoe Ozero, Stepnoye-1, Bestamak	Troizk-7, the Petrovka part of the Krivoe Ozero, Kulevchi VI, Stepnoye VII	Stepnoye VII, Kulevchi VI, Alakul, Lisakovskiy I, Tasty-Butak I
Sources	Epimakhov 2005; Zdanovich 2002; Vinogradov 2003; Kupriyanova 2016	Vinogradov 1984, Vinogradov 2003; Kupriyanova and Zdanovich 2015; Kostyukov and Epimakhov 1999	Kupriyanova and Zdanovich 2015; Vinogradov 1984; Sa'lnikov 1952; Usmanova 2005; Sorokin 1962

Table 1. Summary of the main characteristics of the different Bronze Age cultures in the southern Urals (Berseneva 2017, Table 1).



It has been established that the Sintashta-Petrovka-Alakul continuum constitutes a sequence of kindred cultures, who lived in the southern Trans-Ural area at the end of the Middle and into the Late Bronze Age (Table 1; Figs. 3; 4). The burial data of these kindred cultural groups afford the opportunity to investigate and reconstruct the transformation of gender stereotypes as reflected in the mortuary ritual, and to explore the dynamics of change apparent in the burial rituals associated with different genders in these societies.

This paper has two purposes. The first is to investigate the context of the Sintashta, Petrovka, and Alakul male burials in dynamics during the Bronze Age. The second is to establish possible reasons of the gradual disappearance of gender markers from male burials during the Late Bronze Age.

Archaeological picture of the Sintashta culture

The most impressive culture of the final period of the Middle Bronze Age is the Sintashta culture (21st to 18th centuries cal BCE) (Gening *et al.* 1992; Anthony and Vinogradov 1995; Koryakova and Epimakhov 2007, 66-80; Vinogradov 2003; Zdanovich 2002; Logvin 2002; Tkachev 2007; Logvin and Shevnina 2013). The

Figure 2. Map of key Sintashta, Petrovka, and Alakul burial grounds. 1 Stepnoye-1, Stepnoye VII; 2 Krivoje Ozero; 3 Troizk-7; 4 Alakul; 5 Bolshekaraganskyi; 6 Sintashta; 7 Kamennyi Ambar-5; 8 Kulevchi VI; 9 Lisakovskiy I; 10 Halvay III; 11 Tasty-Butak I; 12 Bestamak (drawing: Natalia Berseneva).

Figure 3. Proportions of individuals of different ages in burials of the Sintashta, Petrovka, and Alakul cultures (Natalia Berseneva).

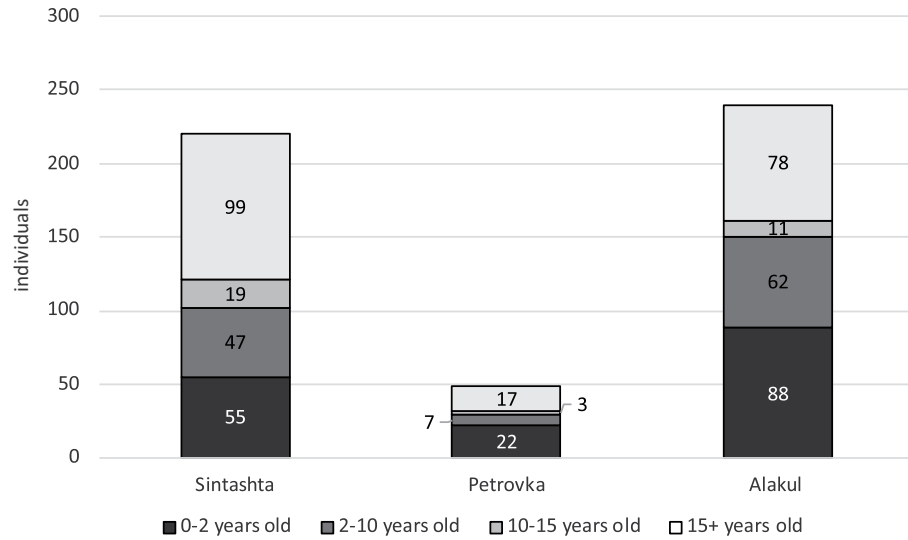
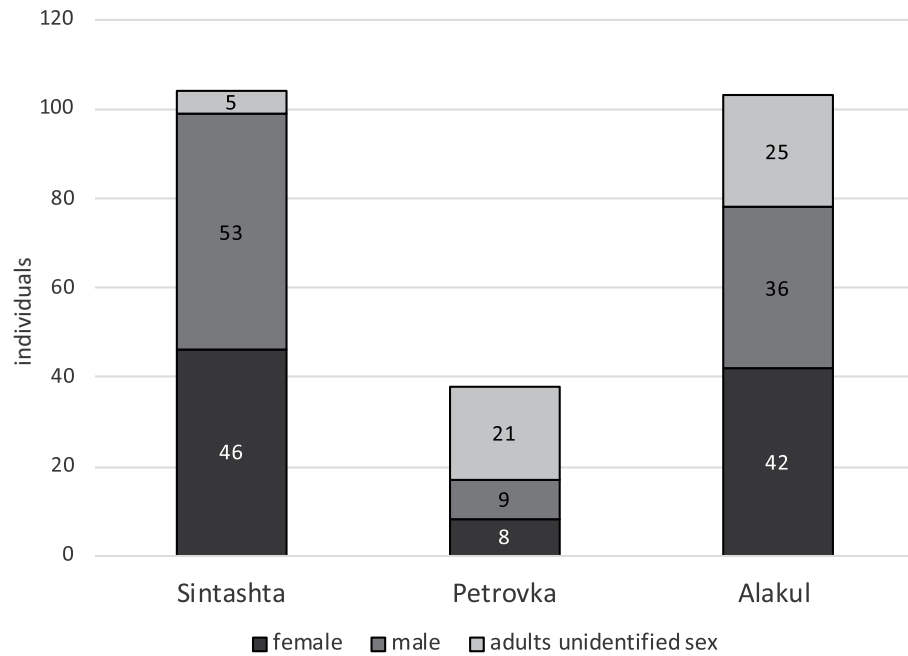
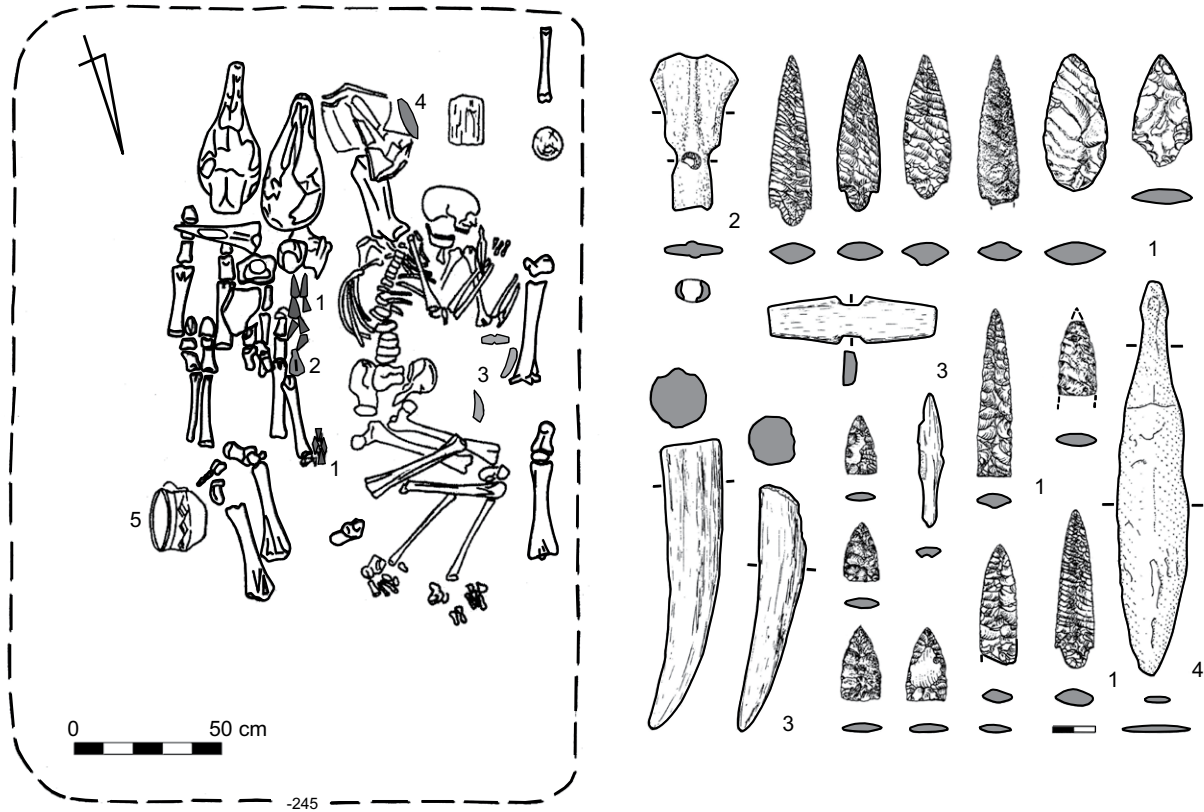


Figure 4. Proportions of males and females in burials of the Sintashta, Petrovka, and Alakul cultures (Natalia Berseneva).



Sintashta settlements and cemeteries are concentrated in the northern steppe of the southern Urals. The settlements were organised into regular blocks of houses, and they had monumental systems of fortification. The total area of the settlements ranges from 0.8 to 2.0 ha (Gening *et al.* 1992; Krause and Koryakova 2013). The Sintashta economy was based on livestock breeding, and there are numerous indications of metalworking at the settlements.

The Sintashta burial sites are complicated. Cemeteries sometimes took the form of groups of burial mounds made up of as many as 10 barrows, and at least two flat burial grounds are known as well. A Sintashta ‘barrow’ constitutes a small cemetery. The mound was not very high (up to 1 m). Each barrow contained from one or two up to 30 to 35 burials, both individual and multiple, and a ditch usually surrounded the barrow. Burial architecture was quite complex. Vast pits were dug into the sterile subsoil (up to 3 m deep) to hold the remains of the deceased, and the grave pits had a wooden ceiling, sometimes supported by posts.



The deceased were usually placed on their left side and more rarely on their right side, in a contracted position, with the hands near the face. An important trait of Sintashta mortuary ritual is tombs containing the remains of multiple individuals. In the southern Trans-Urals, about 55 per cent of all the Sintashta dead were buried in non-individual pit graves.

One of the most notable characteristics of the Sintashta funeral ritual is the abundance and variability of animal sacrifices, chiefly domestic animals: horses, cattle, sheep, and dogs. On average, up to five animals were sacrificed per person in some Sintashta cemeteries (Gening *et al.* 1992; Zdanovich 2002; Zdanovich and Gaiduchenko 2002; Epimakhov 2005 *etc.*) (Fig. 5). From a gender point of view, there are clear regularities: a horse usually accompanied a man, whereas a woman was usually given a cow or small horned animals (sheep and goat). Children were mainly accompanied by sheep.

The greatest number of animals, in terms of both species diversity and number of individuals, were found in the male graves of all cemeteries. Overall, 83 per cent of all horses were found in those burials where at least one of the individuals buried was male. The female burials contained the same animal species, but their 'biomass' was noticeably smaller (Zdanovich and Gaiduchenko 2002). Small horned animals dominated in terms of numbers of individuals in the burials of all gender groups.

Another very interesting Sintashta feature is the so-called chariot complex in burials. It would have included remains of actual vehicles – evidenced archaeologically by the presence of small, oblong pits thought to be wheel negatives, that is, the imprints of wheels where they once stood – as well as horn cheek-pieces, arrowheads, and sometimes other weapons. Usually, such a burial was accompanied by two or more sacrificed horses. It is supposed that the use of these chariots was related to both war and ritual activity (for more details, see Anthony and Vinogradov 1995; Kupriyanova *et al.* 2017; Chechushkov and Epimakhov 2018).

Figure 5. Kamennyi Ambar-5 (Chelyabinsk region, Russia), a cemetery of the Sintashta culture. Barrow 2, grave 15. Plan and grave goods: 1 stone arrowheads; 2 bone artefact; 3 horn components of a bow; 4 bronze knife; 5 ceramic vessel. The burial was that of an adult male (17-19 years old) (Epimakhov 2005, 58 Fig. 47).

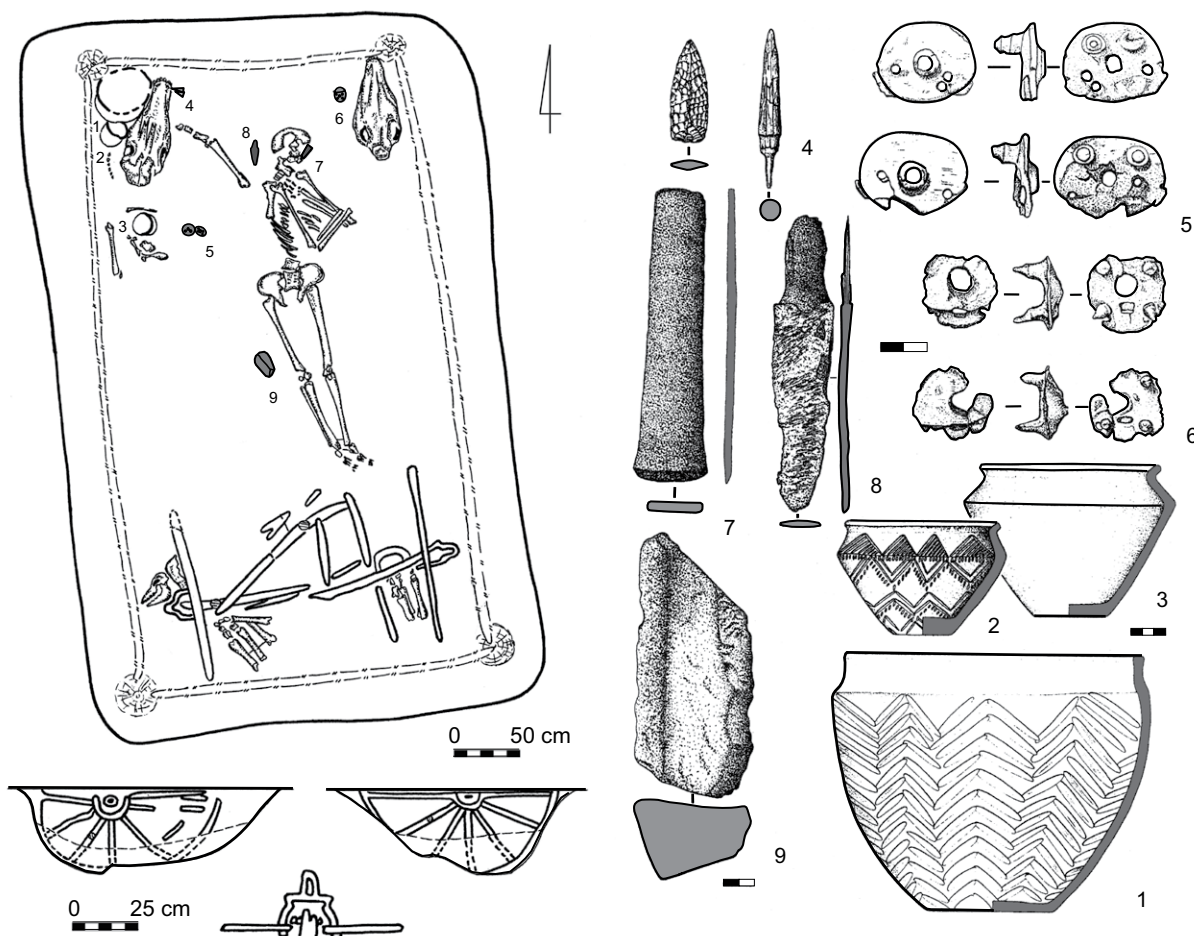


Figure 6. Krivoe Ozero (Chelyabinsk region, Russia), a cemetery of the Sintashta and Petrovka cultures. Barrow 9, grave 1. Plan and grave goods: 1-3 ceramic vessels; 4 stone arrowheads; 5, 6 horn cheek-pieces; 7 bronze adze; 8 bronze knife; 9 sharpening stone. The burial was that of an adult male (about 50 years old) (Vinogradov 2003, 85 Fig. 34).

Sintashta grave goods usually included many categories: weaponry, horse trappings (shield-like cheek-pieces), clothing attachments and ornaments, tools, and objects linked to metallurgy. Hand-made pottery was especially numerous.

Sintashta male burials

Most of the anthropologically identified males (75 percent) were buried in vast multiple tombs (42 individuals out of 56)¹. Many of these pits had been disturbed, and it is sometimes difficult to associate items with a certain individual. On average, male burials are accompanied by more impressive sacrificial deposits than are those of females and children, and horses are usually associated with males. Male grave goods are represented by weapons, tools, and the chariot complex (Figs 5; 6).

Specialised war equipment – battle axes, spearheads, and maceheads – is found only in male and child graves. Concerning tools, bronze adzes are a strong male gender marker.

Undisturbed individual male burials with chariot attributes are said to illustrate so-called warriors-charioteers (Fig. 6) (Gening *et al.* 1992; Chechushkov and Epimakhov 2018 *etc.*). But they are relatively small in number – only six to seven

¹ The investigation and all correlations are based on published data with anthropological identifications: Sorokin 1962; Vinogradov 1984; 2003; Kostyukov and Epimakhov 1999; Zdanovich 2002; Epimakhov 2005; Usmanova 2005; Tkachev 2007; Kalieva and Logvin 2009; Kupriyanova and Zdanovich 2015; Kupriyanova 2016.

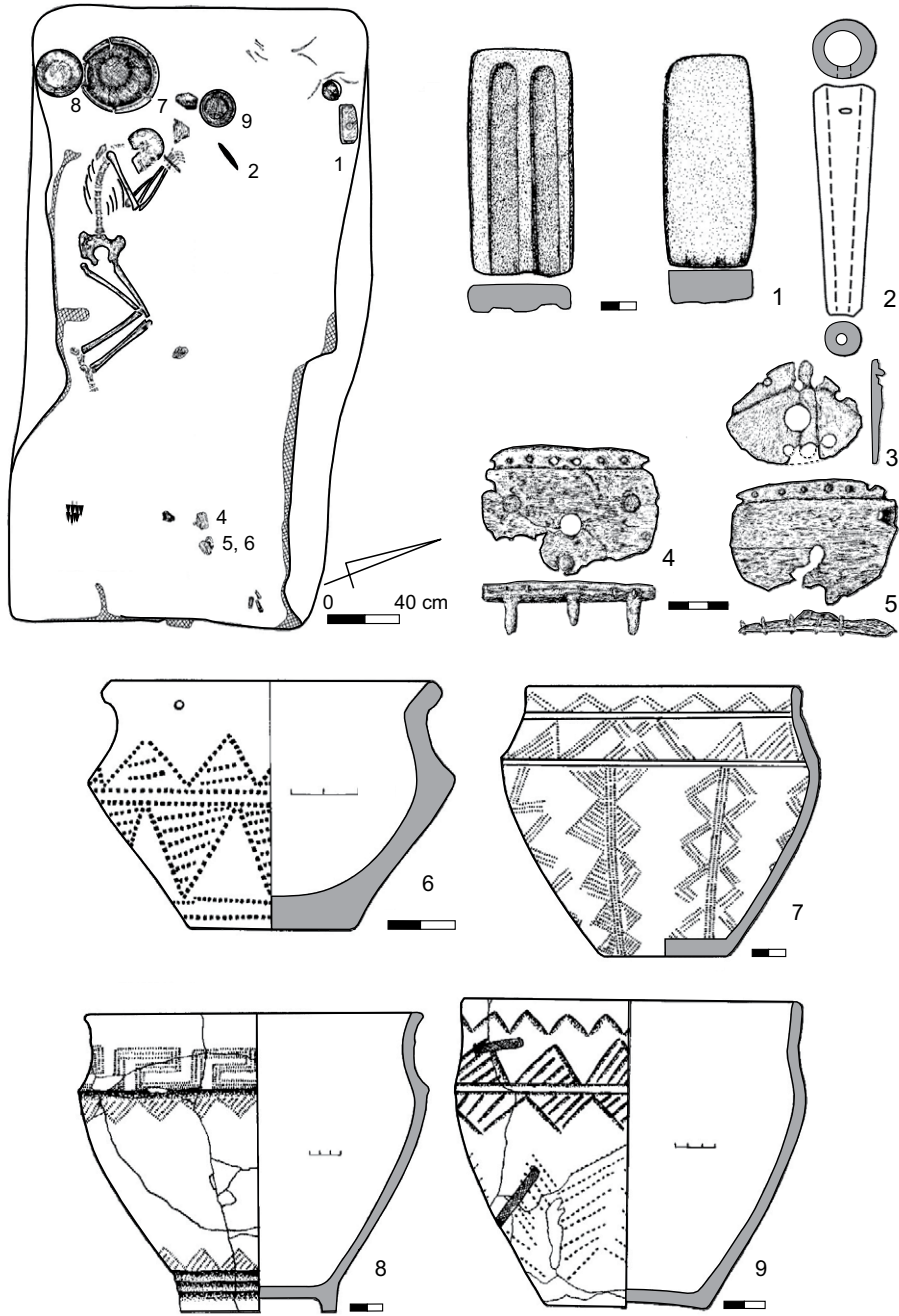


Figure 7. Bestamak (Kostanay region, Kazakhstan), a cemetery of the Sintashta culture. Grave 7. Plan and grave goods: 1 casting mould, ceramic; 2 ceramic nozzle; 3-5 horn cheek-pieces; 6-9 ceramic vessels. The burial was that of an adult male (35-40 years old) (Kalieva and Logvin 2009, 41 Fig. 10).

graves in total. In these graves, adult males (sometimes quite elderly men, from 35-40 to 60 years old) were buried with remains of chariots and abundant grave goods, including weaponry (stone and bronze axes, spearheads, arrowheads, and maceheads), horse trappings (horn cheek-pieces), sacrificed horses or parts thereof, and other domestic animals (Kupriyanova *et al.* 2017).

It is important to note that in the Sintashta chariot burials, usually all categories of grave goods are represented: weaponry, tools, and ornaments. From the archaeological and anthropological evidence, we can propose that chariotry was an activity practised by some groups of males only part of the time (Kupriyanova *et al.* 2017). Archaeologically, we cannot see a social group of ‘warrior-charioteers’ who were entirely engaged in war or military training and activities. Therefore, we can

suppose that the males buried with the attributes of chariotry were not full-time chariot specialists (Kupriyanova *et al.* 2017; Chechushkov and Epimakhov 2018).

The same can be noted about the second important social role of males – metalworking. Burials of ‘smiths’ are very rare, but metallurgical tools are better represented in male burials. Moulds and ceramic nozzles are poorly represented in the Sintashta cemeteries (only four cases are known to date). The only mould was found in burial 7 of the Bestamak burial ground (Kostanay region, Kazakhstan; Kalieva and Logvin 2009, Figs. 10-12). It was discovered in an individual burial of a man (35-40 years old), along with three ceramic nozzles (Fig. 7). There are 22 burials containing stone pestles (Epimakhov and Berseneva 2016, 67). With one exception, they accompanied individually buried men (five cases) or were discovered in communal graves where at least one of the buried was a man (three cases) (*ibid.* 68). In the intact burials, pestles are included in various sets of goods; these are generally accompanied by certain types of stone slabs and occasionally by bronze ingots (Bestamak, pits 20, 170). Only one such item has been found in an individual burial of a young woman (Tanabergen II, mound 7, pit 20), along with adornments and other tools (Tkachev 2007, 26). All of the individuals buried with metallurgy-related grave goods were adults, while one of the buried is reliably identified as a male. Probably smiths were not numerous, were not a special social group, and were not full-time specialists (Epimakhov and Berseneva 2016).

Overall, 64.7 per cent of females were buried in paired and multiple tombs (33 individuals out of 51). Besides ceramic vessels, their grave goods consist of tools and ornaments. Tools reflect a lot of household activities: bronze knives, bronze needles and awls, stone items, a bronze sickle, fish hooks, and sometimes metallurgy-linked objects, including pieces of ore. More than a half of all women (57.1 per cent) were interred with ornaments: bronze hair decorations, pendants, bracelets, finger rings, and faience or bronze beads. Ornaments accompanied females of all ages. Weapons or the remains of chariots are not found in female graves, except for a few arrowheads and horn cheek-pieces. In general, tools from Sintashta male burials reflect many other activities – pastoralism, fishing, hunting, woodworking, and leather and bone working. Most of the time, males were engaged in vital economic activities. We may conclude that male grave goods often reflected several social roles, whereas female grave goods reflected just their gender and household activities.

So, male activities were more varied, and this can be seen in the selection of artefacts for the interment.

Archaeological picture of the Petrovka culture

The Late Bronze Age is represented by the Petrovka (19th-18th centuries cal BCE) and Alakul (17th-15th centuries cal BCE) cultures, which were included in the huge Andronovo family of archaeological cultures and were genetically related (Koryakova and Epimakhov 2007).

The territory of the Petrovka culture covers the Trans-Uralian steppe and forest-steppe, central Kazakhstan, and the middle Tobol area. About a dozen large settlements with rectangular fortifications have been described thus far, but only two of them were discovered in the southern Urals (Vinogradov 2013).

The Petrovka mortuary sites have been quite well studied (Vinogradov 2003; Koryakova, Epimakhov 2007, 81-90; Kupriyanova and Zdanovich 2015). The mounds are relatively small, up to 20-25 m in diameter and up to 1 m in height. The tombs were furnished with wooden roofing, frames, and wall coverings, which were fixed in place by means of vertical pillars. The people were buried in a contracted position, on their left side, and presumably oriented with their heads to the north.

The Petrovka kurgans produced abundant animal sacrifices represented by the whole horse carcasses, which were placed above or outside the burial chamber. Most adult dead were interred in tombs containing multiple individuals.

Petrovka male burials

The number of the Petrovka burials in the Trans-Urals is rather small. There are only 33 adult individuals, of whom only 9 males and 8 females have been anthropologically sexed. Male burials include individuals of different ages, from 18 to 50-55 years old (Vinogradov 1984; 2003; Kupriyanova and Zdanovich 2015). The chariot complex and weapons are well represented in these burials. A male burial from the Krivoe Ozero cemetery (Chelyabinsk region, Russia) (Vinogradov 2003, 68) – barrow 2, grave 1, with an elderly man, 50-55 years old – produced a bronze spearhead and

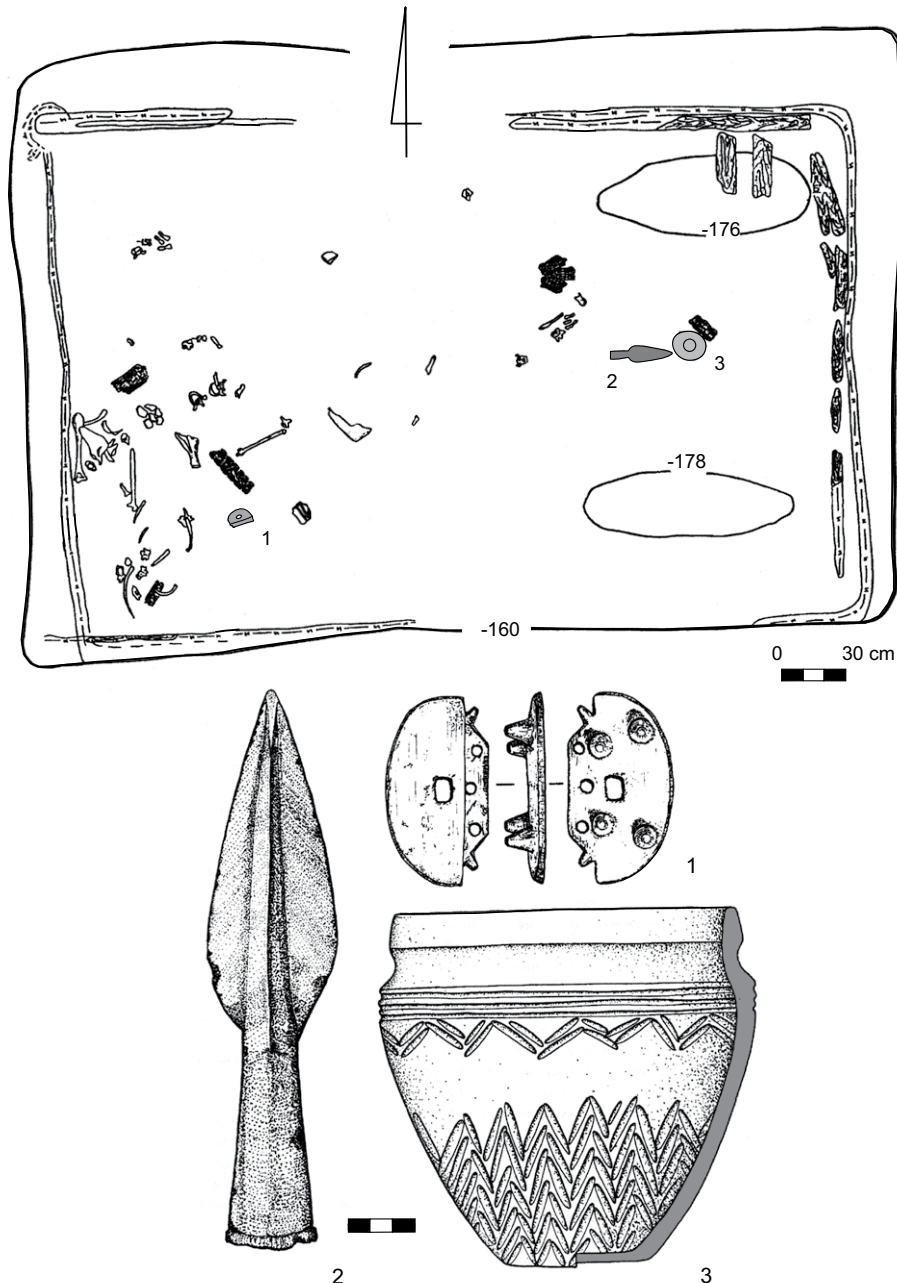


Figure 8. Krivoe Ozero (Chelyabinsk region, Russia), a cemetery of the Sintashta and Petrovka cultures. Barrow 2, grave 1. Plan and grave goods: 1 horn cheek-piece; 2 bronze spearhead; 3 ceramic vessel. The burial was that of an adult male (50-55 years old) (Vinogradov 2003, 68-69 Figs. 25-26).

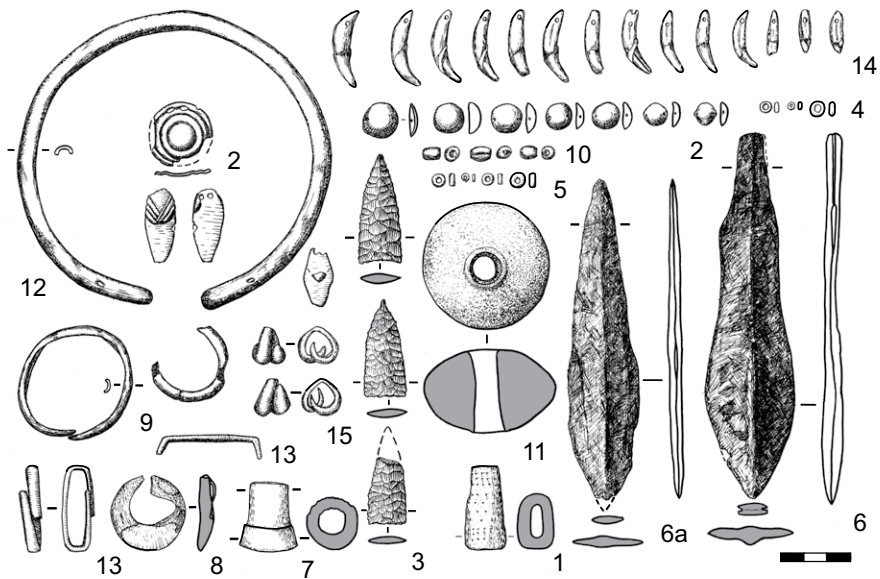
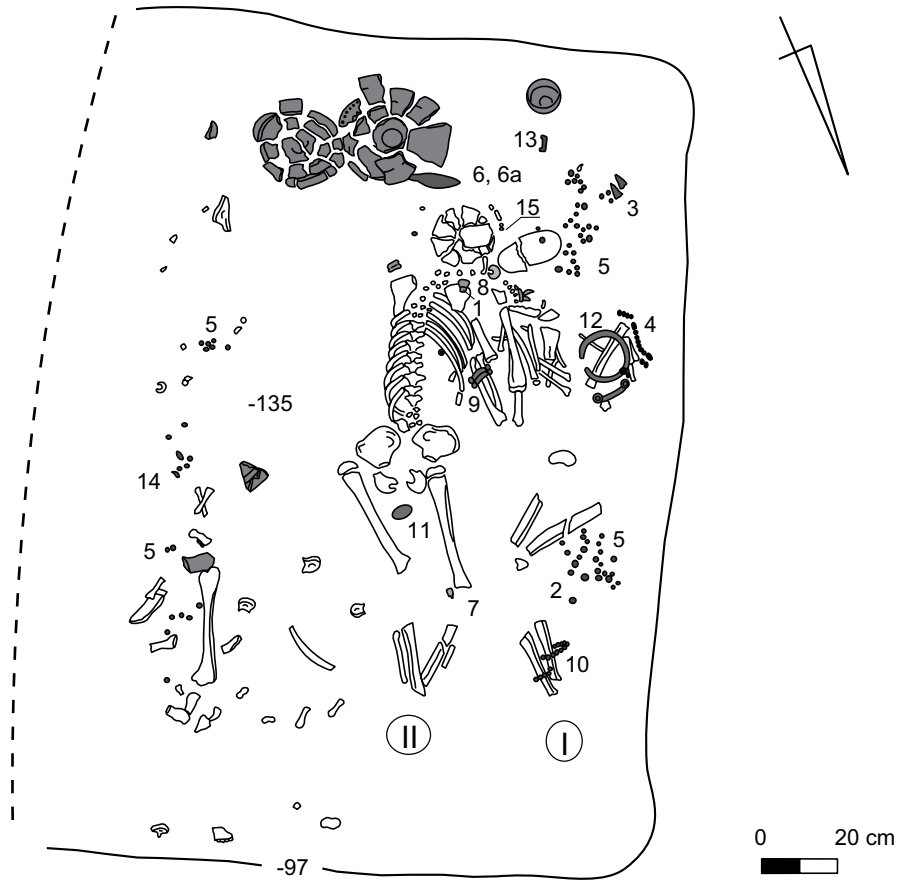


Figure 9. Kulevchi VI (Chelyabinsk region, Russia), a cemetery of the Petrovka and Alakul cultures. Barrow 4, grave 5. Plan and grave goods: 1 bone artefact; 2 small bronze plaques; 3 stone arrowheads; 4, 5 bronze and faience beads; 6a, b bronze knives; 7 bone ending of the stone mace; 8 shell; 9 bronze bracelets; 10 strings of bronze beads; 11 stone macehead; 12 bronze torque; 13 bronze item; 14 pendants from drilled fangs of a steppe fox; 15 bronze pendants. The associated individuals comprised: I subadult (10-11 years old); II adult male of unidentified age, plus two adult individuals from the destroyed part of the grave (Vinogradov 1984, 149 Fig. 8).

bone cheek-piece (Fig. 8). There were wheel negatives, usually interpreted as indicating the former presence of a chariot. In addition, stone arrowheads, cheek-pieces, and stone maceheads were discovered in male graves. Tools were not as numerous: stone abrasives, awls, and bronze knives and adzes.

Another interesting example of a Petrovka male burial is grave 4 at the Kulevchi VI burial ground (Chelyabinsk region, Russia; Vinogradov 1984, Fig. 9). It was in a multiple tomb that included four individuals, two of whom were laid in an 'embrace' position – an adult male and a child (a girl?) of 10-11 years old. The girl wore the entire set of female decorations, and the male was accompanied by a stone macehead and arrowheads (Fig. 9).

Male Petrovka burials produce objects of weaponry: spearheads, battle axes, bone and stone arrowheads, and stone maces. Female graves produce ornaments: bracelets, double-twisted pendants, oval and cross-like pendants, and metal and paste beads². In addition, all the graves yielded an abundance of pottery.

We can clearly see that the male gender is quite well reflected in the Petrovka burial rite. Weapons and tools were markers of male gender. Thus, in all identified cases, chariot attributes and weapons were well represented in the Petrovka male graves. But, as mentioned above, they had only a few tools. So, it is impossible to judge upon the household activities of the Petrovka males. Tools related to metallurgy were absent.

Archaeological picture of the Alakul culture

Alakul sites are found across a huge territory within the steppe and forest-steppe zones of the Trans-Urals and northern, western, and central Kazakhstan. The Alakul antiquities are represented by settlements and cemeteries (Sal'nikov 1952; Sorokin 1962; Usmanova 2005; Koryakova and Epimakhov 2007, 127-138; Kupriyanova and Zdanovich 2015). The planning structure of settlements is predominantly linear; the houses were organised into a single row running along the river bank. The tradition of building fortifications had been lost by this period.

The Alakul funeral sites are represented by kurgan cemeteries (often with mounds surrounded by a stone enclosure) and flat burial grounds. With only a few exceptions, the central graves were robbed before archaeological investigation could take place. The majority of graves contained single individuals placed in a contracted position, on their left side, with the hands in front of the face. There is a series of paired (male and female) or multiple burials where the dead were placed face to face (a man on his left side and a woman on her right side, as a rule) (Rafikova 2014). Pottery was the most frequently found artefact, but ornaments were also numerous: beads, amulets made from animal teeth, bronze bracelets, finger rings, pendants, flat plaques, earrings, and other items. An absolute majority of male burials had no grave goods except for pottery (Fig. 10).

Alakul male burials

Alakul male burials represent 36 individuals, aged between 15 and 55 years old. Most of them were discovered in the northern Kazakhstan burial grounds of Lisakovskiy (Kostanay region, Kazakhstan) (Usmanova 2005) and Tasty-Butak 1 (Aktubinsk region, Kazakhstan) (Sorokin 1962). There were no abundant grave goods in Alakul male burials, and 80 per cent of them lacked any items except for pottery. Grave goods included two bronze knives, a few stone arrowheads, two cheek-pieces, and a

2 For more details on women's dress and ornaments in the Petrovka and Alakul' periods, see Usmanova 2005; Kupriyanova 2008.

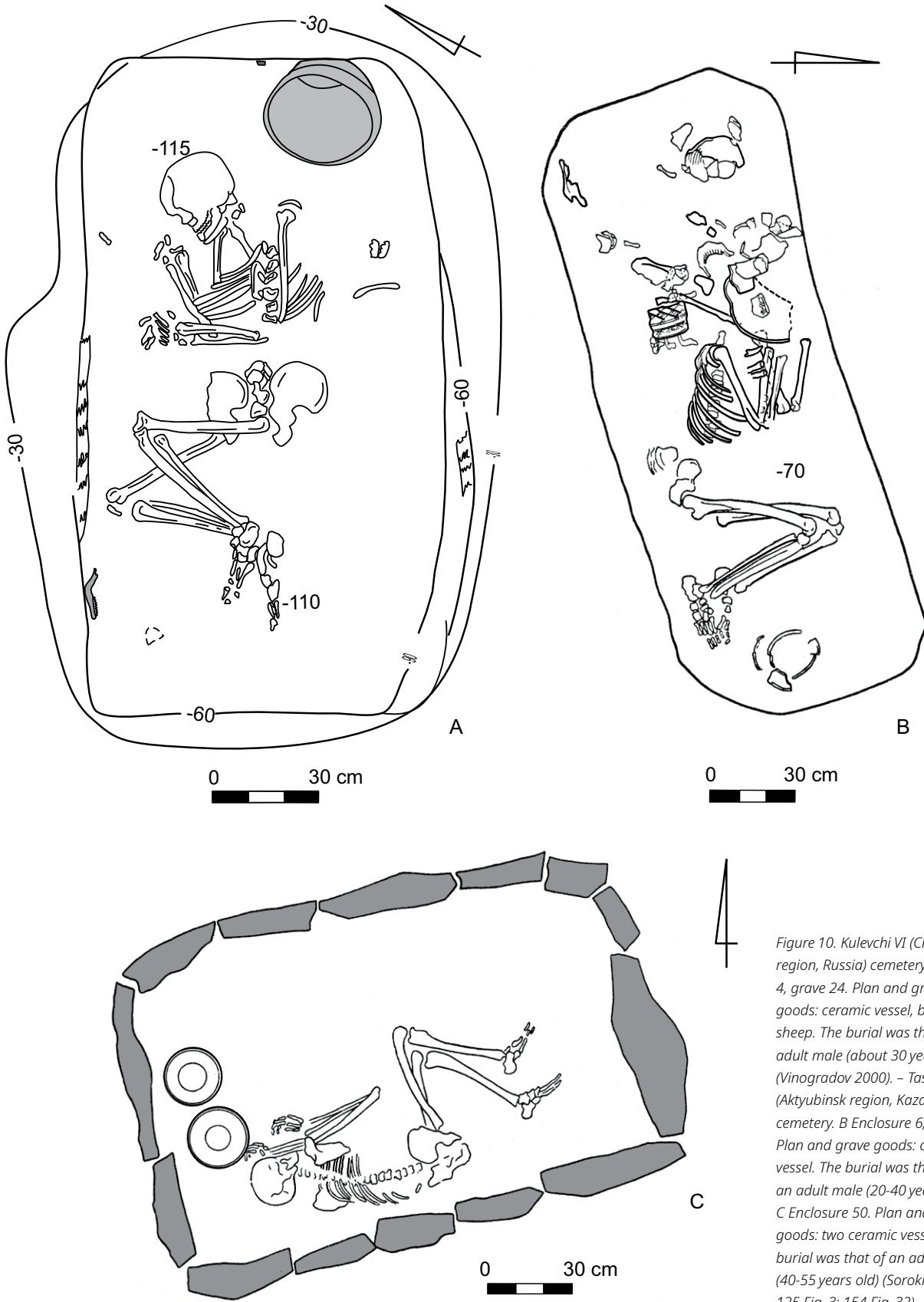


Figure 10. Kulevchi VI (Chelyabinsk region, Russia) cemetery. A Barrow 4, grave 24. Plan and grave goods: ceramic vessel, bone of a sheep. The burial was that of an adult male (about 30 years old) (Vinogradov 2000). – Tasty-Butak (Akt'yubinsk region, Kazakhstan) cemetery. B Enclosure 6, grave 1. Plan and grave goods: ceramic vessel. The burial was that of an adult male (20-40 years old); C Enclosure 50. Plan and grave goods: two ceramic vessels. The burial was that of an adult male (40-55 years old) (Sorokin 1962, 125 Fig. 3; 154 Fig. 32).

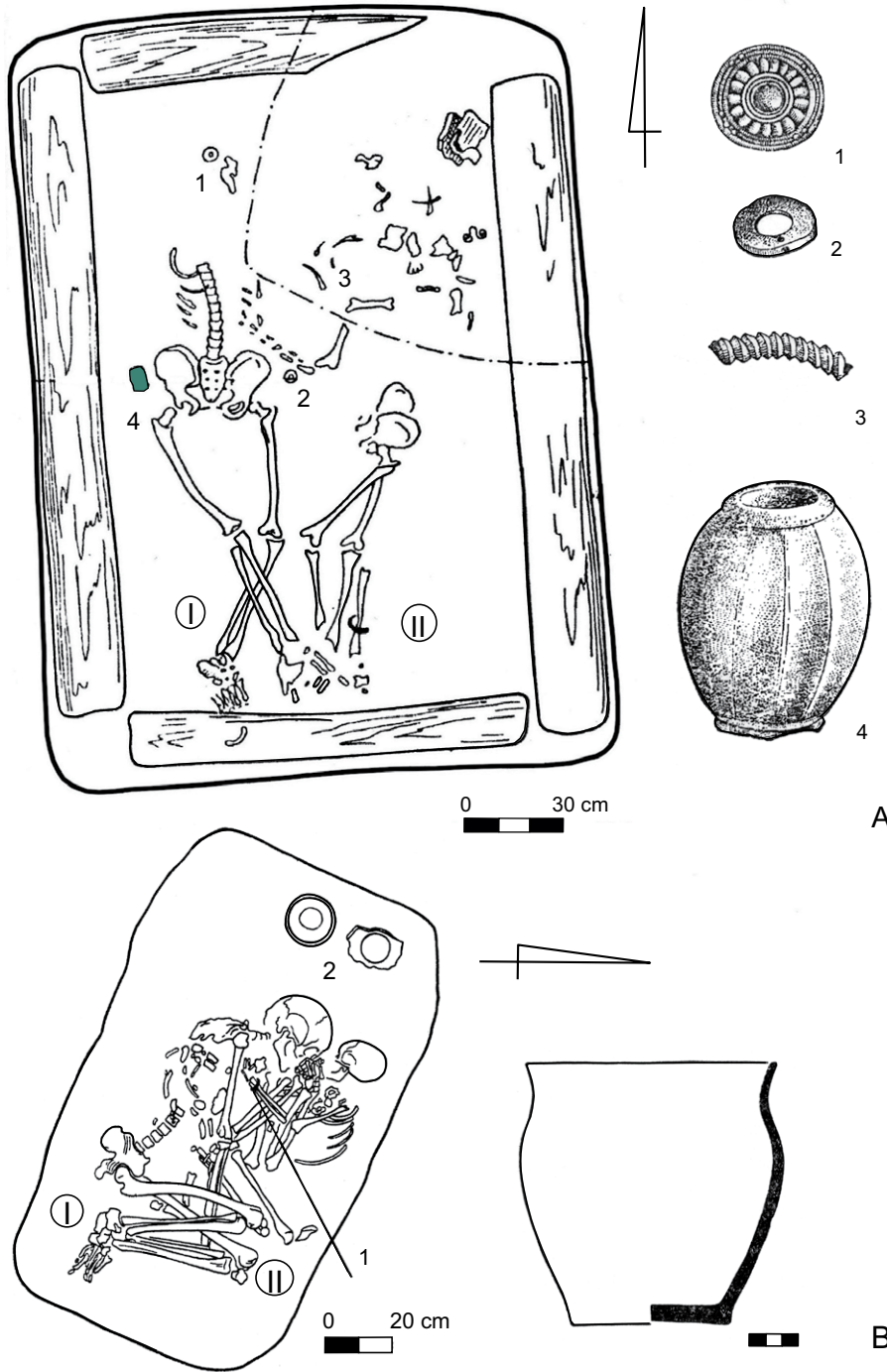


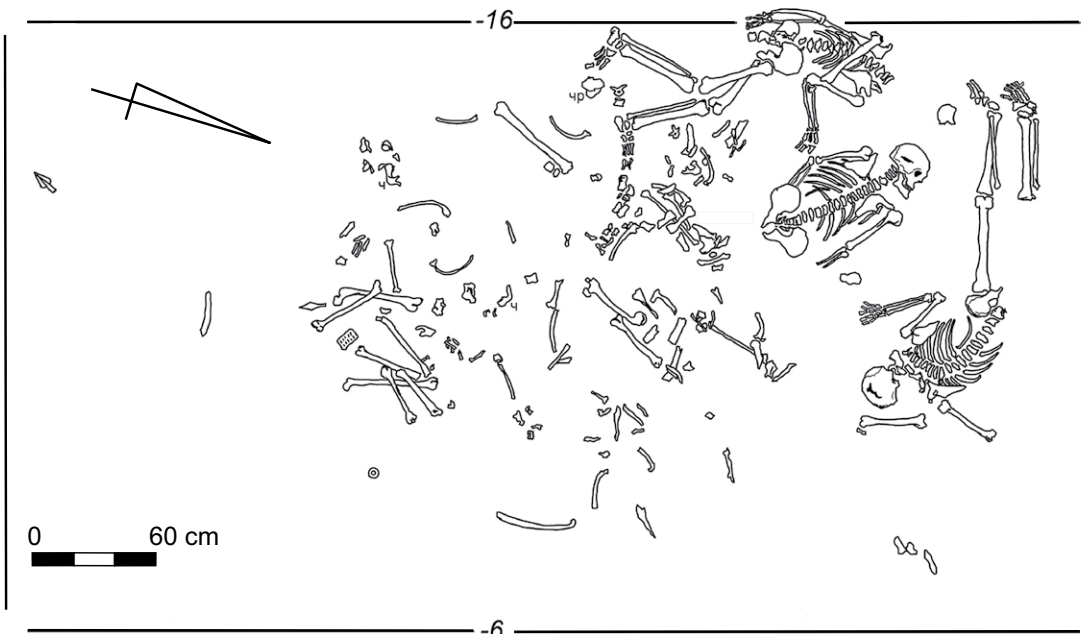
Figure 11. A Alakul (Kurgan Region, Russia) cemetery. Barrow 8, grave 7. Plan and grave goods: 1 small bronze plaque; 2 bone ring; 3 bronze spiral; 4 bronze macehead. The associated individuals comprised: I adult male; II juvenile (about 15 years old) (Sal'nikov 1962). B Tasty-Butak (Akt'yubinsk region, Kazakhstan) cemetery. Enclosure 39. Plan and grave goods: 1 bronze bracelet; 2 ceramic vessel. The associated individuals comprised: I adult male; II infant II (9-10 years old) (Sorokin 1962, 147 Fig. 25).

bronze macehead. In addition, some bronze beads and drilled shells were discovered (Fig. 11). It seems clear that these items were part of items of male clothing, which are as yet impossible to reconstruct. So, we cannot determine material markers for males, due to the absence of tools and weapons in burials.

Female burials represent 42 individuals. Grave goods are more numerous in terms of decorations: beads, amulets made from animal teeth, bronze bracelets of two types (with spiral-like ends and with open ends), finger rings, pendants, flat plaques, earrings, and other items. Complex female hair decorations included



Figure 12. Korkino I (Chekyabinsk region, Russia) settlement. Human remains near House 3 (Chemyakin 2015, 173 Fig. 3).



pendants for braids. There is only one burial that lacked any items, even ornaments and pottery (Tasty-Butak 1, enclosure 44).

Some Alakul settlements produced firm evidence for war-like conflicts. These conflicts were bloody and cruel. Cases of violent death were discovered at the Trans-Uralian settlements of Mirnyi IV (Chelyabinsk region, Russia) and, especially, Korkino 1 (Chelyabinsk region, Russia) (Chemyakin 2015). In the well inside one of the houses at the Korkino settlement were the bones of four to seven individuals. Just outside the house were the remains of 12 to 17 individuals, including four male skeletons in irregular positions. Some of them lacked the bones of the legs, and one male had no cranium. On their skulls, traces of blows with a blunt-edged weapon were identified, and some of these blows had perforated the skulls. In general, among the remains collected near the house, bones of males 25 to 40 years old predominated. Weapons were found, too: two bronze spearheads, two bronze axes, one stone axe, and more than 15 arrowheads. The excavator supposed that this Alakul settlement was destroyed as a result of a war-like attack (Chemyakin 2015) (Fig. 12).

Violence was not absent among Alakul groups, and Alakul males directly participated in it. Judging by the absence of females and children among the victims of the attack, they may have been abducted by the attackers. We can clearly see that the production and use of weapons continued. Moreover, their quality improved. Technological advance is evidenced by the introduction of tin-alloyed bronze, which enhanced the quality of metal weapons.

However, specialised war equipment, the chariot complex, and horse gear disappeared from Alakul male burials. Only a few arrowheads (up from one to four items in a total of nine burials), two cheek-pieces, and one macehead were found, despite the fact that it was not a very peaceful period, judging by the Korkino and Mirnyi materials.

Conclusion

Thus, the reflection of male gender identity in the burials changed dramatically from the Sintashta period to the Alakul period. Sintashta male burials were accompanied by a great deal of grave goods – including weaponry, tools, chariotry attributes, and objects related to metallurgy – and an abundance of domestic animal sacrifices. In the Petrovka period, male grave goods were restricted to weaponry and chariot complex attributes, and animal sacrifices were reduced. Alakul male burials were presumably deprived of grave goods except for pottery. Sacrificial deposits were rare and were represented by non-articulated bones only (Figs. 13-15).

Thus, in comparison with the Sintashta and Petrovka cultures, in the Alakul culture, the manifestation of gender stereotypes was presumably related to females of different ages – from childhood to old age. With rare exceptions, the male gender and male age groups were not reflected in burials (Fig. 15).

How can we explain such a shift in ideology, which started in the Petrovka period and was at its zenith in Alakul times? Was it determined by changing gender stereotypes in the living society?

We can firmly suppose that activities related to stockbreeding – that is, pasturing and animal care – must have been the same in all three societies because, judging by the settlement data, subsistence did not change in any major way from one culture to the next (Krause and Koryakova 2013; Vinogradov 2013). Metallurgy and warfare also continued to develop, and we have enough evidence of that (Epimakhov and Berseneva 2016).

So, we may conclude that gender roles in the societies under study could not have changed dramatically during the Bronze Age. People did not stop working or fighting, even though weapons and tools disappeared from burials. We can

Figure 13. Sintashta culture. Distribution of gender-related grave goods according to age group (Natalia Berseneva).

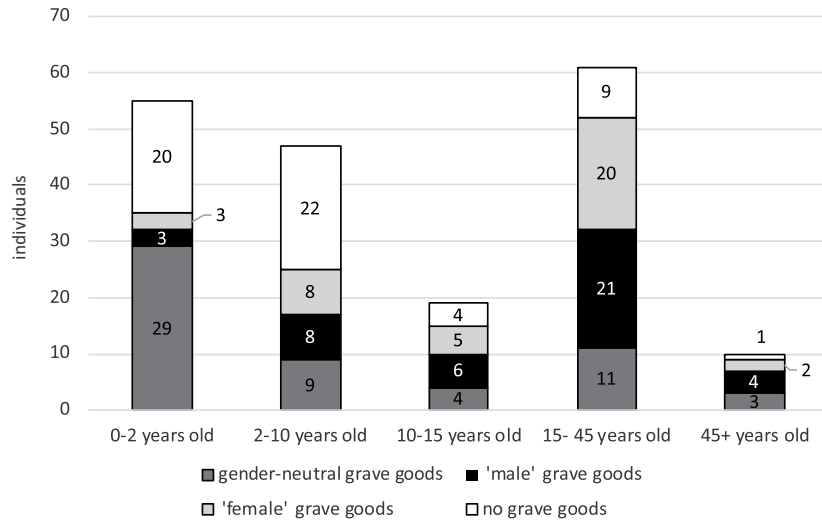
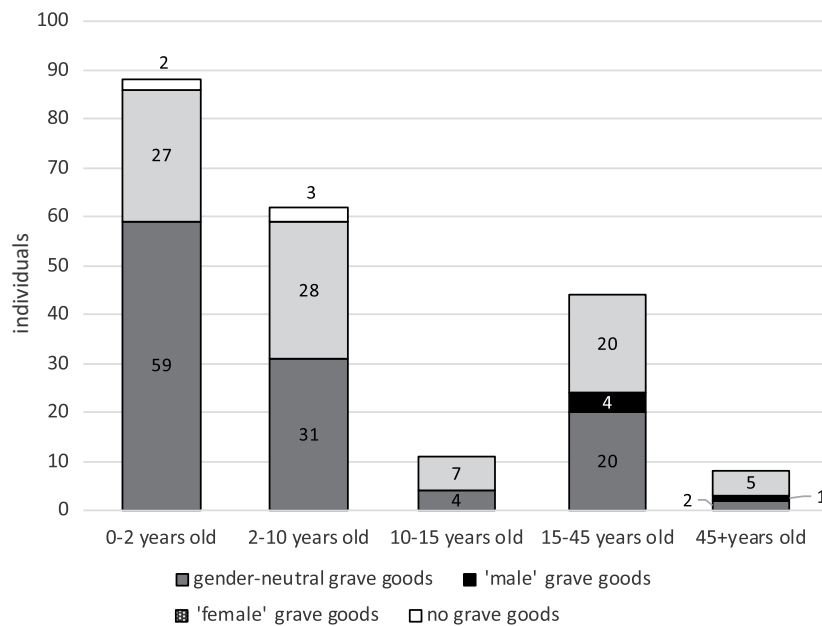


Figure 14. Petrovka culture. Distribution of gender-related grave goods according to age group (Natalia Berseneva).



Figure 15. Alakul culture. Distribution of gender-related grave goods according to age group (Natalia Berseneva).



suggest, instead, that it was the religious ideas related to providing the dead with grave goods that changed. Step by step, women were becoming very important, possibly representing a sacred sphere in life and death during the Ural Late Bronze Age. In contrast, in the Late Bronze Age, males were buried with accented simplicity. Male identity in burials became latent in the course of time, or at least it was no longer reflected in terms of grave goods or in terms of the organisation of the mortuary space (including in the creation of impressive sacrificial deposits and the placement of chariots).

What changes in the society could have led to a change in the ideology? It's hard to say based on archaeological sources alone. The archaeological picture clearly shows that the Alakul population stopped investing huge resources, not only in the creation of great burial complexes and supporting chariot technologies, but also in the building of fortified settlements. If we accept cultural and possible genetic relationships of the Alakul traditions to the Sintashta culture, we can suppose the following. Sintashta collectives were newcomers in the Trans-Uralian steppes and they did not feel safe in their new territory. They built fortifications and used chariots, and they demonstrated their war-like abilities and wealth (in terms of cattle) in the mortuary and ritual spheres. But, in the Alakul period, the situation may have been considered by the population to be relatively safe and favourable. Thus, they no longer felt they had to invest such great resources in such unreasonable activities (from an economic point of view). So, one of male social roles – that of the warrior-charioteer – disappeared gradually during the Alakul period.

It seems clear that a reorientation towards the reflection of family values, presumably related to the female gender, took place. It may have been related to social and environmental circumstances, which may have improved over the course of the Bronze Age.

Acknowledgements

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References

- Anthony, David W., and Vinogradov, Nikolay B. 1995. Birth of the chariot. *Archaeology. An official Publication of the Archaeological Institute of America*, 48, 2, 36-41.
- Berseneva, Natalia 2017. Bronze Age Child Burials in the Southern Trans-Urals (21st-15th centuries cal BC). In: Murphy, Eileen and Le Roy, Melie (eds). *Children, Death and Burial. Archaeological Discourses. Childhood in the past 5*. Oxford: Oxbow Books, 125-146.
- Chechushkov, Igor V., and Epimakhov Andrey V. 2018. Eurasian Steppe Chariots and Social Complexity During the Bronze Age. *Journal of World Prehistory*, 31, 435-483. doi: <10.1007/s10963-018-9124-0>, e-published 16 October 2018.
- Chemyakin, Yuriy P. 2015. Sledy voennykh konfliktov na alakul'skikh poseleniyakh [Evidence of Military Conflicts in Alakul Settlements]. In: Tairov, Alexander D. (ed.). *Etnicheskie vzaimodeistviya na Yuzhnom Urale. Materialy VI Vserossiiskoi nauchnoi konferentsii*. Chelyabinsk: Yuzhno-Ural'skii Gosudarstvennyi Universitet, 169-176.
- Epimakhov, Andrey V. 2005. *Rannie Kompleksnye Obshestva Severa Zentralnoi Evrasii (po Materialam Mogil'nika Kamennyi Ambar-5)*. Chelyabinsk: Chelyabinskii Dom Pechati.

- Epimakhov, Andrey V., and Berseneva, Natalia. A. 2016. Metal Production, Mortuary Ritual and Social Identity: the Evidence of Sintashta Burials, Southern Urals. *Archaeology, Ethnology & Anthropology of Eurasia*, 1, 65-71.
- Gening Vladimir F., Zdanovich, Gennadiy B., and Gening Vladimir V. 1992. *Sintashta: Arkheologicheskie pamyatniki ariiskikh plemen Uralo-Kazakhstanskikh stepei*. Chelyabinsk: Yuzhno-Ural'skoe knizhnoe izdatel'stvo.
- Kalieva, Saule S., and Logvin, Viktor N. 2009. Mogil'nik u poseleniya Bestamak (predvaritel'noe soobshenie). *Vestnik arkheologii, antropologii i etnografii*, 9, 32-58.
- Koryakova, Ludmila N., and Epimakhov, Andrey V. 2007. *The Urals and Western Siberia in the Bronze and Iron Ages*. Cambridge world archaeology. Cambridge: Cambridge University Press.
- Kostyukov, Vladimir P. and Epimakhov, Andrey. V. 1999. Predvaritelnye itogi issledovaniya mogilnika bronzovogo veka Troizk-7. In: Kovaleva, Valentina. T. (ed.). *120 Let Arkheologii Vostochnogo Sklona Urala. Pervye chteniia pamiati Vladimira Fedorovicha Geninga: materialy konferentsii 29 noiabria-2 dekabria 1999 g.* Ekaterinburg: Ural'skii Gosudarstvennyi Universitet, 66-70.
- Krause, Rüdiger and Koryakova, Ludmila N. 2013 (eds). *Multidisciplinary investigations of the Bronze Age settlements in the Southern Trans-Urals (Russia)*. Frankfurter archäologische Schriften 23. Bonn: Habelt.
- Kupriyanova, Elena V. 2008. *Ten Zhenshiny: Zhenskyi Kostyum Bronzovogo Veka kak 'Tekst' (po Materialam Nekropoley Yuzhnogo Zaural'ya i Kazakhstana)*. Chelyabinsk: Avto Graf.
- Kupriyanova, Elena V. 2016. *Pogrebalnye Praktiki Epokhi Bronzy Yuzhnogo Zaural'ya: Mogilnik Stepnoye-1*. Chelyabinsk: Enziklopediya.
- Kupriyanova, Elena V., and Zdanovich, Dmitriy G. 2015. *Drevnosti Lesostepnogo Zaural'ya: Mogil'nik Stepnoye VII*. Chelyabinsk: Enziklopediya.
- Kupriyanova, Elena V., Epimakhov, Andrey V., Berseneva, Natalia A., and Bersenev, Andrey G. 2017. Bronze Age Charioteers of the Eurasian Steppe: A Part-time Occupation for Select Men? *Praehistorische Zeitschrift*, 92, 40-65.
- Logvin, Andrey, and Sevnina, Irina 2013. Die Nekropole von Bestamak. In: Stöllner, Thomas, and Samašev, Zajnolla (eds). *Unbekanntes Kasachstan Archäologie im Herzen Asiens 1*. Veröffentlichungen aus dem Deutschen Bergbau-Museum Bochum 192. Bochum: Deutsches Bergbau-Museum, 231-244.
- Logvin, Viktor N. 2002. The Cemetery of Bestamak and the Structure of the Community. In: Jones-Bley, Karlene, and Zdanovich, Dmitriy G. (eds). *Complex Societies of Central Eurasia from the 3rd to the 1st Millennium BC: Regional Specifics in Light of Global Models 1*. Journal of Indo-European Studies. Monograph Series 45. Washington DC: Institute for Study of Man, 189-201.
- Molodin, Vyacheslav I., Epimakhov, Andrey V., and Marchenko, Janna V. 2014. Radiouglerodnaya khronologia epokhi bronzy Urala i yuga Zapadnoi Sibiri: printsipy i podkhody, dostizheniya i problemy. *Vestnik Novosibirskogo Universiteta*, 13, 3, 136-167.
- Rafikova, Yanina V. 2014. Parnye pogrebeniya alakul'skoi kul'tury na Yuzhnom Urale. In: Molodin, Vyacheslav I., and Epimakhov, Andrey V. (eds). *The Aryans in the Eurasian Steppes: The Bronze and Early Iron Ages in the Steppes of Eurasia and Contiguous Territories. Elena Kuz'mina Memorial Volume*. Barnaul: Altaiskii Gosudarstvennyi Universitet, 228-243.
- Sal'nikov, Konstantin V. 1952. Kurgany na ozere Alakul'. *Materialy i Issledovaniya po Arkheologii SSSR*, 24, 51-71.
- Sorokin, Valeryi S. 1962. Mogilnik bronzovoi epokhi Tasty-Butak I v Zapadnom Kazakhstane. *Materialy i Issledovaniya po Arkheologii SSSR*, 120, 1-207.
- Tkachev, Vitalyi V. 2007. *Stepi Yuzhnogo Priural'ya i Zapadnogo Kazakhstana na rubezhe epoch srednei i pozdney bronzy* [Steppes of the Southern Cisural area and

- Western Kazakhstan on the cusp of the Middle and the Late Bronze Age]. Aktobe: Aktuybinskii j, kastnoy tcentr istorii, etnografii i arkheologii.
- Usmanova, Emma R. 2005. *Mogil'nik Lisakovskii I: fakty i paralleli*. Karaganda: Karagandinskiĭ gos. universitet.
- Vinogradov, Nikolay B. 1984. Kulevchi VI – novyi alakul'skii mogilnik v lesostepi Yuzhnogo Zaural'ya. *Sovetskaya arkheologiya*, 3, 135-53.
- Vinogradov, Nikolay B. 2003. *Mogil'nik Bronzovogo Veka Krivoje Ozero v Yuzhnom Zaural'e*. Chelyabinsk: Yuzhno-Ural'skoe Knizhnoe Izdatel'stvo.
- Vinogradov, Nikolay B. 2013 (ed.). *Drevnee Ust'e: ukreplennoe poselenie bronzovogo veka v Yuzhnom Zaural'e*. Chelyabinsk: ABRIS.
- Zdanovich, Dmitriy G. 2002. Arkheologiya kurgana 25 Bolshekaraganskogo mogilnika. In: Zdanovich, Dmitriy G. (ed.). *Arkaim-Nekropol*. Chelyabinsk: Yuzhno-Ural'skoe Knizhnoe Izdatel'stvo, 17-110.
- Zdanovich, Dmitriy G., and Gaiduchenko, Leonid L. 2002. Sintashta Burial Sacrifice: The Bolshekaraganski Cemetery in Focus. In: Jones-Bley, Karlene, and Zdanovich, Dmitriy G. (eds). *Complex Societies of Central Eurasia from the 3rd to the 1st Millennium BC: Regional Specifics in Light of Global Models*. Journal of Indo-European Studies. Monograph Series 45. Washington DC: Institute for Study of Man, 202-231.

Transformations in a woman's life in prehistoric and archaic societies of the Scythians and the Kalmyks

Maria Ochir-Goryaeva

Abstract

According to the archaeological data, the social status of women in Scythian society was lower than that of men. However, this interpretation cannot be recognized as final in view of some contradictory data. In parallel with prestigious male kurgans, a number of female burials had all the characteristic features of prestige: they were buried in a central location, they were accompanied by horses, killed during the burial rites, or situated on the same meridian line as the central tombs of the burial structure, and they were even disturbed in a similar manner by performers of post-burial rituals. The special investigations carried out along the lines have shown that the post-funeral ceremonies, characterised by disturbance of the human remains, had a ritual function, including, for example, the legitimisation of the ruling status of the heirs of the dead. Illustrative of the type is the female burial of the Melitopolskij kurgan; aligned with a male burial, it shows traces of additional, large-scale earth moving and of post-burial ritual disturbance. Of interest in this respect is the fact that, since the heathen period of their history, traditional nomadic cultures, especially those not influenced by Muslim religious ideas, recognised the rights of women who had reached a particular stage in their life cycle as being equal to the rights of men.

Keywords: *Scythians, Kalmyks, nomads, royal graves, kurgans, post-burial rites, gender transformation, emancipation*

Herodotus, in his *Historia*, was the first to describe the Scythians, a nomadic people of ancient Europe, while the archaeological excavations of their kurgans (burial mounds) in the steppes of the northern Black Sea coast (Rolle 1979; Rolle *et al.* 1998) revealed thousands of gold artefacts (Artamonov 1970; Müller-Wille *et al.* 1991; Jacobson and Reeder 1999). The investigation of the Scythian burials shows that their geographical orientation, depth of the burial chambers (measured from the

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Grave identifier	Kurgan identifier	Position of grave	Grave depth (m)	Horses	Grooms
m01	Kazennaya Mogila	central	13.0	?	-
m02	Melitopolskij	central	12.5	2	-
m03	Chertomyk	central	12.2	11	2
m04	Chmyreva Mogila	central	12.0	10	-
m05	Kozel	central	9.6	11	2?
m06	Lemeshev	central	8.6	3	-
m07	Bol'shaya Tsymbalka	central	8.5	6	-
m08	Tolstaya Mogila	central	8.5	6	3
m09	Mordvinovskij 1	central	8.3	-	-
m10	Gajmanova Mogila	central	8.0	1	1
m11	Zheltokamenka	central	7.5	2	-
m12	Strashnaya Mogila	secondary	6.9	1	-
m13	Gajmanova Mogila	secondary	6.8	1	-
m14	Verchnii Rogachik	secondary	6.7	-	-
m15	Bratoljubovskij	central, <i>dromos</i>	6.7	2	-
m16	Alexandropolskij	central, <i>dromos</i>	5.7	15	-
m17	Deev	central	5.7	1	-
m18	Solokha 2	embankment 2, central	5.4	5	1
m19	Krasnokutskij	central	5.3	4	-
m20	Malaya Lepetikha	central	5.3	-	-
m21	Bashmachka	central	5.3	1	-
m22	Mordvinovskij 2	central	4.5	1	-
m23	Solokha 1	central	4.0	2	-
Total		10 central, 3 secondary	average: 7.07	85	7 (9)

Table 1. Male graves in Scythian mounds in the northern Black Sea area (data after Terenozkin and Mozolev'skiy 1988, 151 Table 2).

level of the ancient ground surface), and arrangement in the same burial mound are important indicators that manifest the family and clan hierarchies of the society, whereby its members' place in the funeral structures was dependent on such factors as consanguinity, social status, age, and gender.

Herodotus's work does not contain any direct evidence concerning the social status of Scythian women. However, there is indirect data that shows that the society was typically patriarchal. Women, according to Herodotus, were not involved in hunting; staying in wagons, they were busy with women's affairs (Herodotus IV, 114). Then, there is a story of the execution of false prophets; their sons were also punished, to prevent their respective clans from continuing, while daughters were left alive (Herodotus IV, 68). This has led researchers to assume that the Scythians considered that women did not play any role in this matter. The fact that Tsar Aripath's wives were registered as supplementary to the burial equipment – with the

Grave identifier	Kurgan identifier	Position of grave	Grave depth (m)	Horses	Grooms
f01	Gajmanova Mogila	secondary	8.0	-	-
f02	Zhelto kamenka	central with added spouse	7.5	-	-
f03	Melitopolskij	central	7.0	-	-
f04	Verchnii Rogachik	central	6.7	-	-
f05*	Bratoljubovskij	central with added spouse	6.7	1	-
f06	Tolstaya Mogila	secondary	6.2	-	-
f07	Alexandropolskij	central with added spouse	5.9	1	-
f08*	Oguz	secondary	5.55	(3)	-
f09	Mordvinovskij	secondary	4.6	1	-
f10	Gajmanova Mogila	secondary	4.0	-	-
f11	Malaya Lepetikha	secondary	3.9	-	-
Total		5 central (3 with added spouse), 6 secondary	average: 5.5	3 (5)	0

Table 2. Female graves in Scythian mounds in the northern Black Sea area (data after Mozolevs'kyi 1979, 151 Table 3, except for graves marked with *, for which data was compiled by Maria Ochir-Goryaeva based on the literature in the references). The numerals in parentheses indicate horses hitched to chariots.

information on their distinctions within the polygamy order as senior and junior wives but without her names (Herodotus IV, 78.80) – may be interpreted as another instance of the Scythian woman's subservient position in relation to her husband.

To conduct a study of the status of Scythian women within their families and clans and wider social structures, I compiled a database of burials where it was possible to identify with a sufficient degree of certainty the gender of the deceased. The starting point was the data published by Borys N. Mozolevs'kyi (1979, 151 Table 2), which formed the basis of two tables (Table 1; Table 2) describing the type of burial (central or secondary), its depth parameters, and the presence of horse graves containing the remains of riding horses. Table 1 presents data on the graves of 22 males, who were accompanied by a combined total of 85 horses (4.5 per human burial on average). The horses were equipped with gold bridle sets and had been placed beside central male burials in special graves made for the purpose in the kurgans that contained them. In the Tolstaya Mogila (Obl. Dnepropetrovsk, Ukraine) and Chertomyk (Obl. Dnepropetrovsk, Ukraine) burial grounds, the horses had grooms probably simultaneously buried beside them.

Table 2 contains data on 11 female burials, which were accompanied by a total of six horses, or 0.5 horses on average per human grave. Notably, according to the archaeologists who excavated the Oguz burial ground¹ (Obl. Kherson, Ukraine), the horses that were buried in the entry pit of the northern secondary grave were not riding horses; they had been hitched to a chariot, fragments of which were recovered from the same grave. If these horses, shown in parentheses in the table, are excluded, the number of horses to be taken into consideration is reduced by three, which makes 0.25 horses per female grave (Table 2).

At this point, it may be concluded that, in accordance with the Scythian funeral practice, accompanying horse graves were mostly the privilege of male burials

1 All Scythian barrows are located in the steppes of the northern Black Sea region, in the middle reaches of the Dnieper River, within the territory of modern-day Ukraine.

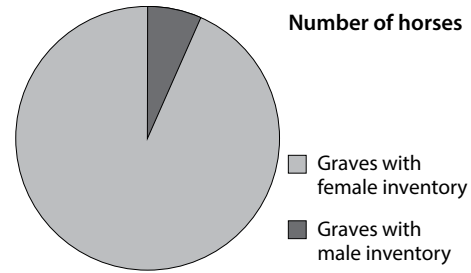


Figure 1. The number of horses in male vs. female graves in the Scythian burial mounds in the northern Black Sea area (sketch: Maria Ochir-Goryaeva; for database, see Tables 1; 2).

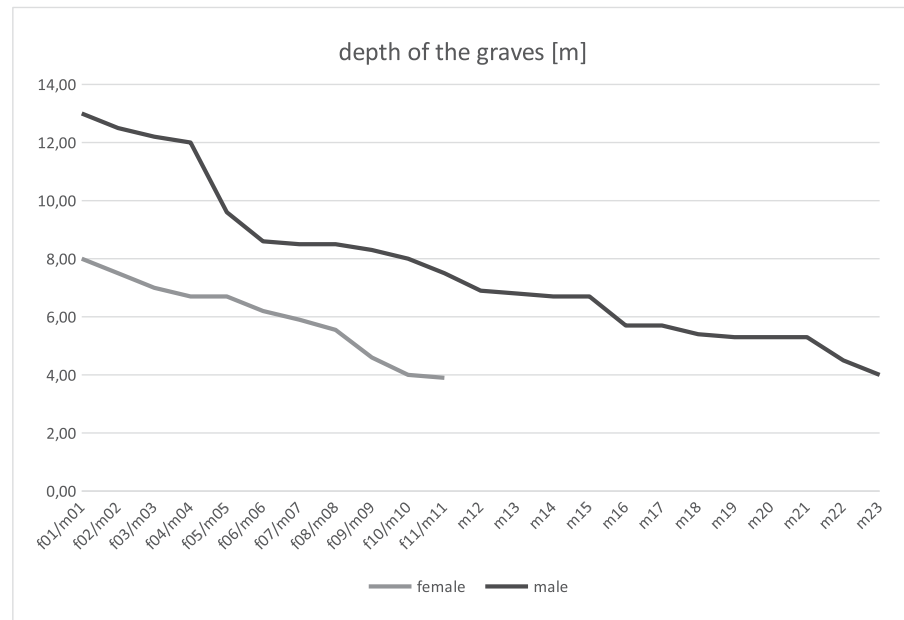
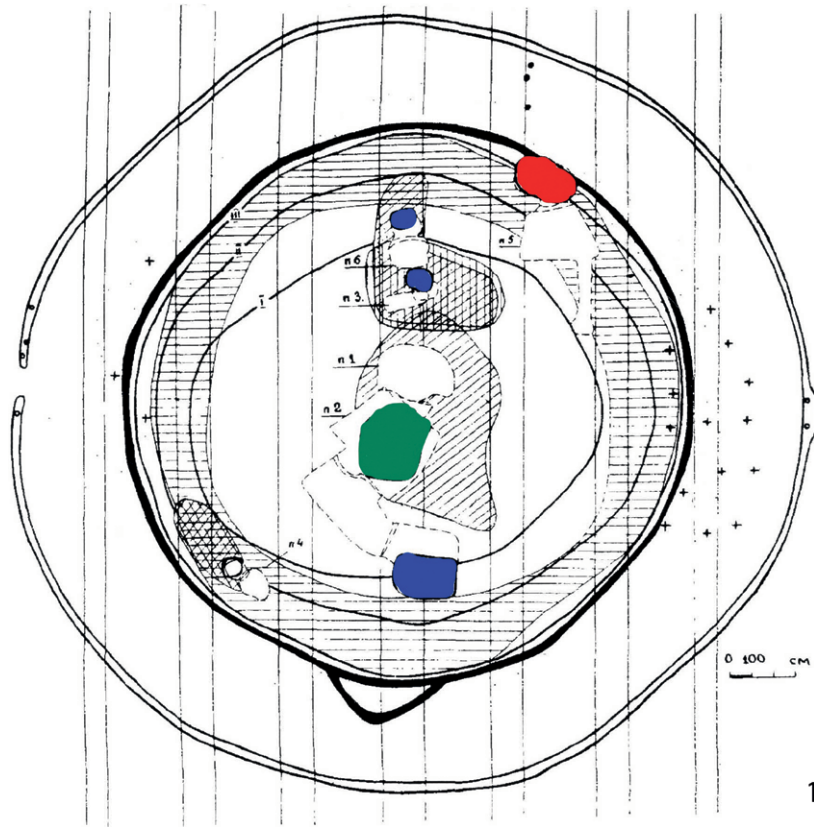


Figure 2. The depths of male and female graves in Scythian mounds in the northern Black Sea area. Female graves: numbers see Table 2; male graves: numbers see Table 1 (sketch: Maria Ochir-Goryaeva; for database, see Tables 1; 2).

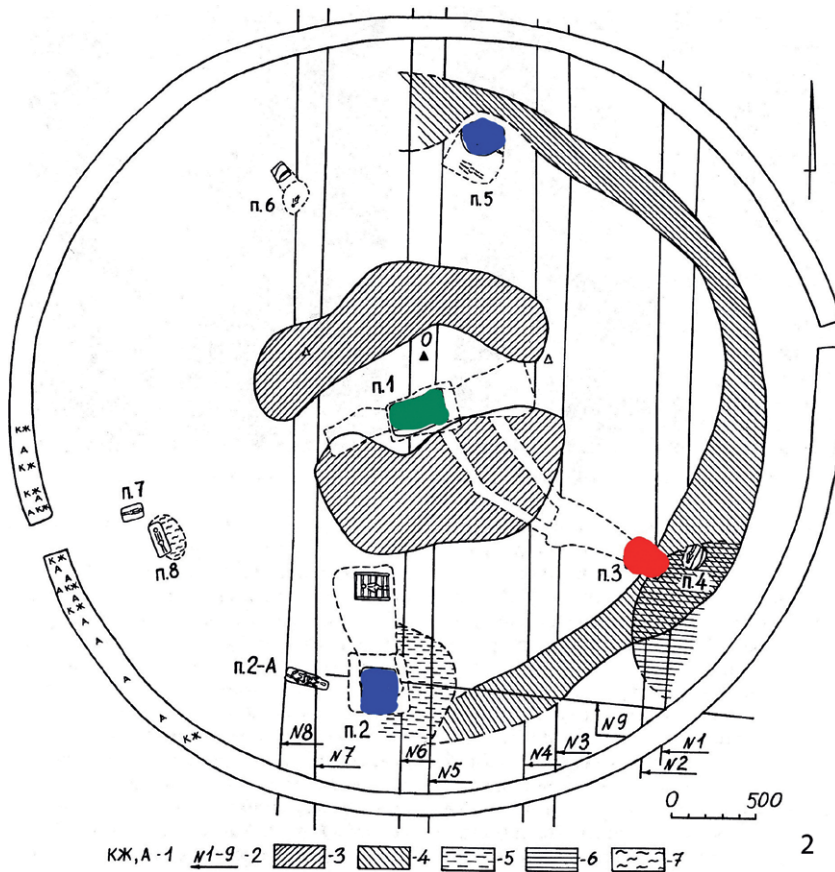
(Fig. 1). Of course, for more reliable results, there is a need for a larger database, but the poor state of the available archaeological evidence precludes this. By the time they were excavated by archaeologists, most of the Scythian kurgans had been destroyed – probably in ancient times – to the extent that, of the human remains they had originally contained, only scattered bones or fragments were left. Another complicating factor is that the kurgans were family sepulchres, and often several deceased were buried in a single catacomb, with the result that few contained just a single female or male burial.

Of further relevance is the fact that there is a substantial difference between male and female graves in terms of proportions of central and side graves. Male burials are largely primary ones; only two out of 23 graves, or 8.6 per cent of the total, were secondary burials. Secondary burials are the prevailing type among the female graves (54.5 per cent of the total); also, three out of five central female burials had had male burials placed beside them. Male and female graves differ in terms of their depth too: The male graves were placed deeper under the mound, on average 7.69 m deep (measured from the ancient ground surface under the kurgan to the base of the burial chamber), while the average depth of the female burials was 5.5 m (Tables 1; 2). A bar chart demonstrates this quite vividly, showing that the average difference in depth between male and female graves reaches 2 m and that the deepest male grave was 4 m deeper than the deepest female grave (Fig. 2).

The examination of the data has indicated that three parameters – horse graves accompanying human burials, the type of graves in terms of their central or peripheral position in the kurgan structures, and their depth – may be seen as direct or indirect indicators showing that the social status or prestige of the deceased in



1



2

Figure 3 (continued on the next page). Plan showing the location of graves in the kurgan. Blue – man, green – multiple burial (family), red – woman. 1 Belozorsky liman Kurgan 4 (Pleshivenko 1991, 54); 2 Soboleva Mogila (Mozolevs'kyi and Polin 2005, 154); 3 Tolstaya Mogila (Mozolevs'kyi 1979, 46); 4 Melitopolskij kurgan (Terenozkin and Mozolevs'kyi 1988, 12).

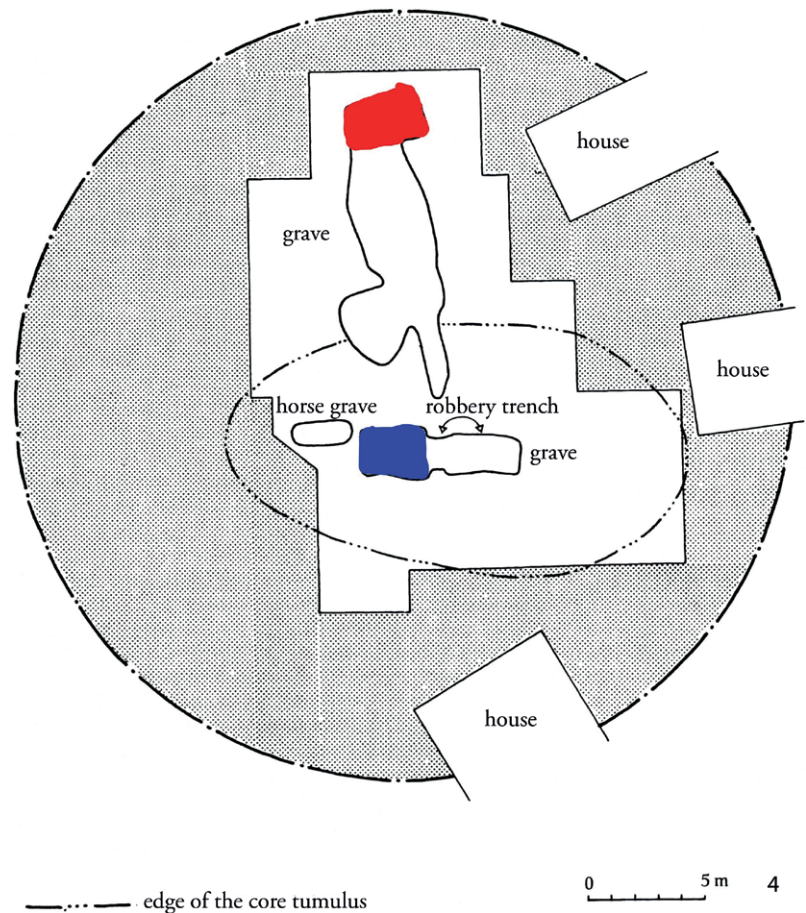
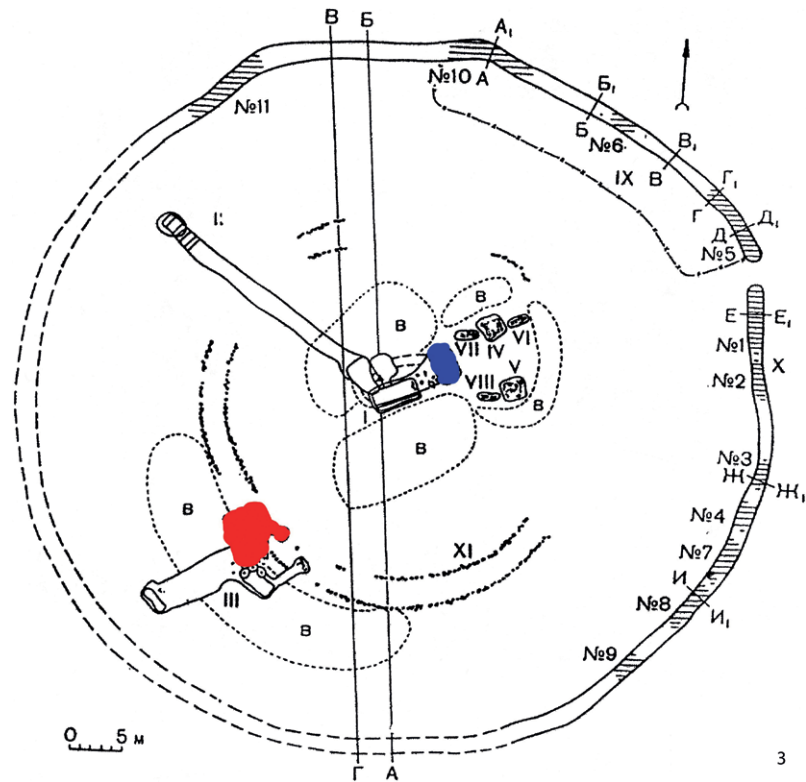


Figure 3 (continued). Plan showing the location of graves in the kurgan. Blue – man, green – multiple burial (family), red – woman. 1 Belozorsky liman Kurgan 4 (Pleshivenko 1991, 54); 2 Soboleva Mogila (Mozolevs'kyi and Polin 2005, 154); 3 Tolstaya Mogila (Mozolevs'kyi 1979, 46); 4 Melitopolskij kurgan (Terenozkin and Mozolevs'kyi 1988, 12).

the society in question was largely dependent on their gender. Well-known are single central burials of male members of the Scythian nobility, such as the tomb of the Strashnaya Mogila (Ukraine), which contained a young nobleman (Iljinskaja and Terenozkin 1983, 168-169). At the same time, female graves that are single and central are notably absent among the elite burials². Whether central or secondary, female burials are never not accompanied by male ones, as emphasised by Iljinskaja and Terenozkin (1983, 124). Also, no additional earth moving or funerary feasts were detected as a corollary of the female burials (Mozolevs'kyi 1979, 148-172).

Therefore, it may be concluded that in terms of their status, women were a step lower than men on the social ladder. Given the patriarchal character of Scythian society, it may be assumed that a woman's status ultimately depended on the status of her husband or father. Hence, in the kurgans of the Scythian elite, female graves chiefly accompanied those of their husbands.

There is another aspect to the subject under discussion. Analysis of the data on the burial mounds of the Scythian nobility and of the Scythian royal kurgans has shown that the arrangement of graves within the kurgan structures depended on the status of the deceased buried in them. In the Scythian royal kurgans, the tomb of the tsar was always in the centre of the structure, while those of his relatives corresponded to the central tomb and placed along the same meridian line. The Scythians buried their dead in a *supine position*, with the head pointing west. As a result, the graves arranged in a single row were either on the royal person's left (in the northern direction) or on his right (in the southern direction).

Such grave arrangements being prestigious, they were exclusively occupied by male burials. Children were sometimes buried in such graves too, such as in the Gajmanova (Obl. Zaporizhia, Ukraine) burial ground (burial 3) or in kurgan 4 of Belozorsky liman (Ukraine) (burials 3, 4, and 6). The gender of the deceased could not be identified in these cases, but given the pattern described, the burials must have contained the remains of male infants. In Soboleva Mogila (Obl. Dnepropetrovsk, Ukraine), there were burials of a young man and a teenager that occupied the northern (left) side of the structure in relation to the royal tomb, while that of an old man was to south of the central royal burial, that is on the royal's right side. Practically all of the graves arranged along the main line, including those of infants and teenagers, was marked by additional earth moving within the kurgan structure, which was a sign of prestigious burials. Thus, the arrangement of their burials in the main row, the ritually disturbed character of some of them, and the additional earth moving performed in such cases all indicate that the boys and young men buried in them belonged either to the family of the royal person buried in the central tomb or to the families of his close male relatives.

Most of the female graves were not found along the main line in the kurgans but arranged in the next row, mostly in north-eastern portion and on very rare occasions in the south-eastern portion of the structures. Apparently, even if placed in the next row, they were accorded more or less prestige depending on their arrangement in accordance of the principle of being placed to the central corpse's right (south) or left (north) (Fig. 3,1.2).

As a rule, the female graves were almost never disturbed in the course of post-funeral ceremonial practices. Disturbed female burials are a rare exception to the rule. This implies that in their lifetime most of the women did not enjoy the status that they could have passed on to the next generation when dead. Notably, the special investigations carried out along the lines have shown that the post-funeral ceremonies characterized by disturbances of the human remains had a ritual function, including, for example, the legitimization of the ruling status of the heirs of

2 Here we are discussing kurgans of the Scythian nobility – or royal kurgans as they are sometimes called – while those of commoners will be discussed elsewhere.

the dead. The heirs had to enter the royal tombs to destroy the remains of their dead, freeing and transferring to themselves the charisma of the dead rulers, as well as taking status regalia out of the graves (Kuzmin 1991, 146-155; Savinov 1996, 107-111; Shulga 2003, 102-105; Ochir-Goryaeva 2016, 113-128).

It was thanks to this social 'insignificance' of the Scythian women that archaeologists today have at their disposal, in undisturbed condition, a number of exceptionally rich female burials that were preserved intact. One example is the female secondary tomb of the Tolstaya Mogila burial ground that contained the remains of a young woman of 30 years and her infant. This was the only secondary grave in the kurgan. While there was room to the north and south of the central royal tomb in the main line, the female and child burial was, nevertheless, placed in a less prestigious (in this case, the western) part of the funeral structure.

In fact, this was one of the richest burials among the Scythian royal tombs. In addition to the sewn metal plaques, recovered on the remains of the young Scythian woman, there were large gold items, such as the neck *hryvnia* (478.5 g), three lamellar bracelets (from 65 to 74 g), and 11 rings (66 to 80 g each). The total weight of the jewellery slightly exceeds 1100 g. Nevertheless, her grave had been placed in the non-prestigious part of the burial ground of her husband (tsar); there was no sign of any additional earth moving in the structure. No traces of a funeral feast were discovered either, and no ritual visits to her grave with the purpose of disturbing her remains to 'borrow' her life force and to inherit her social power were ever made (Terenozkin and Mozolevs'kyi 1988, 161).

However, the notion of the lower social status of women in Scythian society are not fully convicting in view of the data that seem to contradict it. The fact is that there are female burials that may have the characteristics that are chiefly associated with a prestigious male grave: They were central in their funeral structures, or there were horse graves accompanying them, or they had been placed in the same meridian line as the central tomb or even had traces indicating they had been disturbed in the course of special post-funeral ceremonies performed. Hence, they were very similar to prestigious male graves.

One such exceptional burial among the royal tombs is that of the Melitopolskij (Obl. Zaporizhia, Ukraine) 'tsarina', a woman of 50-55 years. Her catacomb had been placed in the northern part of the kurgan along the meridian line aligned with the central male grave, to its left but in the same main row (Fig. 3,4). Moreover, large-scale additional earth moving had been performed on the occasion of her burial, as well as ceremonial disturbances in the burial chamber. The form of the catacomb grave of the tsarina was characterised by a wide *dromos* (8 m long, 2.5-3.25 m wide, and 6 m deep), and an oval shape of the chamber (3.3m × 2.2 m, and 6.5 m deep). In terms of its construction and size, this tomb was similar to the southern burial of the Solokha royal kurgan (Obl. Zaporizhia, Ukraine), that of a male, with evidence of large-scale earth moving on the site and performance of a funeral feast, and which contained five riding horses accompanying it. The grave goods recovered in the tomb of the Melitopolskij 'tsarina' also suited her high status; it contained gold items totalling 1600 g. But most impressive were probably the numerous household items and 11 wine amphorae. A similar large household section was recovered in the male burials of the largest royal kurgans, such as Chertomlyk, Berdyansky kurgan (Obl. Zaporizhia, Ukraine) and Dvugorbaya Mogila (Ukraine). The posture of the dead woman, with legs wide apart, mirrors that of the male contained in the southern burial of the Soboleva Mogila. According to the evidence based on the burials of the Scythian-Sarmatian Eurasian nomads, the deceased are quite frequently positioned in their graves in a manner described as a dance pose, that is, with legs bent and spread wide (Smirnov and Moškova 1964, 92). This pose is characteristic of a horseman's funeral when he was led to the grave on his riding horse (Obel'chenko 1992, 118-120). This pose is known from ethnographic evidence and from one of the

images on the gold case from the Siberian collection of Tsar Peter the Great dating back to the Scythian epoch (Fiel'strup 2002, 112; Ochir-Goryaeva 2018, 68-73).

How can one account for instances when some of the women in Scythian society seem to have enjoyed a social status equal to that of men? At this point, it is probably helpful to understand the ambivalence in the position of women characteristic of nomad societies, where women were treated partly subordinate but partly also equal to the men.

For many years, using ethnographic data in the study of ancient nomadic cultures of Eurasia and investigating the parallels between prehistoric nomads and more recent groups were considered incorrect from a methodical point of view (Artamonov 1947; Gryayznov 1955, 20-29; Chernikov 1960, 17-21; Smirnov and Moškova 1964, 5-64).

A. M. Khazanov, however, has suggested – in opposition to this method – dividing the history of Eurasian nomads into three epochs: the epoch of the ancient nomads, the epoch of nomads of the Middle Ages, and the epoch of the nomads of modern times. He has proven that differences between ancient and later nomads have historical and ethnical but not socio-economic reasons, and he has made extensive use of the ethnographic information on a number of recent nomadic peoples (Kazakhs, Kirghiz, Bashkirs) reconstruct the social history of the Scythians (Khazanov 1975), paying special attention to the Sarmathian-Kalmyk parallels (Khazanov 1972, 213-219)³. In my study of Scythian epoch burials with accompanying horse graves or graves containing horse equipment recovered in the Eurasian steppes, I have suggested using a landscape-geographical principle in seeking ethnographical parallels of the horses' role in the culture in question. Given that the archaeological sites associated with the Scythians and other nomads are located in the Eurasian Steppe, stretching from the Black Sea to the Altai Mountains, it seems only appropriate to use the ethnographic data of the nomadic peoples and groups who inhabit this region (Ochir-Goryaeva 2012, 441-453). The paper 'Ancestry and demography and descendants of Iron Age nomads of the Eurasian Steppe' confirms that there is genetic continuity between prehistoric nomads of the Scythian epoch and present-day Eurasian nomads, especially those of Turkic ancestry (Unterländer *et al.* 2017, 1-15).

It seems no accident that the two orientations of the burial constructions of the Scythian epoch are correlated with the western and eastern genetic groups of the Eurasian Steppe (Ochir-Goryaeva 2017, 434).

Researchers have already noted the fact that patriarchal nomadic societies, especially those untouched by the influence of Muslim religious views, are characterised by the recognition of the rights of women as equal to men at a certain moment in her lifetime, a tradition that goes back to ancient times (Khazanov 1975, 85; Nikolaeva 2008, 169-183; Kubyšev *et al.* 2009, 172-173 note 163). Notably, different periods in women's lives were marked by different traditional dress and headgear. It seems that in every society a distinction was made between a girl's and a married woman's traditional attire, but this is not always true for elderly women and grandmothers.

3 The Kalmyk are, in fact, the only nomadic people who, in the early 17th century, made the transcontinental migrations from Central Asia (western Mongolia) to Eastern Europe (the Volga region), where they founded their nomadic state (Khan-dom). In this way, they repeated the old migration route that was traditional for the nomadic peoples (the Scythians, Sarmatians, Huns, Chasars, Kumans, *etc.*) of earlier times (the Early Iron Age and the Middle Ages). During their migration, they changed their ethnic name from Oyrat to Kalmyk, which, again, was not uncommon in the ancient history of nomads. These facts allow us to look at the Kalmyk history through the prism of world history, in which they can be presented as the last wave of Asian nomad advancement into Europe (Istorija 2009, 112-304).



Figure 4. Kalmyk traditional dress of 1 non-married girl; 2 married woman; 3 old woman; 4 man (1 RIA Kalmykija; 2,3 photograph: Maria Ochir-Goryaeva; 4 postcard, private collection).

Illustrative from this point of view is, for example, the tradition of the Kalmyk⁴ (Nefed'ev 1834, 140; Zhitetskiy 1893, 11; Bakaeva 2010, 162-167; Khoninov and Khaninova 2010, 68-69), the culture with which I identify.

There are three separate seasons in the life of a Kalmyk woman: the first is as a girl in her parents' home, the second is as a married woman who belongs to her husband's family, and the third is as the head of an extended family (clan).

4 This is based on data from both fictional and scientific literature, including sources on Kalmyk ethnography and culture, combined with my own experience as a girl who grew up in a largely traditional environment, living the old nomadic traditions in my school and college years. My colleagues of the ethnography section at the Kalmyk Research Centre (RAS) and I often have discussions on the themes; they are interested in my case because they grew up in town and their parents did not speak Kalmyk, their mother tongue, while I am a country girl and my parents learned Russian from us, their children. In fact, I have been registered as an authentic informant in the ethnographers' records. At this point, having earned the degree of Doktor habil., I often reflect on the facts and events of my past, both as a Kalmyk native speaker and as a researcher. The traditions in question were strictly observed by my grandparents' generation. The generation of my parents followed them as well, trying at the same time to fit them into the requirements of the day, while my own generation takes into consideration only those traditions and customs that are of a most general character and that meet the demands of the day. However, the core of the traditional perceptions is still there; it has not lost its relevance.

Sometimes one has to remember things long forgotten. It only *seems* that women's emancipation has been around for two hundred years. In fact, in the patriarchal nomadic societies of the Eurasian steppes (Khazanov 1975, 85; Nikolaeva 2008, 169-183; Kubyšev *et al.* 2009, 172-173 note 163), a woman used to enjoy equal rights with a man at a certain period of her life cycle. But the evidence for this interesting phenomenon, which is of much relevance in the current discussion, may often be absent archaeologically. Let me describe these periods of her life in some detail.

The traditional Kalmyk perception was that girls were pure and innocent, staying at their parents' home until they married. At the age of 12 to 14 years, they had to leave to go to their husband's household. Accordingly, they were treated as guests expected to leave soon. Girls were not supposed to do hard work; their traditional pastimes were sewing or embroidery. Pampered as much as possible, they wore pretty and richly adorned dresses and had their hair braided in a single braid, worn on the back. Their dresses were made of light-coloured fabric, blue or green; if the fabric was patterned, then the pattern was small and never bright (Fig. 4,1). In general, girls were thought to be heavenly-like, chaste creatures. With their maidenly looks, they were not supposed to be voluptuous; they were supposed to be as modest and spiritual as possible.

When girls were given in marriage, the change in their status was radical. Indeed, the girl whom her family knew was considered to be dead. When she was leaving her parents' home, they had to perform a ceremony called *daalh avlhn*, similar to that performed for the dead carried from their homes to cemeteries. This was the way to prevent 'the family's happiness and well-being' (oral tradition) fading away with the departing girl. Upon arrival at her husband's home, she was given a new name, dressed as appropriate for a married woman, and given new jewellery, to wear instead of that of her girlhood which was left in her parents' household. The wedding ceremony included a special practice of braid separation; from now on, she had to wear two braids, her right braid symbolising her parents' vital force and the left braid symbolising the power of her husband's family. The dresses of married women were elegant, decorated with gold and silver embroidery. Bright colours were preferred for dresses (*terlik*) and top caps (*tsegdig*), and various shades of red were favourite because they were associated with the main function of a married woman, which was to give birth to children and to look after them (Fig. 4,2). Her status was strictly regulated in the sphere of relations with her husband's relatives and with strangers. For example, even in her *yurt* (tent), she was not supposed to approach the altar and take offerings from it; neither was she allowed to take a seat in the male part of her home, which was reserved for honoured guests and elder male family members. In my opinion, these practices were aimed at a gradual adaptation of the new person to fit into her new family, but also as a precaution against any chance of extramarital affairs.

The arrival of her first grandson and the end of her own childbearing years marked the third transformation in the life of a Kalmyk woman. As a grandmother with grandchildren around, she had to give up her elegant *terlik-tsegdig* type clothes richly decorated with embroidery, as well as her earrings and rings with bright gems or anything too eye-catching and inappropriate for her age. Now, instead, of a married woman's dress, she had to wear clothing appropriate for an old woman, which was in fact very similar to the man's: the same headgear made of black or grey astrakhan, with a red tassel, and a long dress (*berz*) styled after the man's *beshmet*, but stripped of any decorative embroidery and sewn of dark blue or dark brown monochromatic fabric (Fig. 4,3,4). Her new attire was to emphasise that she was now in the final period of her life, to be detached from worldly activities. She was once more chaste in the ritual sense of the word and enjoyed well-deserved respect and rights. While paying visits, she was seated as a

guest of honour along elder men and had her tobacco pipe lit for her. Her advice was eagerly sought after. Moreover, there were precedents of an elderly woman managing her family and clan. I think that these were the ways to recognise her status as a founder of her family (clan); with her blood flowing in the veins of all her children and grandchildren, the woman was ultimately accepted as a fully-fledged member of her husband's clan of blood relations.

This brief ethnographic excursus serves to suggest a plausible interpretation for the exceptional position (equal to that of male chieftains) that some elderly Scythian women appear to have enjoyed. The differences in the funeral rite practised in the case of the 30-year-old female of the Tolstaya Mogila kurgan and her 50-year-old counterpart of the Melitopolskij kurgan may be accounted for by the different life stages that they belonged to.

References

- Artamonov, Michail I. 1947. Voprosy istorii skifov v sovetskoj nauke. *Vestnik Drevney Istorii* 3.
- Artamonov, Michail I. 1970. *Goldschatz der Skythen in der Ermitage*. Prague: Artia.
- Bakaeva, Elsa 2010. Odezhda i ukrasheniya. In: Bakaeva, Elsa, and Žukovskaâ, Nataliâ (eds). *Kalmyki. Narody i kultury*. Moskva: Nauka, 149-186.
- Chernikov, S. S. 1960. O termine 'ranniye kochevniki'. *Kratkiye soobshcheniya instituta istorii material'noy kul'tury*, 80, 17-21.
- Fiel'strup, F. A. 2002. *Iz obriadovoi zhizni kirgizov nachala XX veka* [An extract from the Kyrgyz ritual life in the early 20th century]. Moskva: Nauka.
- Gryaznov, Michail P. 1955. Nekotoryye voprosy slozheniya i razvitiya rannikh kochevnikov Kazakhstana i Yuzhnogo Sibiri. *Kratkie soobsheniya Instituta Etnografii*, 24, 2-29.
- Il'inskaja, Varvara A., and Terenozkin, Alexeij I. 1983. *Skifiya VII-IV vv. do. n.e.* Kyiv: Naukova Dumka.
- Istorija Kalmykii s drevnejšich vremen do našich dnei* 1. Èlista: Gerel, 2009.
- Jacobson, Esther, and Reeder, Ellen D. 1999. *Scythian Gold. Treasures from ancient Ukraine*. New York: Abrams.
- Khazanov, Anatolij M. 1974. Sarmato-kalmytskiye paralleli: k voprosu o zakonomernostyakh kochevogo khozyaystva v odnotipnoy ekologicheskoj obstanovke. In: Kalmytskii NIIALI (ed.). *Problemy altaistiki i mongolovedeniya*. Materialy Vsesoyuznoy konferentsii. Èlista, 17-19 maia 1972 goda, 1. Èlista: Kalmytskii NIIALI, 213-219.
- Khazanov, Anatolij M. 1975. *Sotsial'naia istoriia skifov: Osnovnye problemy razvitiia drevnikh kochevnikov evrazijskikh stepei*. Moskva: Nauka.
- Khoninov, Mikhail V., and Khaninova, Rimma M. 2010. *Stanu krasnym tiul'panom: stikhi, poemy, perevody, povest'*. Èlista: Dzhangar.
- Kubyšev, Anatolij I., Bessonova, Svetlana S., and Kovalev, N. V. 2009. *Bratoljubovskij kurgan*. Kiev: Institut archeologii NAN Ukrainy.
- Kuz'min, Nikolaj Ju. 1991. Ograblenie oder obryad? In: Chrshanovskii, V. A. (ed.). *Rekonstrukcija drevnich verovanii: istochniki, metod, zel.* St Petersburg: GMIR. 146-155.
- Mozolevs'kyi, Borys N. 1979. *Tovsta mogila*. Kiev: Naukova Dumka.
- Mozolevs'kyi, Borys N., and Polin, S. V. 2005. *Kurgany skifskogo Gerrosa IV v. do n.e.* (Babina, Vodiana i Soboleva mogily). Kiev: Stilos.
- Müller-Wille, Michael, Murzin, Vjaceslav Ju, Rolle, Renate, Schietzel, Kurt, Petrovič Toločko, Petr 1991. *Gold der Steppe. Archäologie der Ukraine*. Neumünster: Wachholtz.

- Nebol'sin, Pavel I. 1852. *Ocherki byta kalmykov Khoshoutovskogo ulusa*. St Petersburg: Tip. K. Kraiia.
- Nefed'ev, Nikolai A. 1834. *Podrobnye Svedeniia o Volzhskikh Kalmykakh, Sobrannye na Meste*. St Peterburg: Tip. K. Kraiia.
- Nikolayeva, Darima A. 2008. Sledy kul'ta materi-praroditel'nitsy v traditsionnoy kul'ture buryat. *Etnograficheskoye obozreniye*, 3, 169-183.
- Obel'chenko, Oleg V. 1992. *Kul'tura antichnogo Sogda: po arkheologicheskim dannym VII v. do n.é.-VII v. n.é.* Moskva: Nauka.
- Ochir-Goryaeva, Maria 2017. Genetics and geographical orientation of the Eurasian Nomads (VI-III cent. B.C.). In: *23rd EAA Annual Meeting, Maastricht 2017. Building Bridges*. Abstract Book. Maastricht: European Association of Archaeologists, 434.
- Ochir-Goryaeva, Maria A. 2012. *Drevnie vsadniki stepej Evrasii*. Moskva, Taus.
- Ochir-Goryaeva, Maria A. 2016. Sledy postpogrebal'nykh obryadov v kurganakh skifskoy epokhi stepey Yevrazii. In: Nosovm Evgenii (ed.). *Drevniye nekropoli i poseleniya: postpogrebal'nyye ritualy, simvolicheskiye zakhoroneniya i ogrableniya*. Trudy IIMK RAN 46. St Petersburg: Institut istorii material'noi kul'tury, Rossiiskaia Akademiia nauk, 113-129.
- Ochir-Goryaeva, Maria A. 2018. Prozessiya vsadnikov na zolotom futlyare iz kollekzii Petra I [Procession of Horsemen on a Gold Plaque from the Siberian Collection of Peter I]. *Archaeology, Ethnology & Anthropology of Eurasia*, 46, 4, 67-73.
- Pleshivenko, Alla G. 1991. Skifskii kurgan u Belozerskogo limana [The Scythian kurgan near Belozersky estuary]. In: Boltrik, Yrii V., and Bunyatyan, Ekaterina P. (eds). *Kurgany Stepnoi Skifii: sbornik nauchnykh trudov* [Kurgans of Steppe Scythia]. Kiev: Naukova Dumka, 52-72.
- Rolle, Renate 1979. *Totenkult der Skythen 1-2. Das Steppengebiet*. Vorgeschichtliche Forschungen 18. Berlin: de Gruyter.
- Rolle, Renate, Murzin, Vjačeslav Ju., and Alekseev, Andrej Ju. 1998. *Königskurgan Čertomlyk. Ein skythischer Grabhügel des 4. vorchristlichen Jahrhunderts*. Hamburger Forschungen zur Archäologie 1. Mainz: Zabern.
- Savinov, Dimitri G. 1996. Ob obryade pogrbenii bolshich pazyrykskich kurganov. In: Alekseev, Andrej Y. et al. (eds). *Zrachestvo i shamanizm v skifskuy epochu*. St Petersburg: RGNE, Institut istorii material'noi kul'tury, Rossiiskaia Akademiia nauk; Izdatelstvo Gosudarstvennogo Ermitaza, 107-111.
- Shulga, Petr I. 2003. *Mogil'nik skifskogo vremeni Lokot'-4a*. Barnaul: Altaiskii gos. universitet.
- Smirnov, Konstantin F., and Moškova, Marina G. 1964. *Savromaty. Rannââ istoriâ i kul'tura sarmatov*. Moskva: Nauka.
- Terenozkin, Alexeij I., and Mozolevs'kyi, Borys N. 1988. *Melitopol'skii kurgan*. Kiev. Naukova dumka.
- Unterländer, Martina, Palstra, Friso, Lazaridis, Iosif, Pilipenko, Aleksandr, Hofmanová Zuzana, Groß, Melanie, Sell, Christian, Blöcher, Jens, Kirsanov, Karola, Rohland, Nadin, Rieger, Benjamin, Kaiser, Elke, Schier, Wolfram, Pozdnyakov, Dimitri, Khokhlov, Aleksandr, Georges, Myriam, Wilde, Sandra, Powell, Adam, Heyer, Evelyn, Currat, Mathias, Reich, David, Samashev, Zainolla, Parzinger, Hermann, Molodin, Vyacheslav I., Burger, Joachim 2017. Ancestry and demography and descendants of Iron Age nomads of the Eurasian Steppe. *Nature Communications*, 8, Article 14615. 1-10. doi: <10.1038/ncomms14615> e-published 3 March 2017.
- Zhitetskiy, Irodion A. 1893. *Ocherki byta astrakhanskikh kalmykov. Etnograficheskkiye nablyudeniya 1884-1886 [Essays on the life of the Astrakhan Kalmyks. Ethnographic observations 1884-1886]*. Moskva: Eipografiya Volchaninova M.G.

Tracing gender in funerary data. The case study of elite graves in the North-Alpine complex (Late Bronze Age to La Tène B)

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Abstract

Based on a data analysis of elite graves in the North-Alpine complex, this paper has a twofold purpose. On the one hand, it presents methodological tools to define archaeological gender from funerary data, a basis for developing gender approaches and raising specific research issues. This requires a theoretical presentation of the different dimensions of gender, in order to establish methodological tools and characterise archaeological gender. Methods using statistical analysis are then detailed.

On the other hand, it presents results in terms of change in gender relations and suggests theoretical interpretations. The gender analysis of elite graves from the Late Bronze Age to La Tène B in a part of the North-Alpine complex, namely, north-eastern France, southern Germany, Switzerland, Austria, and Bohemia, shows interesting results. This wide study area and its dataset of more than 800 graves enable a long-term approach to shedding light on gender differences in funerary practices.

The results show specific changes and enable me to question the concept of gender, not only in its archaeological definition, but also as a system of domination and differentiation, which implies issues relating to wealth, status, social organisation and hierarchy. Indeed, the funerary data highlight the reality of 'great women', and the cross analysis proposed here shows an engendered evolution of the elite. This evolution is linked with the supremacy of females in terms of the possession of wealth, raising the issue of the significance of this female wealth. The results also show regional diversity, which raises question about the durability of gender structures, their origin, and their implications.

Keywords: *Bronze Age, Iron Age, Central Europe, elite graves, gender*

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Introduction

The starting point of my research was women's positions in the North-Alpine complex, as can be illustrated by the key figure of the Lady of Vix (Dép. Côte d'Or, France) and 50 years of bibliography about this grave.

Discovered in the 1950s, this grave immediately generated great enthusiasm among archaeologists as well as the general public, as it was the subject of an article in one of the most popular French magazines, *Paris Match*, in 1953 (n°228, 1-8 August 1953). In that article, the Lady of Vix was represented as a glamour icon: blond hair with perfectly styled hair, carmine red lipstick, and the gold neckring as a diadem. That picture was the first representation of the Lady of Vix, and it shows the biases and stereotypes inherent in the interpretation of elite graves and, more specifically, female graves. The grave, characterised by its wealth and the quality of its grave goods, became the starting point of a debate on women's position, and especially this woman's position, in North-Alpine society. That debate took place as a play in three acts.

At the beginning (in the 1950s), the grave was seen as feminine because of the lack of weapons and the presence of gold ornaments. The Lady of Vix was, without any doubt, a princess (Megaw 1966; Joffroy 1979; Brun 1987). In the second act, the gold neckring, which was traditionally only seen in male graves, put into question the sexual identification as female. Other interpretations denied the feminine attribution and proposed hypotheses explaining both the feminine aspect (lack of weapons) and the male aspect (presence of gold neckring), with the Lady of Vix being seen as a shaman (Pauli 1972), a priest (Spindler 1983), or a transvestite priest (Arnold 1991). After this period of doubt, in the third act the emergence of a less stereotyped approach renewed interpretations, in particular thanks to anthropological studies. The first osteological study did not define the sex (Charles 1954), and a first attempt at sex determination, in 1980 (Sauter 1984), was inclusive. In 1987, Langlois provided a first sexual determination as female (Langlois 1987), which was later confirmed by new studies and a genetic one in 2000-2001 (Depierre and Duday 2003). Since then, her female sex and high social status have become acknowledged, but her status was linked by one researcher to her ugly physical appearance (Knüsel 2002, 294).

These 50 years of publication and hypotheses highlight a critical issue: the problem is not really the sex; it is that one of the richest graves found in that part of Europe is that of a female. Before we trace gender, we have to deconstruct the stereotype that assumed high social status for men but not for women, even with the right grave goods and status markers¹.

In this regard, I will first develop a theoretical approach of gender, a concept that is often misused. These theoretical fundamentals will allow the development of a definition of an archaeological gender and its uses (*i.e.* construct methodological tools for tracing gender in funerary data). Then, I will test these methods on the corpus of elite graves in the North-Alpine complex from the Late Bronze Age to the La Tène B period of the Iron Age. Lastly, I will expose how these results and their limits underline the contribution of the concept of gender as a heuristic tool.

1 This was my PhD Work, entitled 'La production des Grandes Femmes' (the making of great women) and deal with the relation between female with wealth and power in North Alpine world during Bronze and Iron Age, thesis defended with highest mention in 2014.

From gender to archaeological gender

Creating a clear definition of the theoretical concept of gender is a precondition for using it to interpret archaeological funerary data. The best way to approach this concept nowadays is to summarise its emergence and evolution in the social sciences and then examine its use in archaeology.

History of gender

The concept of gender has its roots in the early 20th century, with the work of the American anthropologist Margaret Mead's book *Sex and Temperament in Three Primitive Societies* (Mead 1928; 1935). She was the first to deal with the concept of 'sexual roles' and suggested that the personality of each sex is a cultural construct. She highlights that the sexual division of labour is cultural and not natural.

The first half of the 20th century was marked by *The Second Sex*, a 1949 book by Simone de Beauvoir on the distinction between female and woman, with her famous quote: '*one is not born a woman, one becomes one*' (Beauvoir 1976, 13).

Following these slow beginnings, research on sexual issues has increased in parallel with the rise of feminism. In the late 1960s, the works of the psychoanalyst R. Stoller (1968) introduced a conceptual distinction between biological sex and psychological identification². Then, the sexologists J. Money and A. Ehrhardt (1972) distinguished 'gender role' and 'gender identity'. At the same time, the sociologist A. Oakley developed this concept from a descriptive to a critical nature (Oakley 1972, 16).

During this first phase of gender studies, gender was defined as belonging to the social sphere; gender is a social sex, a social construction, not determined by biological sex.

The works of J. Butler and T. Laqueur dominated the subsequent phase. For J. Butler, the definition of gender was still part of biological ideology, caught in the debate on the dichotomy between culture and nature (Butler 1990). T. Laqueur highlighted the belated and invented character of the sexual division (Laqueur 1990). These works represent a turning point in the perception of gender. Gender is no longer conceptualised as determined by sex but gender design now the system that generates sexes and distinguishing them. Thus gender could be summarised in three key points: Gender does not express the social part of a division, but gender is this division. Gender precedes and determines sexes that belong to it.

Gender is not only a system of differentiation but also a domination system.

I argue that the importance of coming back to the evolution of the concept of gender shows real meaning in the light of this last conceptual approach. Gender approaches in archaeology cannot only be the study of men and women, nor only of male and female status in past societies. Gender archaeology deals with each of the three key points above: Archaeological data could allow us to determine an archaeological gender as entirely distinct from biological sex. Archaeological gender and biological sex could be studied separately at first and then together in order to understand gender as a system that creates and distinguishes the sexes; and archaeological data could allow for the identification and characterisation of a system of domination by ranking data (which implies wealth and hierarchy issues).

These theoretical perspectives may seem complex and may seem to cover several aspects of gender issues, and a holistic approach is possible provided we apply the correct terminology.

2 It is the psychological process by which individuals unconsciously endeavour to pattern themselves after one another. The roots of the concept can be found in the writings of Sigmund Freud.



Figure 1. Gender as a continuum
(Caroline Trémeaud).

A specific terminology for archaeology?

The term *gender* first appeared in the archaeological literature in the 1970s, first in prehistory. Examples are *Were They All Men? An Examination of Sex Roles in Prehistoric Society*, a workshop in 1979 but published somewhat later (Bertelsen *et al.* 1987); *Woman the Gatherer* published by Frances Dahlberg (1983) in response to the symposium *Man the Hunter* (published by Richard Lee *et al.* 1968); and the important article ‘Archaeology and the Study of Gender’, by Margaret Conkey and Janet Spector (1984). Since the 1990s, gender studies have been an integral part of archaeology, starting with *Engendered Archaeology: Women in Prehistory*, published by Joan Gero and Margaret Conkey (1991). And Europe and the North-Alpine world are the subject of more gender works (Díaz-Andreu and Sørensen 1998; Sørensen 2000; Arnold 1995; David-Elbiali 2011; 2012; *etc.*).

Nevertheless, use of the word *gender* may prove challenging, especially in France, where the concept is not yet seen as totally legitimate, as noted by R. Whitehouse: ‘*Gender archaeology has yet to make any impression in either France [...]*’ (Whitehouse 2006, 735).

Formulating precise definitions of the concepts and terms underpinning the discussion on gender is a prerequisite to facilitate an exchange of views on results. Several points of terminology must be clarified about sex, gender, and genders.

First, for our use in archaeology, sex refers to biological sex and only to related data, obtained by osteological or genetic studies. This point may seem obvious, but there is, however, frequent confusion between the terms *gender* and *sex*, reinforced by the use of such terms as *sexual markers* to characterise some grave goods. Such characterisations are misleading because they lead archaeologists to use goods to define biological sex, which is not synonymous with gender. It is extremely important to use the term *sex* (and related terms) only to characterise biological sex.

Second, there is a distinction between *gender* (singular) and *genders* (plural). The singular form refers to the system of differentiation and domination, which can be reconstructed from funerary data through an analysing of wealth and hierarchies, while the plural form refers to the determination of an archaeological gender, a social construction unrelated to sex. Moreover, the archaeological gender must to be considered as a non-binary variable, a continuum³ between two opposites: the one end masculine, the other feminine, with between them a neutral or mixed area (Fig. 1).

Ultimately, the gendered approach developed here could be summarised as follows:

Sex is no gender and gender is no sex. Gender (singular) refers to a system of differentiation and domination. An archaeological gender (*i.e.* genders) must be defined with archaeological data.

Thus, tracing gender in funerary data requires a twofold approach. On the one hand, determine archaeological genders that are supplementary and complemen-

3 The concept of continuum is recurrent in gender studies as a way out from a binary conception of gender or sex (Fausto-Sterling 2012 or Peyre 2006).

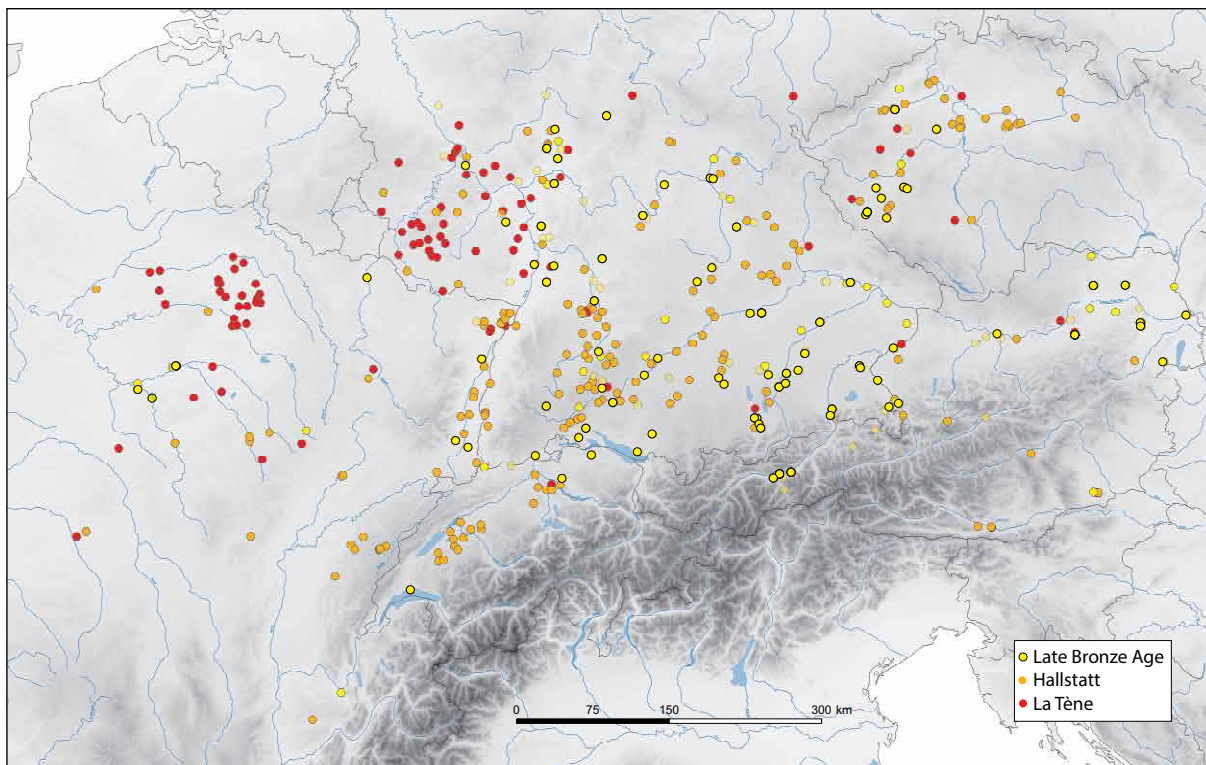


Figure 2. Map showing elite graves in central and Western Europe dating to the Late Bronze Age (yellow) and the Hallstatt (green) and early La Tène (red) periods of the Iron Age (Caroline Trémeaud).

tary with the sex (not always available from funerary data); on the other hand, pay attention to gender processes that means on differentiation scheme between masculine and feminine in past societies. In order to develop these twofold aims, I have created several methodological tools in relation to the selected corpus of data.

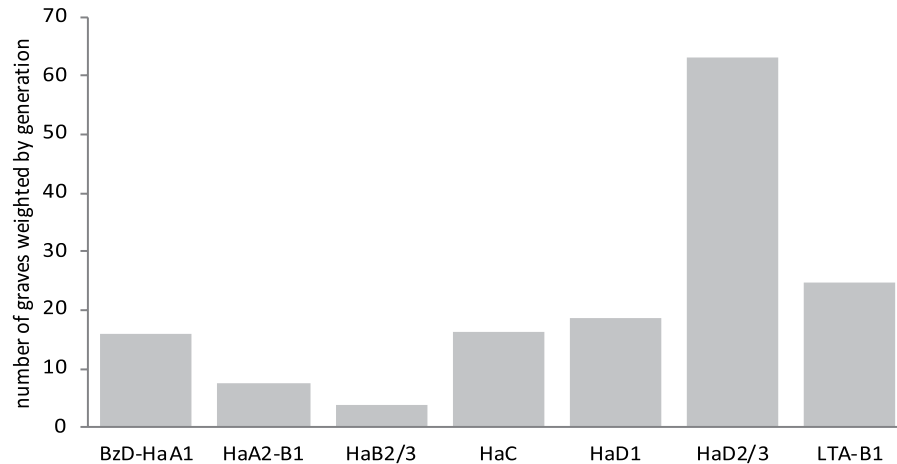
Materials and methods

Corpus presentation

The starting point for my research on elite graves was the Lady of Vix grave. I prefer the term *elite graves* to *princely graves*, which has been used since the 19th century following the work of Paulus, who characterised for the first time as *princely* some graves that he discovered in Hundesingen near the Heuneburg (Lkr. Sigmaringen, Germany; Fischer 1999, 34). This adjective was largely repeated to describe all the ostentatious graves from the Hallstatt period (Ha). Using the term *princely graves* implies that we recognise a high status and precise social roles before studying them. In addition, this term is linked with the ‘*Fürstensitze*’ (princely seat) and so is fixed in time and space. For my approach⁴, it seems most suitable to use the term *elite* (or *ostentatious*) *graves*. Traditionally, these graves are defined by a tumulus as well as singular and important graves goods, such as precious vessels, imports, precious ornaments in gold, and wagons (Schönfelder 2009; Echt 1999). Compiling data contained in previous works (Echt 1999; Hansen 2010; collection see Tomba project), I created a database in which are inventoried all the graves from the Late Bronze Age to La Tène B1, totalling 721 graves.

4 The definition of the term *princely* is more or less fixed in the research tradition and requires redefinition or at least clarification (see Fischer 1999, 34-35).

Figure 3. Chronological distribution of elite graves (number of graves weighted by generation). Bz: Bronze; Ha: Hallstatt; LT: Ta Tène (Caroline Trémeaud).



The chronological framework is long, covering more than 1000 years (c. 1350-250 BCE). In geographical terms (see Fig. 2), it covers a large part of the North-Alpine complex (*i.e.* north-eastern France, southern Germany, Switzerland, Austria, and Bohemia). A large area that is coherent in regards to the ostentatious funerary display was required to understand social evolution on a long temporal scale.

The geographical evolution shows a movement from east to west of the North-Alpine complex: during Late Bronze Age elite graves are situated more in the east then they tend to be located in the southern part and finally they are largely in west part. The chronological sequence highlights a lack of elite graves during Hallstatt period HaB2-3 and a sharp increase during HaD2-3. The number of elite graves is weighted by generation (Fig. 3), which allows a comparison from period to period (even if the duration is not the same).

I first recorded precisely the details of each grave in a database⁵. In order to question gender, several scales are necessary: the scale of the entire phenomenon of elite graves, the scale of the different chronological periods, and the scale of the grave and its deposit.

The archaeological gender as a methodological tool

Traditionally, grave goods are considered to be an indication of the sex of the buried individual, with a stereotyped division: the presence or absence of weapons, based on a common assumption of sexual division of labour linking war and hunting activities with males. This gender bias has been detected since the beginning of gender studies, and was explicitly described by Conkey and Spector in a seminal article (1984, especially p. 11 for funerary archaeology). Formulating a biological interpretation on the basis of grave goods rises from a conflation of sex with gender. Although this approach was based on stereotypes, it was, in a way, a gender approach, without its proponents being aware of the fact and without them employing any methodological underpinning.

The limits of this stereotypical approach have recently been underlined with a famous Viking tomb excavated in the 1970s at the Birka settlement, on the island of Björkö (Stockholmslän, Sweden). Grave Bj 581 included a sword, an axe, a spear, armour-piercing arrows, a battle knife, two shields, and two horses (Hedenstierna-Jonson *et al.* 2017, 2). The tomb was quickly identified as that of a high-ranking warrior – who was presumed to have been male. But a new study (Hedenstierna-Jonson *et al.*

⁵ Each grave is recorded with details about all grave goods, grave architecture, location, and anthropological information (see Trémeaud 2018, 58-66).

between them. These analyses need to meet two prerequisites to generate statistically significant results: a time unit, in order to avoid showcasing a chronological evolution of graves or typology, and a sufficiently large sample of data – which is a prerequisite inherent to any statistical survey.

The corpus for the correspondence analysis for the graves of HaD2-3 (Fig. 4 bottom) is composed of 116 graves (with the detailed data of each graves recorded in a database) and 22 functional categories. The map shows the repartition of graves and functional categories following the first two factors (represented in abscissa and in ordinate): The x-axis represents the first factor and the y-axis, the second factor. The main objective is to interpret these two factors that play a fundamental role in the repartition, defining connections and preferential schemes in the grave goods.

Here, the AFC clearly shows two groups: one including weapons and the other including spindles. So gender is clearly visible, which highlights the importance of this variable in funerary practices.

This first step brings to light associations of finds, which then need to be interpreted. These interpretive steps take into account sexual determination as well as the results of AFC, and they allow a gender interpretation of the different correspondence analyses.

This process allows defining, as a new variable, an archaeological gender for each grave. The gender is not a binary variable, but a *continuum* between two opposites (one masculine the other feminine), with a neutral zone in between. Indeed, the CFA (see Fig. 4) clearly shows a continuous spread with clusters. To preserve this trend while advancing in the interpretation, three gender values have been used here: masculine and feminine (the two opposite poles revealed by CFA analysis) and a neutral (or mixed) gender. This last value should not be confused with the indeterminate values. Neutral gender characterises graves in the middle of the *continuum* revealed by the correspondence analysis, that is, graves that are neither feminine nor masculine, but as distinct as masculine and as feminine.

Nevertheless, to be significant, correspondence factor analysis has to follow specific rules, and a thorough analysis of the data is required to interpret the mapping and to explain the meaning of the factorial axes. Applied to the entire corpus, this method enables me to define archaeological gender for 96 per cent of the corpus: 24 per cent are feminine, 52 per cent masculine, and 20 per cent neutral. Biological sex determinations are rare for this corpus: for 92 per cent of the graves, the biological sex has not been defined; for 3.5 per cent it was determined to be female and for 4 per cent, male.

Ranking graves: A wealth indicator

After the gendering of the data, issues around establishing hierarchies led me to develop a two-step method for ranking the graves.

The first step addresses the problem of interpreting grave goods in terms of wealth differences, with the creation of a quantitative indicator I have termed the wealth indicator. This wealth indicator makes it possible to visualize easily and clearly the wealth of graves and to calculate the funerary investment for each grave. The wealth indicator, which is quantitative, does not allow for long-term comparisons.

A second step is needed to overcome the limits of this quantitative indicator. Thus, a two-phased method was established: firstly a quantitative characterisation of each grave's wealth, by weighting them, and secondly, a discretisation⁶ of this weight in order to create a qualitative variable that allows long-term comparison.

6 In applied mathematics, discretisation is the process of transferring continuous variables into non-continuous variables.

Weighting graves⁷ is essential in order to study funerary wealth. However, this type of study is particularly difficult to conduct as it involves an estimation of the value of funerary practices, linked to systems of thought and values from a past that is largely inaccessible to us. To overcome this limitation, it is necessary to establish a method that is as objective as possible. With this in mind, the current work is based on two principles: Take into account as many criteria as possible for each grave (a completeness principle) and weight each criterion to define a grid of analysis, which requires taking into account both material and architectural aspects to characterise graves. Each grave is weighted by using these principles, taking into account all components of each grave: architecture, location, and finds (using quantitative and qualitative criteria):

$$\text{WEIGHT}_{\text{grave}} = \text{WEIGHT}_{\text{architecture}} + \text{WEIGHT}_{\text{artefact}}$$

The weight of architecture is obtained by adding together points linked to the architecture of the grave (presence/absence of a superstructure, such as a tumulus or enclosure) and points linked to the location (isolated or in a cemetery; in a central or peripheral position in the cemetery or burial ground). This calculation can be refined with size or height elements when the data allow it, but given the types of data available in this case, it was difficult to develop a more detailed analysis grid.

The weight of each grave goods is more complex, involving three main criteria (the functional category, the material, and the quantity). These main criteria have a number of sub-criteria in order to get the most accurate results. The functional category has a value based on an analytical grid that aims at proposing a common approach despite the diversity of artefacts. The material is classified into five categories, which take into account the scarcity of the material and its use (pure or plated). The number of grave finds is weighted by class for certain functional categories, such as beads, vessels, bones, or undetermined rings.

The sum of these two components gives a weight for each grave. In order not to artificially amplify subjective values, this weighting system is based on a relative and limited scale based on an analysis of the graves and artefact frequency.

$$\text{WEIGHT}_{\text{grave}} = \text{WEIGHT}_{\text{architecture}} + \text{WEIGHT}_{\text{artefact}}$$

$$\text{WEIGHT}_{\text{architecture}} = \text{architecture} + \text{location}$$

$$\text{WEIGHT}_{\text{artefact}} = (\text{material} \times \text{category} \times \text{quantity}) / \text{artefact}$$

These calculations were done using an analysis grid that summarises assigned values for each criterion and they were applied to each grave individually. This analytical grid, which assigns a value on each criterion, allows us to estimate the wealth of each grave. This has been automated by using a script, which systematises the process and makes it achievable on a large database. This automatic treatment of data applies exactly the same method and analytical grid on all of the data, which enables a rigorous and efficient process. This method [creation of analysis grid + weighting graves + process automation per script] provides a quantitative variable, the wealth indicator.

As noted above, this wealth indicator (see Fig. 5) is not appropriate for long-term comparisons. Indeed, with the analysis grid being the same for all graves, the variations, which could be chronological in nature, are not visible, so it was necessary to construct a supplementary tool by defining class of wealth.

7 For further details about this method, see Trémeaud (2018, 109-128).

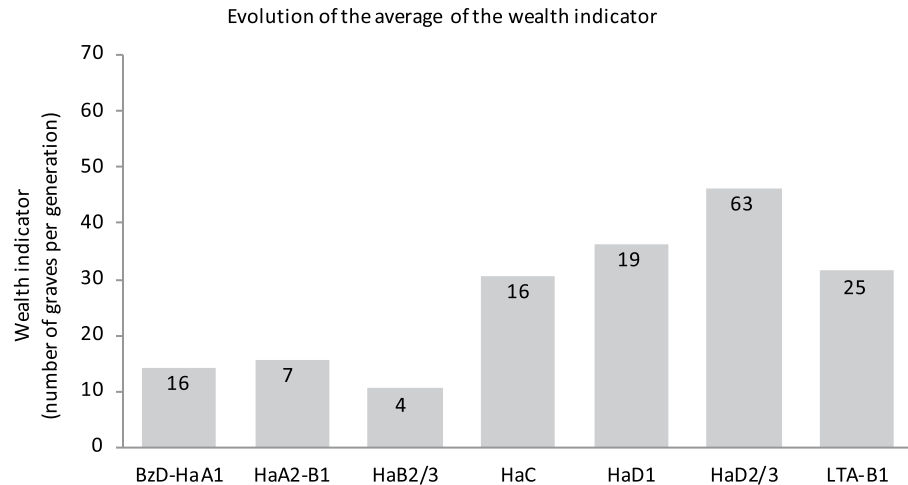


Figure 5. Averages of the wealth indicators for elite grave (Caroline Trémeaud).

Ranking graves: Wealth classes

Wealth is expressed here by using levels of classes, which aim at structuring archaeological data to interpret them within a social framework. This structure does not necessarily describe a social reality. For the particular corpus of elite graves⁸, we can estimate to have at least an adequate and appropriate sample, but we do not know whether it is complete. Some of the elites may not be recognisable in the archaeological record, and a lack of funerary wealth doesn't mean a lack of elites. This work may therefore only relate to the archaeologically visible portion of the elite.

Defining wealth classes enables us to conceptualise a social structure, based on the archaeological data. Following the work of Georges Dumézil (1958) and his three-ways theory, confirmed by Georges Duby (1978) with the *bellatores*, *oratores*, and *laboratores* (those who pray, those who fight, and those who work) for medieval society, and following Pierre Bourdieu's (1979) three-part model for his analysis of contemporary society, social organisation is often seen as being tri-partite.

We need to model and structure the data further to question them, to highlight variations, and to try to specify sociological interpretations. Even with this refinement, the wealth classes should not be understood as the exact social structure of these past societies.

This step is particularly important because the creation of wealth classes enables us to compare graves over the long term despite chronological gaps. The definition of classes on the basis of wealth in graves cannot be applied to the entire corpus, because of absolute differences in wealth. For example, the wealth indicator for the richest grave from the Late Bronze Age is far lower than that of the richest grave from Hallstatt D, even though both are comparable in a relative sense in terms of wealth indicator.

So the definition of wealth classes for the corpus of elite graves should be done per chronological phase, whose length relates to the data resolution: Bronze Age D-Hallstatt A1, Hallstatt A2-B1, Hallstatt B2-3, Hallstatt C, Hallstatt D1, Hallstatt D2-3, and La Tène A-B1. These chronological intervals incorporate 94 per cent of the relevant data (the remaining 6 per cent represent graves not precisely dated).

In order to define wealth classes, the wealth indicator is discretised to obtain an ordinal variable using a quantitative variable and to define a certain number of levels.

Here, the choice was made to use five levels of wealth expression, where '0' is the poorest class, with graves that present neither graves goods nor architecture; '+', '++', and '+++' are intermediate levels of wealth; and 'A' is the highest levels of wealth.

⁸ This paper focuses on elite graves, which is not the case for the database constructed during my PhD.

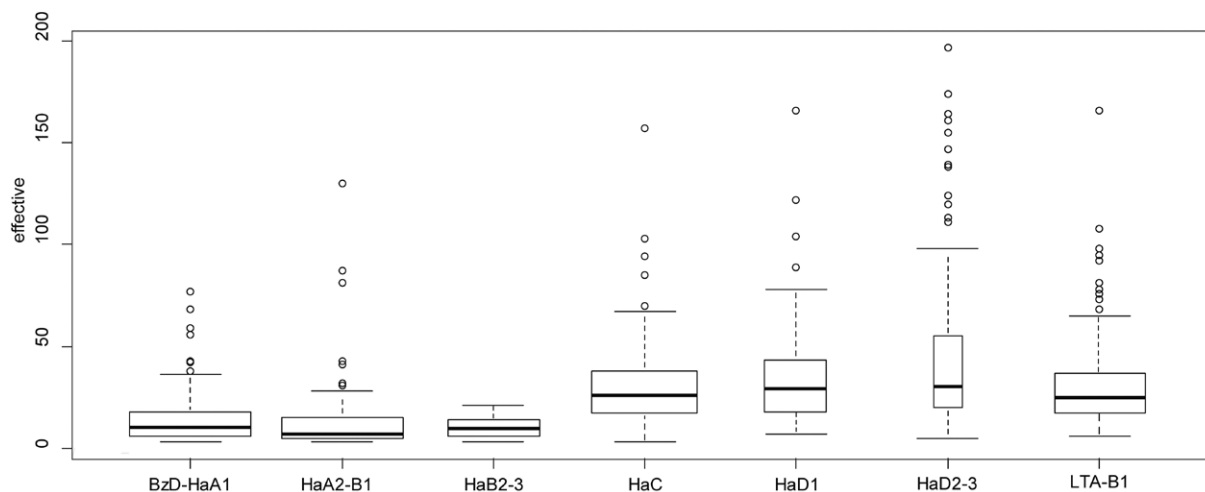


Figure 6. Boxplot of the wealth of elite graves; the width is proportional to the duration of each period (Caroline Trémeaud).

The wealth indicator is a quantitative variable, which is too continuous to allow me to define classes directly from the list of values. It is necessary to use statistical analysis to discretise these values in five classes. The data dispersion requires using a statistical solution to describe these data in order to review and compare the spread of a distribution. The box plot (or Tukey's test⁹) is an effective solution to compare several statistical series.

This test (see Fig. 6) shows the median and the quartiles of the distribution of a population and highlights atypical values, the outliers. In this study, the outliers are the richest graves of each cemetery or each period in the corpus of elite graves. These graves stand out from the others and should be considered as the higher level of wealth ('A').

Using John Tukey's method to define the outlier as the higher wealth class is of great interest in the study of wealth, since this definition is based on the distribution on each statistical series of the wealth indicator and so is linked to the data themselves. As such, the richest class is defined with all the outliers, and the poorest class is constituted by graves without any finds or architecture (which are absent in this corpus of elite graves).

All the rest of the data are divided into three levels (marked '+', '++', and '+++') defined by the method of equal amplitude: the wealth indicator, without outliers, is divided into three equal parts for each period. This method respects a criterion of equal measure for each level and each statistical series. Using this method, we can observe the distribution of wealth classes and see variations in the distribution in each class on a long-term perspective.

The ranking of graves is a preliminary step to move to the next stage in funerary studies. Tools need to be created in order to detect and analyse social inequality, define social strata, and to approach hierarchies of past societies. The method presented here facilitates working with a dispersed geographical and chronological set of data, and on a large scale.

On a long-term perspective, ranking elite graves will allow us characterising more thoroughly funerary investments, distinguishing levels even within these elites. Above all, the process of ranking is the first methodological step in questioning a corpus in terms of hierarchy, gender, and social structure.

9 John Tukey's method (1977, 43-44) considers that every value being higher than the upper (or lower) quartile plus 1.5 times the interquartile range (or minus 1.5 times the interquartile range) is an outlier (if: $Y < [Q1 - 1.5 IQR]$ or $Y > [Q3 + 1.5 IQR]$, where $Q1$ = lower quartile, $Q3$ = upper quartile, and $IQR = [Q3 - Q1]$ is the interquartile range). Using a box plot (Graph 3b), outlying values are within the upper quartile plus 1.5 times the interquartile range.

Gendering and ranking are essential prerequisite to address gender as a system of differentiation and domination. That brings me to the concept of intersectionality¹⁰: an analytic framework that attempts to identify the various intersections of social inequality as the matrix of domination in society. Thus, intersectionality considers that various forms of social stratification – for archaeological data such as wealth, sex, age, and gender – do not exist separately from each other but are interwoven. Therefore, crossing status and gender results should progress the interpretation of masculine and feminine positions and relationships in the funerary elites of North-Alpine societies.

Results

Gender results: Masculine and feminine fluctuation

The chronological approach highlights the fact that the masculine gender clearly dominates from BzD to HaC. The analysis (Fig. 7) shows also that the masculine gender is always visible in funerary data, while the feminine gender could be sometimes not marked. In fact, during the HaB2/3, no more feminine graves are perceptible. Then, a significant change is visible: from Ha D1 to LTB, the masculine portion never exceeds 50 per cent, and feminine graves even dominate during a brief period (Ha D2-3).

The neutral gender is still present, constituting at least 20 per cent of the graves. Thus, even in periods where male and female gender are strongly reflected in the graves, a significant part of the graves are deliberately not masculine or feminine but neutral.

This evolution is linked with supremacy of females in wealth possession in graves (very clear between HaD2-3 and LT B1), which raises the question of the significance of this female wealth.

A detailed geographical approach (Fig. 8) refines this general evolution by showing regional diversity. To capture this variability, I divided the North-Alpine complex into four zones¹¹.

The representation of the quantitative evolution (in percentage by periods) of elite grave by gender confirms these regional trends (Fig. 9). In particular, it is interesting to note the following: The south-eastern zone is the only one where masculine gender graves exceed feminine gender graves. From the Late Bronze Age to the beginning of the Early Iron Age (HaC), the western part shows masculine is above feminine. The north-east is a more fluctuating zone. The emergence of the feminine gender occurs earlier in the west (HaD1) and later in the north-east (HaD2-3). In the north-west, the feminine gender is short-lived (only HaD1 and without perceiving masculine in the same time), while in the south-west it lasts longer.

10 The concept of intersectionality is intended to illuminate dynamics that have often been overlooked by feminist movements and theory. Indeed, the emergence of intersectionality challenged the notion that ‘gender’ was the only factor determining and led me to consider in the same time gender and other factors, archaeologically reachable such as wealth, social status, age, etc.

11 The definition of those areas relies on the work of P. Brun, highlighting four cultures with their own specific characteristics (Brun 1988, 140-143).

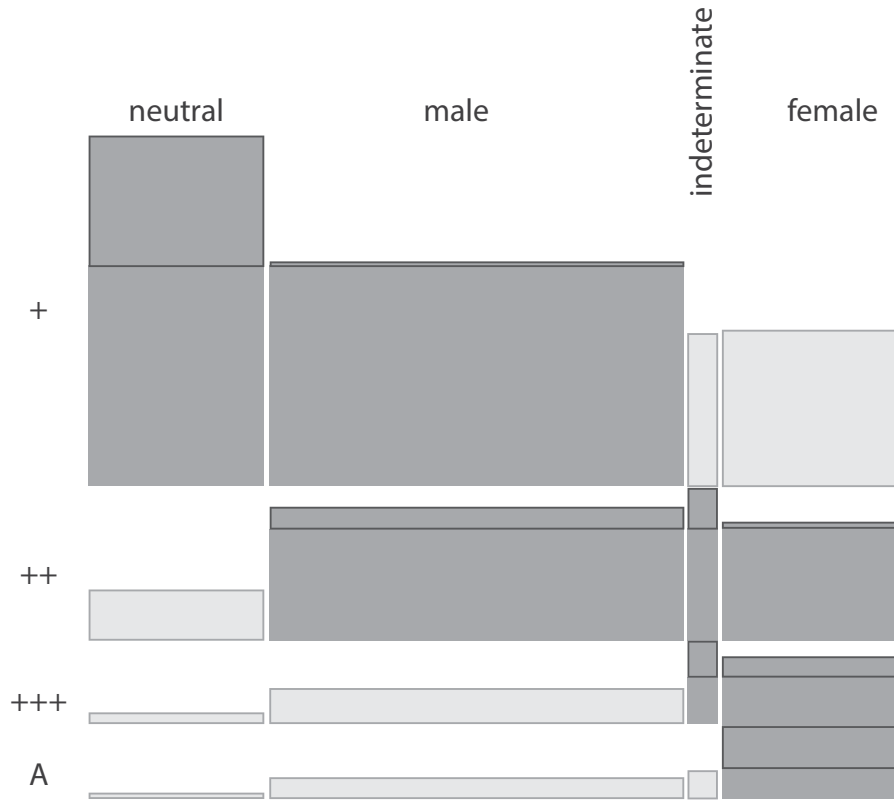


Figure 7. Weighted matrix (or Bertin's diagram) of gender and wealth classes of elite grave (Caroline Trémeaud).

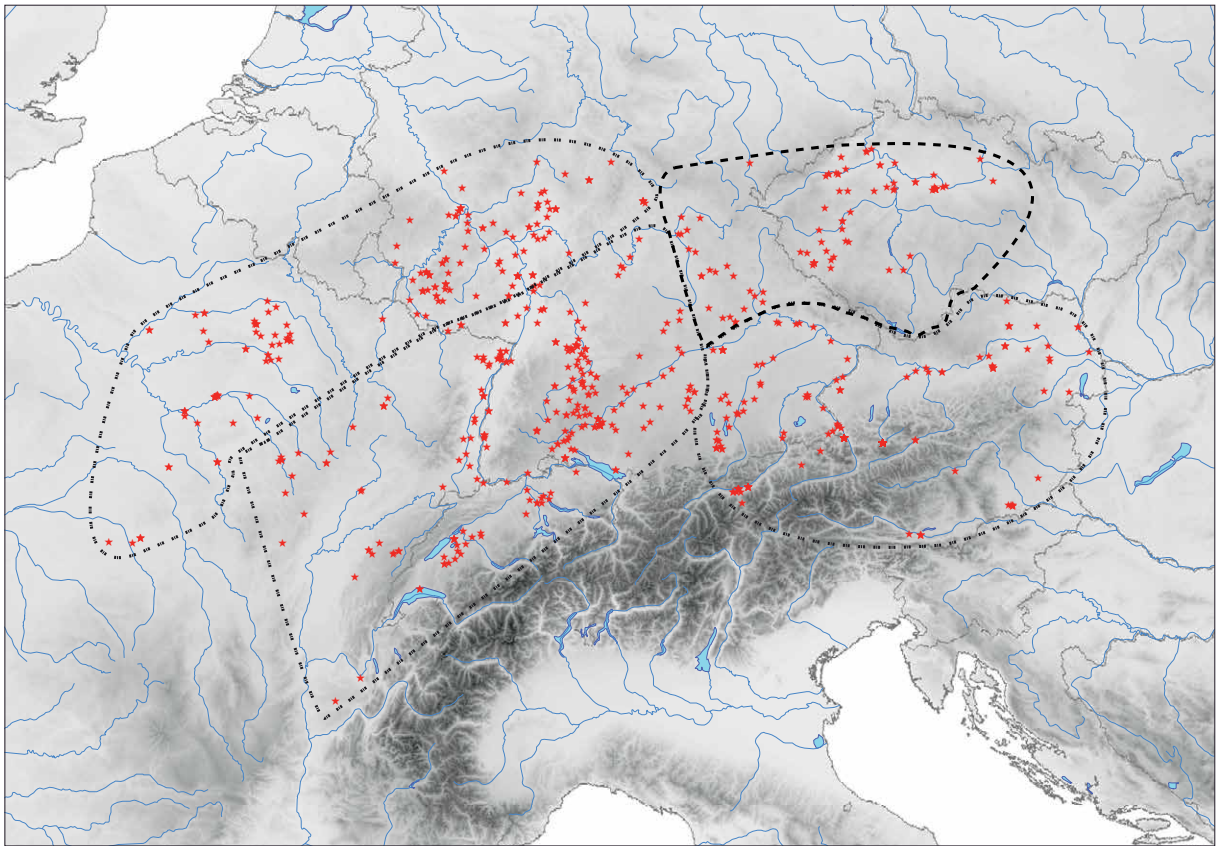


Figure 8. Detailed map of the four areas in central and Western Europe, showing the location of the sites with elite graves (Caroline Trémeaud).

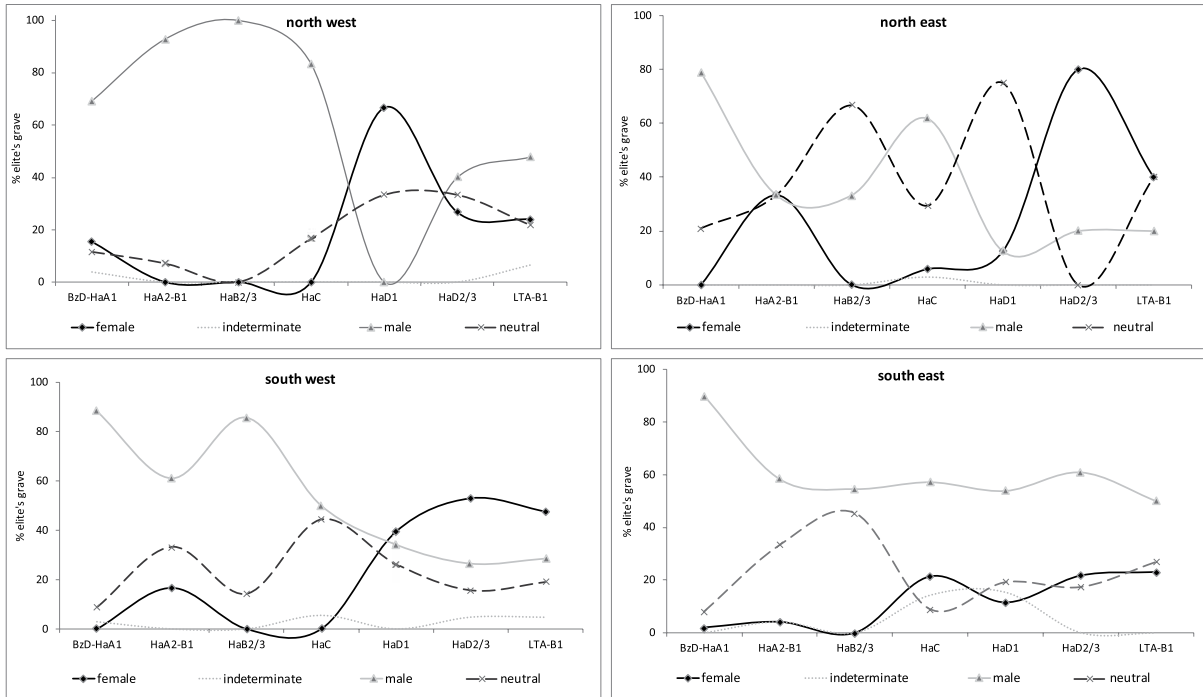


Figure 9. Elite graves by gender by period (Caroline Trémeaud).

Gender result: Long-term analysis of a differentiation system

Gender is more than just what I have termed ‘archaeological gender’; it is also a system of differentiation. To do access the differentiating aspect of gender, it is necessary to characterize another variable: the wealth of each grave.

The analysis of the wealth indicator shows the presence of outlying values, which seem to indicate that hierarchies are already in place by the Late Bronze Age. With a lack of outlying values and a smaller dispersion of range, only Hallstatt B2-3 seems less ranked. For this period, either we have a lack of elite graves (linked to a demographic decline) or the presence of elites is not expressed in funeral practices. Hallstatt B2-3 is a great period of hoard finds¹². The box plot shows the main trend: an increase in elite graves in Hallstatt D. This trend, which begins in Hallstatt D1 and continues in Hallstatt D2-3, has been confirmed by both quantitative and qualitative data and is also recognizable in settlements with princely residences. Does this trend signal the appearance of a new hierarchical level, with a sort of ‘paramount chief’, and a social system based on complex chiefdoms (as defined by Johnson and Earle 1987)?

This change could possibly mark the apparition of a sort of ‘supra-elite’, the question remains open, but certainly marks increasing social competition, showing a new hierarchical level in social structure.

The geographical approach to this data also highlights strong variations in funerary investment: The north-west shows a phase of simplicity in funeral practices until Hallstatt D1, that is, longer than in other parts of the North-Alpine complex. But compared with other areas, the area presents a higher level of wealth in La Tène A-B1. The north-east shows a quantitative increase in elite graves in Hallstatt C, but not qualitative one, as the graves of upper wealth classes remain rare. The

12 Some non-funerary hoards contain the same type of artefacts as elite grave, and their quantity and quality suggest an elite practice (Blitte 2015).

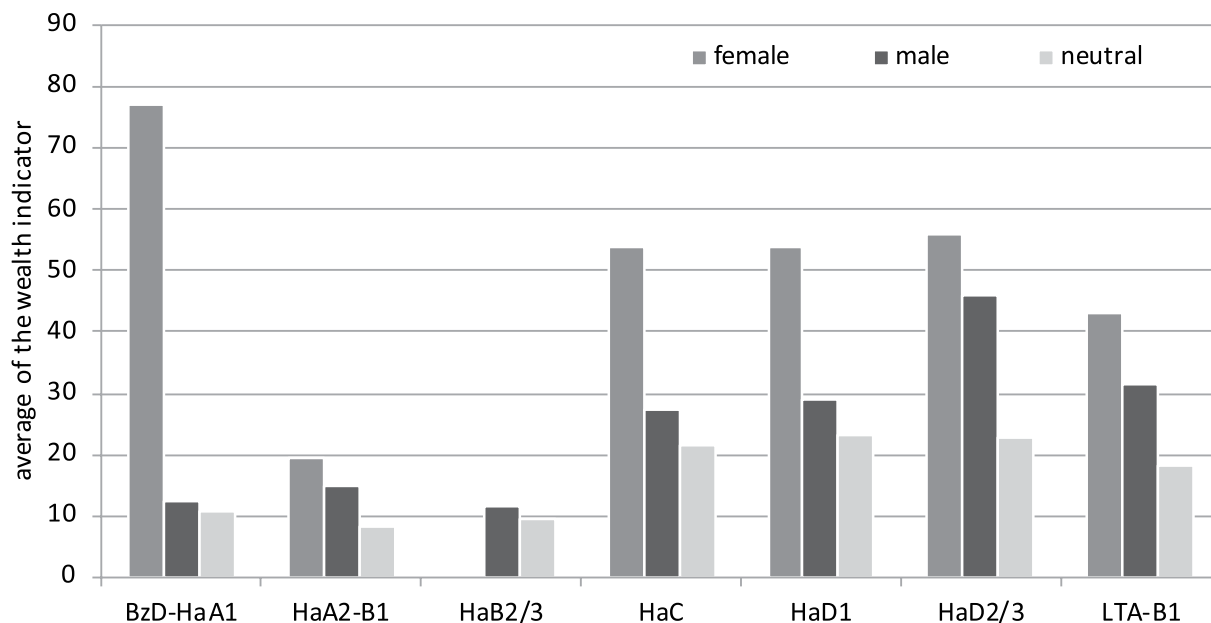


Figure 10. Average wealth of elite grave by gender (Caroline Trémeaud).

south-west shows a very significant increase both in number and in quality during Hallstatt D2-3.

This more detailed analysis of the results on wealth and gender variables thus highlights diversity among the geographical areas, despite relative similarities. The combined analysis of wealth and gender variables shows their interactions and evolutions on a long-term perspective: Wealth indicators point out a higher average of wealth for feminine graves than for masculine ones. Neutral graves are the less favoured ones in terms of wealth. This pattern can be observed for the entire chronological framework.

The supremacy of feminine wealth possession is especially clear during BzD-HaA1, after which this wealth gap shrinks. It becomes significant again during HaC-HaD1. During these moments, the gap between masculine and neutral gender is reduced. During HaD2-LTB, the gap between masculine and neutral becomes more important than the one between feminine and masculine graves.

The overall analysis of gender and wealth highlights that both masculine and feminine genders get funerary access to each of the wealth classes. However, there is no exclusive link between gender and wealth: it is possible for each gender to access to the same wealth and status in death.

These results (Fig. 10) highlight that HaB2-3 can be considered to mark a break in funerary practices for the elite, but one without consequences; the same structure is visible after.

In terms of wealth classes, results show that the poorer class is linked with neutral gender, that the two higher classes are clearly connected with feminine gender, and that masculine gender is quantitatively better represented, but more linked with both the poor wealth classes.

The evolution of the wealth indicator average highlights the following points: In the south-east, the feminine graves are always richer than the masculine ones, although, as we have seen, they are fewer in number. In the north-east, from HaD2-3 to LTB, the feminine graves are richer than the masculine ones. In the west, the feminine graves from Ha D1 are almost richer than the masculine ones.

These regional trends enable us to question the durability of social structures in the different zones of the North-Alpine world, following different paces, in that some social structures seem to last longer in some areas than in others. Then, this durability and pacing raising questions about different spheres of influence.

From results to interpretation

To explain these results in terms of transformation processes on gender relations, it is necessary to place them in the framework of North-Alpine societies. This period is characterized by an expansion of territories and the appearance of the first urban settlement, mirroring the princely phenomenon from the 6th-5th centuries BCE. In this perspective, we could summarize an overall development in two stages: In the first stage, societies become more complex, which is linked with the development of exchange with the Mediterranean area and the Nordic world. During this stage, the funerary data show ostentation, and within that general pattern, an ever-more prominent place for female graves. During the second stage, exchanges increase, leading to more a complex social structure in North-Alpine societies. This phenomenon seems to occur less in elite graves, which show a reduced funerary investment. At this time, the female position, which could be inferred from graves with high-wealth grave goods, loses its dominant place in favour of the male position.

This research, which was conducted for my PhD thesis and which involved a thorough analysis of the whole corpus, has highlighted that funerary ostentation (with the increase in very rich graves) characterizes BzD to LTB1. It is thus a long-term phenomenon. It has also highlighted that any social interpretation has to reflect the variable evolution of feminine and masculine wealthy graves within in the general context.

The data clearly shows the importance of wealthy feminine graves, placed in a dominant position, for a shorter or longer time, in some parts of the North-Alpine complex. Quite a few interpretations have been proposed since the discovery of the burial of Lady of Vix to explain the ostentatious female graves, as I have reviewed elsewhere (Trémeaud 2016). These conventional hypotheses -involving matrilineality, 'honorary males, and exchange of women' – are more or less appropriate, but none suffice to justify the extent of the phenomenon.

One hypothesis that I propose is that women would have taken part in a process of growing complexity, which benefitted them in a concrete way, by allowing them to reach positions of power or by controlling allowing them to control the means of production (for instance, textile production, such as in the Etruscan world). Funerary data supports this hypothesis. Indeed, the analysis of archaeological finds in graves does not show any division between males and females. They both had access the same power markers and wealth levels.

Thus, considering the analysed data in the broader context of the North-Alpine world led me to propose the following interpretation for the increase in rich female graves: They could be evidence of females reaching a power situation (control of political or economic power or religious authority). Furthermore, in some regions graves of females are richer than those of males, both qualitatively and quantitatively. This interpretation has to be linked to societies' growing complexity and integration into dynamic networks. But this situation of female gender dominance is not a long-lasting event and, with the increase in exchange, the male gender recovers its dominant position in a rather short period of time. Ultimately, this study, which relies on a large set of data, offers a refined vision of the relationship between women and power and their access to decision-making processes, with an unknown form: takeover of an economic resource, political influence, or support of a network exchange ...

Conclusions

In this paper, I have presented the methodological approach I implemented for tracing gender among a complex corpus of graves. The complexity of the dataset can be summarized as follows: The chronological framework covers about 1000 years.

The data compiled cover a large geographical area. The corpus presented here consists of 721 graves, which were inventoried in detail.

The use of a statistical approach based on the recorded data expresses wealth and gender in an objective and understandable manner. A long-term approach enables the tracing of genders in terms of defining archaeological gender; detecting differentiation in funerary practices; and, ultimately, questioning gender as a system of domination and differentiation: according to chronological paces and area, relationships between gender and wealth draw changes making sense in terms of social structure.

First, the results show an engendered evolution of the elite, with key but brief moment where females prevail in the elite graves. Meanwhile, the supremacy of females in wealth possession is obvious in archaeological documentation, however caution should be used in interpreting funerary wealth (both for male and female grave). Moreover, the obvious regional diversity and changes leads to question about the durability of social structures in the different parts of the North-Alpine world.

Ultimately, with an adapted methodological framework, tracing gender enables to renew interpretations, not only on women's position, but also on social structures in archaic societies.

The importance of women at the end of Hallstatt D seems to be explained by particular social structures linked with the princely phenomenon. But the strong link between female gender and wealth during all time periods is another outcome that raises more questions than it answers. Maybe we have here a funerary and protohistoric expression of the concepts of *Women of Value*, *Men of Renown*, proposed by Annette Weiner in relation to the Trobriand (Weiner 1976). My aim is not to devalue the hypotheses proposed in the past, but to strengthen them. Archaeological and, more specifically, funerary data are intrinsically biased and partial. This is an inherent limitation for all social readings of archaeological data, but one which must not prevent to renew hypotheses to refine our understanding of past societies.

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References

- Abdi, Hervé and Béra, Michel 2014. Correspondence Analysis. In: Alhaji, Reda, and Rokne Jon (eds.). *Encyclopedia of Social Network Analysis and Mining*. New York: Springer, 275-284.
- Arnold, Bettina 1991. The deposed princess of Vix: The need for an engendered European prehistory. In: Walde, Dale, and Willows, Noreen D. (eds). *The Archaeology of Gender: Proceedings of the 22nd Annual Chacmool Conference*. Calgary: University of Calgary Press, 366-374.
- Arnold, Bettina 1995. "Honorary Males" or Women of Substance? Gender, Status, and Power in Iron-Age Europe. *Journal of European Archaeology*, 3, 153-168.
- Beauvoir, Simone de 1976. *Le Deuxième Sexe*. Collection Folio essais 38. Paris: Gallimard.
- Bertelsen, Reidar, Lillehammer, Arnvid, and Naess, Jenny-Rita 1987. *Where They All Men? An Examination of Sex Roles in Prehistoric Society. Acts from a workshop held in UtsteinKloster Rogaland, 2-4 november 1979*. NAM-Forskningsseminar 1. Stavanger: Arkeologisk Museum i Stavanger.

- Blitte, Hélène 2015. *De la richesse pour les dieux ... et pour la reproduction sociale. Les dépôts non funéraires de l'âge du Bronze en Europe* [PhD thesis Université Paris 1 Panthéon-Sorbonne, defended in July 2015].
- Bourdieu, Pierre 1979. *La distinction: critique sociale du jugement*. Paris: Les éditions de Minuit.
- Brun, Patrice 1987. *Princes et princesses de la celtique: le premier âge du fer en Europe 840-450 av. J.C.* Collection des Hespérides. Paris: Errance.
- Brun, Patrice 1988. Les Résidencesprincièrescomme centres territoriaux: éléments de vérification. In: Mohen, Jean-Pierre (ed.). *Les princes celtes et la Méditerranée. Colloque des Recontres de l'Ecole du Louvre, Paris 1987*. Paris: La Documentation Française, 129-143.
- Butler, Judith 1990. *Gender Trouble. Feminism and the Politics of subversion*. New York: Routledge.
- Charles, Robert P. 1954. Anthropologie. In: Joffroy, René (ed.). *La tombe de Vix. Monuments et Mémoires* 48. Paris: Fondation Eugène Piot, 65.
- Conkey, Margaret, and Spector, Janet 1984. Archaeology and the Study of Gender. *Journal of Archaeological Method and Theory*, 7, 1-38.
- Dahlberg, Frances 1983. *Woman the Gatherer*. Yale: University Press.
- David-Elbiali, Mireille 2011. Du genre et des classes d'âge: analyse croisée de trois nécropoles de l'âge du Bronze (Gemeinlebarn F, Nogara-Olmo, Neckarsulm) et réflexion sur l'organisation sociale. *Notizie Archeologiche Bergomensi*, 19, 2011, 135-150.
- David-Elbiali, Mireille 2012. "Paysages du genre" au nord et au sud des Alpes du 15e au 13e siècle av. J.-C. In: Bérenger, Daniel (ed.). *Gräberlandschaften der Bronzezeit = Paysages funéraires de l'âge du Bronze. Internationales Kolloquium zur Bronzezeit, Herne 2008*. Bodenaltertümer Westfalens 51. Darmstadt: von Zabern, 169-203.
- Depierre, Germaine, and Duda, Henri 2003. La défunte. In: Rolley, Claude (ed.). *La tombe princière de Vix*. Paris: Picard, 29-56.
- Díaz-Andreu, Margarita, and Sørensen, Marie-Louise S., 1998. *Excavating women: a history of women in European archaeology*. London: Routledge.
- Duby, Georges 1978. *Les trois ordres ou l'imaginaire du féodalisme*. Bibliothèque de histoires. Paris: Gallimard.
- Dumézil, Georges 1958. *L'Idéologie tripartite des Indo-européens*. Collection Latomus 31. Bruxelles: Latomus.
- Echt, Rudolf 1999. *Das Fürstinnengrab von Reinheim: Studien zur Kulturgeschichte der Früh-La-Tène-Zeit*. Saarbrücker Beiträge zur Altertumskunde 69. Bonn: Habelt.
- Fischer, Franz 1999. The early Celts of West central Europe: the semantics of social structure. In: Arnold, Bettina, and Blair, Gibson D. (eds). *Celtic Chieftdom, Celtic State: The Evolution of Complex Social Systems in Prehistoric Europe*. New directions in archaeology. Cambridge: Cambridge University Press, 34-40.
- Fausto-Sterling, Anne 2012. *Corps entous genres. La dualité à l'épreuve de la science*. Paris: La Découverte.
- Gero, Joan M., and Conkey, Margaret W. 1991 (eds). *Engendering Archaeology: Women and Prehistory*. Oxford: Blackwell.
- Hansen, Leif 2010. *Hochdorf VIII. Die Goldfunde und Trachtbeigaben des späthallstattzeitlichen Fürstengrabes von Eberdingen-Hochdorf (Kr. Ludwigsburg)*. Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 118. Stuttgart: Theiss.
- Hedenstierna-Jonson, Charlotte, Kjellström, Anna, Zachrisson, Torun, Krzewińska, Maja et al. 2017. A female Viking warrior confirmed by genomics. *American Journal of Physical Anthropology*, 164, 853-860.
- Joffroy, René 1979. *Vix et ses Trésors*. Paris: Librairie Tallandier.

- Johnson, Allen W., and Earle, Timothy 1987. *The evolution of human societies: from foraging group to agrarian state*. Stanford: Stanford University Press.
- Knüsel, Christopher J. 2002. More Circe than Cassandra: The princess of Vix in ritualized social context. *European Journal of Archaeology*, 5, 275-307.
- Langlois, René 1987. Le visage de la Dame de Vix. In: Eluère, Christiane (ed.). *Trésors des Princes Celtes*. Petit journal des grandes expositions 175. Paris: Réunion des musées nationaux, 212-217.
- Laqueur, Thomas W. 1990. *La fabrique du sexe: essai sur le corps et le genre en Occident*. NRF essais. Paris: Gallimard.
- Lee, Richard B., Irven, Devore, and Nash-Mitchell, Jill 1968. *Man the Hunter*. Chicago: Aldine.
- Mead, Margaret 1928. *Coming of Age in Samoa. A psychological study of primitive youth for western civilisation*. New York: Morrow.
- Mead, Margaret 1935. *Sex and Temperament in Three Primitive Societies*. Apollo editions. New York: Morrow.
- Megaw, John V. S. 1966. The Vix burial. *Antiquity*, 40, 38-44.
- Money, John, and Ehrhardt, Anke 1972. *Man and Woman, Boy and Girl*. Baltimore: Johns Hopkins University Press.
- Oakley, Ann 1972. *Sex, Gender and Society*. Towards a new society. London: Temple Smith.
- Pauli, Ludwig 1972. Untersuchung zur Späthallstattkultur in Nordwürttemberg. *Hamburger Beiträge zur Archäologie*, 2, 128-135.
- Peyre, Évelyne 2006. Du 'sexe' et des os. In: Vidal, Catherine (ed.). *Féminin Masculin – Mythes et ideologies*. Paris: Belin, 35-48.
- Sauter, Marc R. 1984. Sur le sexe de la 'Dame de Vix' (Côte-D'Or). *L'Anthropologie*, 84, 89-113.
- Schönfelder, Martin 2009. Archäologische Untersuchungen zur Elite in der keltischen Gesellschaft – eine Zwischenbilanz. In: Egg, Markus, and Quast, Dieter (eds). *Aufstieg und Untergang. Zwischenbilanz des Forschungsschwerpunktes Studien zu Genese und Struktur von Eliten in vor- und frühgeschichtlichen Gesellschaften*. RGZM Monographien 82. Mainz: Verlag des Römisch-Germanischen Zentralmuseums, 59-78.
- Sørensen, Marie-Louise S. 2000. *Gender archaeology*. Cambridge: Polity.
- Spindler, Konrad, 1983. *Die Frühen Kelten*. Stuttgart: Reclam, 105-112.
- Stoller, Robert 1968. *Sex and Gender. On the Development of Masculinity and Feminity*. New York: Science House.
- Tomba project: TOMBA project (ed.). *Tomba Database*. Multilingual internet image database for tombs of elites in Bronze and Early Iron Age Europe. Online available at <www3.rgzm.de/tomba/>, retrieved in April 2012.
- Trémeaud, Caroline 2016. Great Women? The emergence of female in elite's graves in the Celtic World (Late Bronze Age – La Tène B). In: Keller, Christin, and Winger, Katja (eds). *Frauen an der Macht? Neue interdisziplinäre Ansätze zur Frauen- und Geschlechterforschung für die Eisenzeit Mitteleuropas*. Universitätsforschungen zur prähistorischen Archäologie 299. Bonn: Habelt, 41-56.
- Trémeaud, Caroline 2018. *Genre et hiérarchisation dans le monde nord-alpin, aux âges du Bronze et du Fer*. BAR International Series 2912. Oxford: BAR publishing, 2018.
- Tukey, John W. 1977. *Exploratory data Analysis*. Reading: Addison Wesley.
- Weiner, Annette 1976. *Women of Value, Men of Renown: New Perspectives in Trobriand Exchange*. Austin: University of Texas Press.
- Whitehouse, Ruth 2006. Gender Archaeology in Europe. In: Nelson, Sarah M. (ed.). *Handbook of gender in archaeology*. Gender and archaeology series. Lanham: AltaMira, 733-783.

2 Tracing gender transformations

2.3 In cultural landscapes

Social manipulation of gender identities in Early Iron Age Latium Vetus (Italy)

Ilona Venderbos

Abstract

The focus of this paper is on shifts in gender identities in Italy during the earliest phases of the Early Iron Age (roughly the second half of the 10th century and the 9th century BCE). This phase comprises the initial stage of the profound societal transformations attested in Italy and the wider Mediterranean between c. the 10th-6th centuries BCE. The region Latium Vetus, an area more or less corresponding to modern-day southern Lazio (near Rome), serves as a case study to address this subject. Social roles and identities, characterised by a strong dependency on age and biological sex, are implicitly regarded as relatively stable throughout this period. However, in this paper, I argue that several changes in funerary customs and the composition of grave good assemblages indicate weakening of the strong association between gender identity, age, and biological sex, which, in my view, is connected to an increasing social manipulation of gender identities.

Keywords: *Early Iron Age, Latium, burials, gender identity*

Introduction

The classical world of Italy dawned in c. the 10th-6th centuries BCE. As in many places across the Mediterranean, communities experienced profound transformations in socio-political organisation, economy, culture, and beliefs (e.g. the rise of an aristocracy, urbanisation, the emergence of formal political institutions and of craft specialisation). These transformations eventually culminated in the famous Etruscan, Greek, and Roman cities. Many studies have been devoted to reconstructing the processes that led to these complex, state-like hierarchical societies (e.g. Attema *et al.* 2010; for Latium, e.g. Pacciarelli 2001; Fulminante 2013). Questions of identity, including gender, have recently become an important research focus in this field (e.g. Herring and Lomas 2000; 2009; Gleba and Horsnæs 2011; Pitzalis 2011; Cuzzo 2015a; 2015b; Whitehouse 2015; Perego and Scopacasa 2016). Funerary

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archaeology is the discipline through which to study questions on identity in this phase, since burial places provide the principal source of information. I will focus in this paper on changes in gender identities during the second half of the 10th century and 9th century BCE, in other words, the earliest stages of the profound societal changes noted above. The central study area is Latium Vetus. In this region during the period under consideration, social identities, including gender identities, appear strongly related to age, biological sex, and social roles (*e.g.* Cogle 2009, 66).

Both Anna Maria Bietti Sestieri's and Lisa Cogle's work on Osteria dell'Osa (Bietti Sestieri 1992a; 1992b; 2008; Cogle 2008; 2009) have provided great insight into Early Iron Age gender identities at Latium (see below). Their results have been derived from statistical analysis of grave good assemblages, funerary rituals, and anthropological data on age and sex. Their observations on differences between LP IIA and LP IIB led me to the hypothesis that transformations in gender identities occurred throughout this period. In order to test this hypothesis, I returned to the raw funerary data of different Latial necropoleis. First, I evaluated Bietti Sestieri's and Cogle's results in terms of age and gender of the deceased, then I established whether these configurations also could have been at play in the other Latial necropoleis, and, finally, I analysed the chronological distribution of these customs. Based on this research, I propose in this paper that substantial changes in funerary rituals and the composition of grave good assemblages indicate the increasing weakening of the strong dependency on age and biological sex, a development that, in my opinion, is to be interpreted as the result of social manipulation of gender identities.

This paper is structured as follows: First I present some important theoretical notions from funerary and gender archaeology, followed by a short introduction to the study area and an overview on the current state of research on gender identities in Latium Vetus. In the central part of this paper, I will discuss two examples illustrating how identities may have transformed throughout the beginning of the Early Iron Age. The two examples comprise infant and child burials and adult men's tombs.

Identifying gender identities in the funerary record

It is important to realise that funerals constitute part of a *rite de passage* aimed at taking the deceased away from the world of the living, to the world of the dead. Burying the deceased with appropriate rituals enables safe admittance to and fruitful existence in the afterlife. Based on the anthropological model of a tripartite structure in *rites de passage*, Chris Fowler (2013, 515-519; 2015, 51-52, with references) in my opinion rightly argues that aspects of the full assemblage of the deceased's identities are selected and adapted to suit the world of the dead during such a *rite de passage*. As a result, it is highly likely that aspects of identity are represented in the funerary record in some way. New identities (*e.g.* being an ancestor) could add up to or replace the identities the deceased had in life. This redefinition of identities might also cause the destruction, removal, or inversion of symbols of identity. Aspects such as social standing, achievements or failures in life, a good or bad death, as well as age and gender could be preconditions for access or denial to specific new statuses after death (Fowler 2013; 2015; cf. Parker Pearson 1999).

Furthermore, burials do not reflect day-to-day reality, but, rather, the ideal social structure of a society (Morris 1987; 1992). The reflection of the ideal social structure implies that, instead of a set of personal identities, burials express a selection of normative identities (Cogle 2009, 56).

As a result, in my view it is very difficult to obtain much information on individual perception and personal experience of gender, but it is certainly possible to

Latial Phase	Relative dates	Absolute dates
I	Final Bronze Age 3	c. 1050-950 BCE
IIA	Early Iron Age 1 early	c. 950-900 BCE
IIB	Early Iron Age 1 late	c. 900-825/800 BCE
III	Early Iron Age 2	c. 825/800-725 BCE
IVA	Early and Middle Orientalising period	c. 725-630/620 BCE
IVB	Late Orientalising period	c. 630/620-580 BCE

Table 1. Chronological phases in Latium Vetus (absolute dates after Van der Plicht et al. 2009).

come to an understanding what gender identities were considered appropriate and normative. For example, when cross- or transgender is not formally accepted in a given society, these identities probably won't be expressed in the funerary record (Cogle 2009, 56-57; cf. Arnold 2002, 241-255; Joyce 2008, 42-64). It should be stressed, however, that these normative gender identities were not static and monolithic. On the contrary, these norms were discussed and renegotiated (Søfaer Derevenski 1997, 487; cf. Stig Sørensen 2007; Cuozzo 2015a, 586). Such renegotiations and differing interpretations could be mirrored in the funerary record. Furthermore, gender is not necessarily fixed from birth and stable throughout life, but can be fluid according to context, role, or age (Whitehouse 2007, 31-33; cf. Díaz-Andreu and Lucy 2005, 2). Finally, gender identities are not an independent construction, but are defined in relation to and often intersect with other aspects of identity, such as age, status, ethnic identity, and so on (e.g. Arnold and Wicker 2001, xi; Nelson 2004, 145; Díaz-Andreu 2005, 17; Arnold 2002, 240-241; 2006, 141; Joyce 2008, 51-53; Herring and Lomas 2009, 5; Whitehouse 2015, 96).

Study area

The region called Latium Vetus is generally thought to have roughly corresponded to modern-day southern Lazio. It is bordered by the Tyrrhenian sea in the west, the Monte Ausoni in the south, the Sacco and Liri rivers and the Apennine mountains in the east, and the Tiber in the north (Fulminante 2013, 39; 41-44; 2018, 477-479). From the end of the Final Bronze Age well into the Iron Age, the area is characterised by a similarity in material culture also known as the Latial *facies* (De Santis 2011, 171; Fulminante 2018, 480-481). This period between the end of the Final Bronze Age and the beginning of the Archaic period is divided into several chronological phases derived from the ancient name of the region (see Table 1)¹. The periods under study in this paper are Latial Phase (LP) IIA and LP IIB (respectively, 950-900 BCE and 900-825/800 BCE).

Several burial grounds dating to this timeframe are known. The most well-known necropoleis are located in Rome (Italy): LP IIA tombs have been found at the Forum Romanum near the temple of Antoninus and Faustina, on the Fora of August and Caesar, on the Capitoline hill, and near the House of Livia on the Palatine (Bietti Sestieri 2010, 279; Fulminante 2013, 72; both with an extended bibliography

1 The absolute chronology of Early Iron Age Italy is still debated (for an overview on the debate, see Fulminante 2013, 293-295). Since Latium is one of the few regions with a good radiocarbon sequence from the Bronze Age to the Orientalising period (Nijboer *et al.* 1999-2000, 168-173), I have decided to use the absolute dates proposed by Van der Plicht *et al.* (2009), which are based on radiocarbon dates from different areas in the Mediterranean, including Latium.

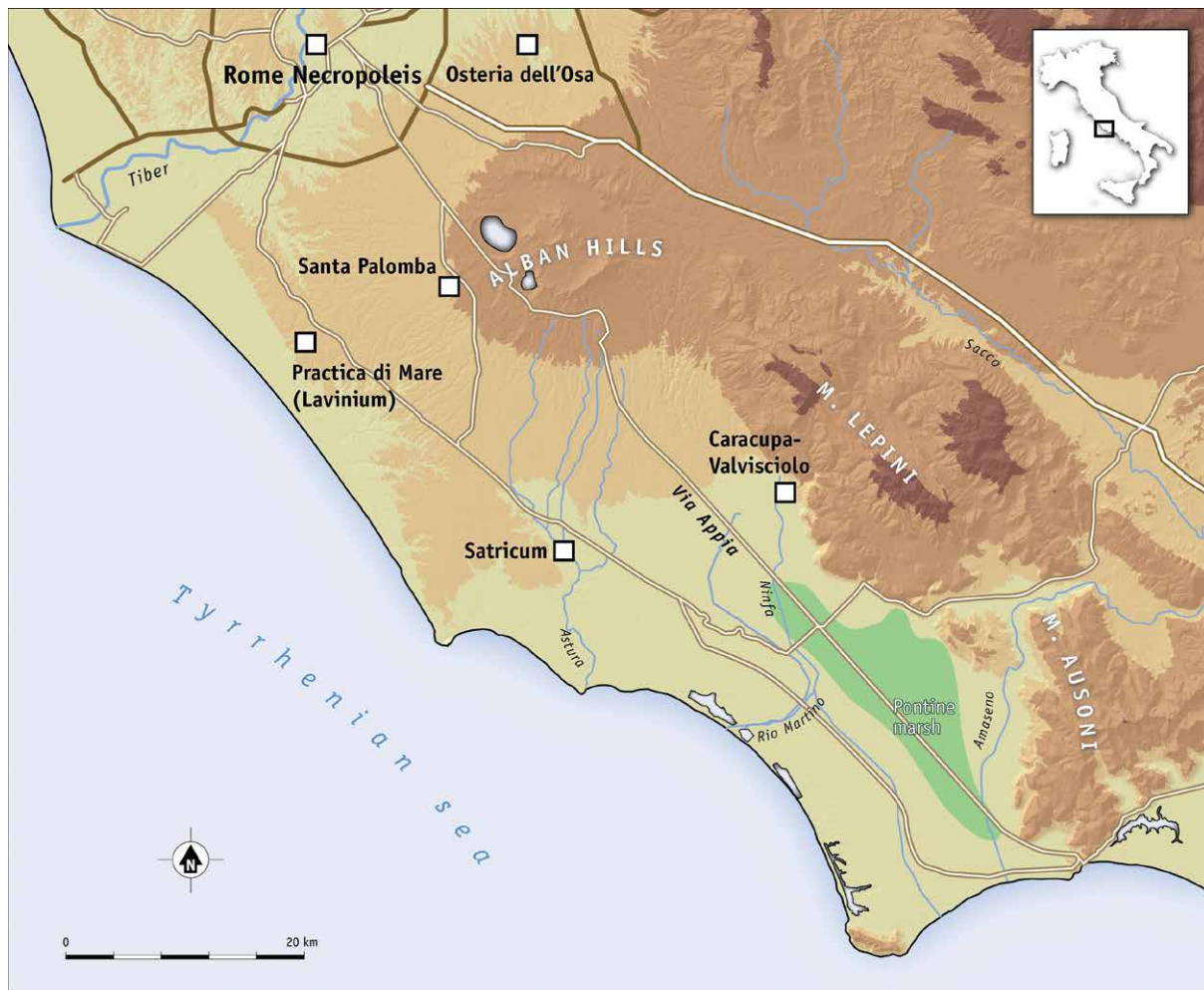


Figure 1. Map of Latium Vetus (central Italy), with sites mentioned in the text (drawing: Bert Brouwenstijn, Vrije Universiteit Amsterdam).

on these burial grounds). In LP IIB, these necropoleis were abandoned and replaced by new burial grounds in the hills surrounding the central habitation (Fulminante 2013, 77-78; Bietti Sestieri 2010, 279). The Esquiline necropolis (e.g. Gjerstad 1956) is the most noted of these funerary areas. Santa Palomba (prov. Rome, Italy), Osteria dell'Osa (prov. Rome, Italy), Pratica di Mare (prov. Rome, Italy), Caracupa-Valvisciolo (prov. Latina, Italy), and Satricum (prov. Latina, Italy) are among the best-known cemeteries outside the historical centre of Rome (see Fulminante 2003 for an extended bibliography on these burial grounds). These necropoleis (Fig. 1) have been excavated, analysed, and published to different degrees. Osteria dell'Osa is the absolute key site for LP II in this region because of the high number of c. 450 burials dating to this period and the extensive publication of the data (Bietti Sestieri 1992a; 1992b). Furthermore, the biological sex of at least 100 females and 76 males could be unequivocally determined. Another 68 females and 52 males could be attributed sex with different degrees of certainty (my counts, based on the anthropological data presented in Becker and Salvadei 1992). At least 90 subadults under 15 years of age have been found (my counts), but their sex attribution needs to be approached with caution (Cogle 2009, 57). Since Osteria dell'Osa constitutes the key site, this necropolis plays a central role in this paper.

In LP II, Latial burial grounds consisted of large, formal necropoleis organised in family groups containing men, women, and subadults. In LP IIA, cremation (a

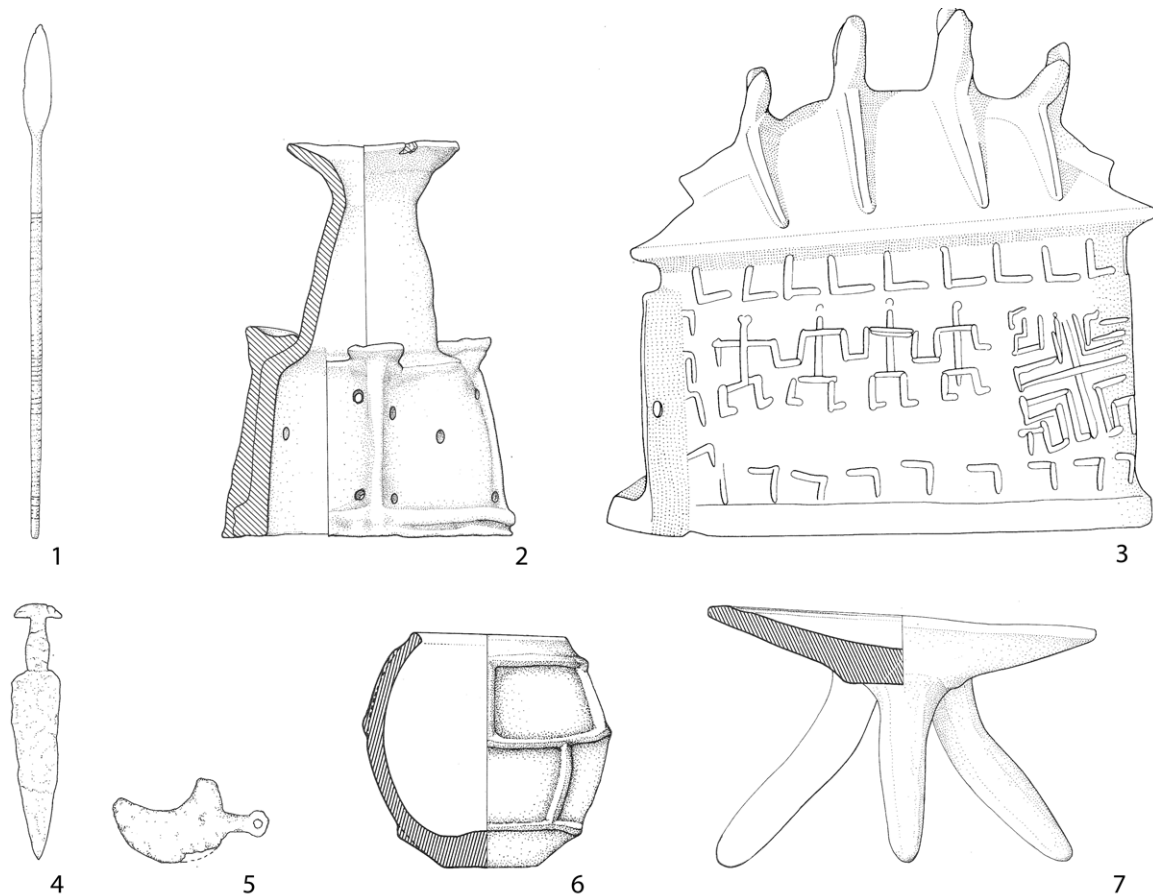


Figure 2. Osteria dell'Osa (prov. Rome, Italy), selection of objects characteristic of cremation tombs. 1 Miniature lance or spear, bronze; 2 miniature brazier, clay; 3 hut urn, clay; 4 miniature sword, bronze; 5 miniature razor, bronze; 6 miniature corded jar, clay; 7 miniature three-legged table, clay. Not to scale (Bietti Sestieri 1992b, pl. 10,2; 12,6; 26,27.31; 41,66; 42,62.72).

tradition inherited from the Final Bronze Age) and inhumation both were practised, often even within the same necropolis. During LP IIB, the cremation ritual fell almost completely out of use (De Santis 2009, 124; Bietti Sestieri 2010, 279-280). Characteristics of the cremation burials are cremation urns in the shape of a hut or a jar with a roof-shaped lid, as well as miniature ceramics, including tables, lamps and lighters, braziers, and corded jars (Bietti Sestieri 1992a, 104-105). The corded jar possibly resembled a specialised type of storage jar (Bietti Sestieri 1992b, 239; De Santis 2009, 125). Bronze objects comprised personal ornaments, razors, and weapons (such as lances, spears, and swords), as well as components of armour such as greaves, and miniature shields or cuirass discs (Fig. 2). These objects were placed together in a cylindrical pit, often accompanied by animal bones and/or seeds around the urn. In some cases, the ceramic assemblage was life-size or partially life-size. Inhumation tombs, in contrast, consisted of rectangular pits dug in the soil, with life-size grave goods such as ceramics, bronze, amber, faience, glass paste, stone or clay ornaments, weaving equipment, bronze razors, and so on (e.g. De Santis 2009, 124-126).

During the early LP IIA phase in Osteria dell'Osa², nearly all adult individuals between 15 and 50 years old gendered as men had been buried in a cremation tomb with miniatures. Both Christopher Smith and R. Ross Holloway argue that these cremations, especially those in a central location in the grave groups, are the burials of a *pater familias* (Holloway 1994, 107-108; Smith 1996, 64-65). Similarly, Erik van Rosenberg states that the central cremation burials belong to household or family

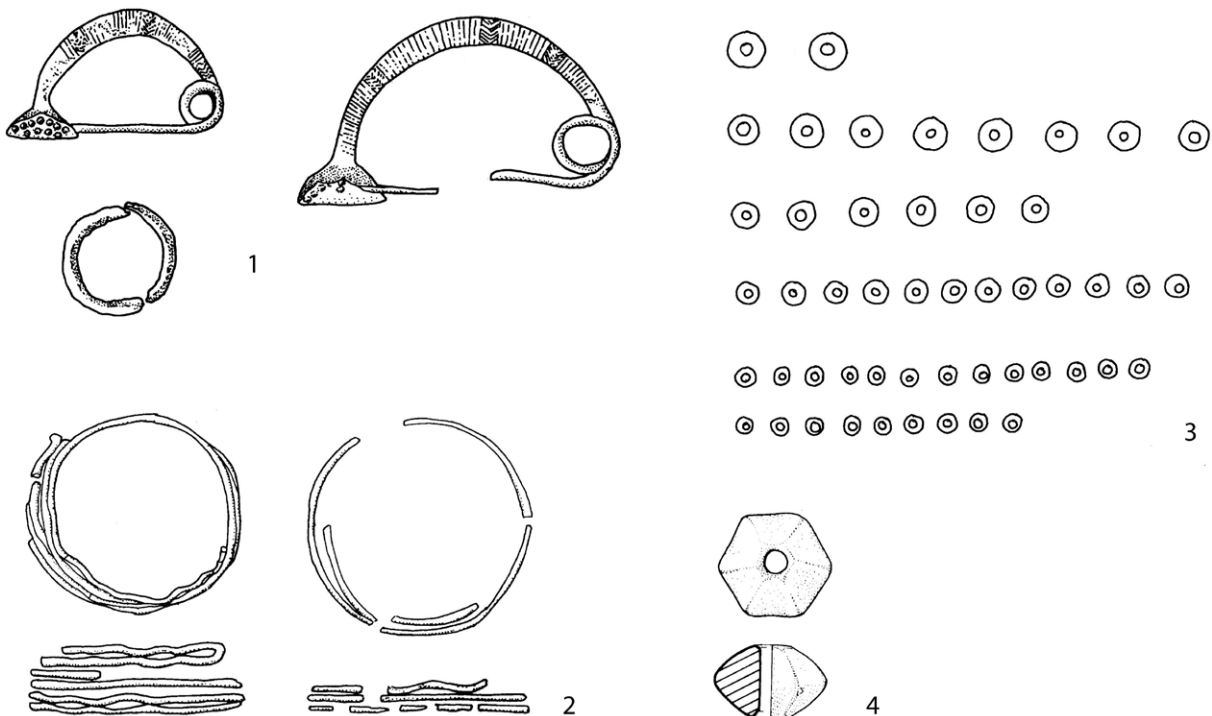
2 Bietti Sestieri (1992a; 1992b) and Bettelli (1997) discern between LP IIA1 and LP IIA2 and IIB1 and IIB2. However, this subdivision could not be applied to all Latial necropoleis. For the sake of clarity, I therefore chose to divide between early/earlier and late/later.

heads, or to the founders of the necropolis at Osteria dell’Osa (Van Rossenberg 2005, 130). Holloway (1994, 108) and Smith (1996, 63-65) regard men not granted such cremation burials as younger brothers or as individuals who failed to reach a certain age or perform certain tasks. Bietti Sestieri (1992a, 105; 127-129; 147-151; 154), in contrast, argues that these particular burial rituals were not a prerogative for individuals with a special position. In her eyes, these rituals were destined for adult males in general, because they were at the age of greatest physical prowess. In her view, only bronze knives, votive vessels, statuettes, and swords indicate a special position for the deceased, as cult or military leaders. Similar cremation tombs have been found at the Forum Romanum (Gjerstad 1956), the Forum of Caesar – dating to the transition between LP I and IIA (De Santis *et al.* 2010a, 263-273; De Santis *et al.* 2010b, 314), and Santa Palomba (Bologna 2008, 99-102; 104). Anna De Santis (*e.g.* 2009, 125-126; cf. Catalano *et al.* 2001, 197-199; De Santis *et al.* 2010a, 264-265; 267; 272) offers a similar interpretation for these cremation burials to that offered by Bietti Sestieri for Osteria dell’Osa.

Gender-specific objects and socio-technic items

Figure 3. Gender-specific grave goods for women at Osteria dell’Osa (prov. Rome, Italy). 1 arch bow fibulae, with and without suspension ring, bronze; 2 hair rings, bronze; 3 necklace with beads, faience and glass paste; 4 spindle whorl, clay. Not to scale (Bietti Sestieri 1992b, pl. 3a.34,4.4a.5.6a; 3a.177,16.18.23).

Both Bietti Sestieri (1992a, 108) and Cogle (2009, 59-60) provide a clear overview of gender-specific objects at Osteria dell’Osa. Fibulae with a serpentine bow, sometimes substituted with pins and occasionally accompanied by bronze rings, were gender-specific for men. Bronze arch bow fibulae, suspension rings, finger rings, hair rings, beads, pendants, and necklaces, as well as spindle whorls and spindles were gender-specific for women (Fig. 3). Although the situation is not entirely clear due to the limited number of burials, my analysis indicates that similar gender markers may have prevailed at the Forum Romanum. In the Caracupa-Valvisciolo necropolis, the situation seems slightly different: Fibulae with a serpentine bow, found in only two male graves, do not seem to have had a strong connection with gender, but



lances and razors appear to be gender-specific for men in this necropolis. Specific objects for women probably did not differ much from other Latial cemeteries.

In addition to gender-specific objects, Bietti Sestieri discerns so-called socio-technic items, a term derived from the New Archaeology denoting objects that are not merely functional but also indicative of social status or rank. At Osteria dell'Osa, socio-technic items specific for men were razors, arrows, and the combination of a miniature sword and lance/spear (Bietti Sestieri 1992a, 103-105; cf. De Santis 2009, 125). For women, bronze spindles can be regarded as socio-technic items (Bietti Sestieri 1992a, 105). Knives, two-handled globular jars on a high conical stand, and so-called drinking sets (large, two-handled jars or large amphorae with cups inside) are socio-technic items without clear gender associations (Bietti Sestieri 1992a, 105-109; cf. De Santis 2009, 125). Knives, however, may have had a stronger association with gender in other Latial necropoleis. In Caracupa, these objects, only found in a small number of tombs belonging to women, possibly were a status symbol specific for women (Angle and Gianni 1985, 193; 1990, 25). In contrast, I found that knives may have been a male prerogative at Santa Palomba and the Forum of Caesar. Finally, scrutinisation of the contents of the tombs found at Santa Palomba (see De Santis *et al.* 2010b, 314) and Caracupa-Valvisciolo (see Angle and Gianni 1985, 194), showed that a number of male burials from these funerary areas contained razors.

Bietti Sestieri emphasises that at Osteria dell'Osa no direct correlation between socio-technic items and other indications of status – such as large tomb, central position, or a high quality and quantity of grave goods – could be identified. Furthermore, more males had been buried with socio-technic items than with any other conspicuous elements. Female burials, in contrast, contained more wealth in the form of ceramics and personal ornaments, but few socio-technic items (Bietti Sestieri 1992a, 103-104; 127; 130; 2008, 142-143; 156; cf. Smith 1996, 63; De Santis 2009, 124). Bietti Sestieri also observes that in LP IIA, predominantly adult males in their prime received socio-technic items and other prestige objects, whereas in LP IIB, the focus shifted towards mature and old men and women. Moreover, the nature of these objects shifted from complex sets of weapons and knives to drinking sets and globular jars on a high stand and lavish fibulae (Bietti Sestieri 1992a, 127-128).

Gendered social roles and gender identities

Bietti Sestieri's (2008, 149-156) reconstruction of social roles at Osteria dell'Osa proved to be highly informative for the subject of gender identities. She discerned both horizontal and vertical roles. Horizontal roles are defined by biological age, sex, and gender, whereas vertical roles are connected to rank or high status. The clearest vertical role for females, in her view, related to cult (indicated by the presence of knives, statuettes of an individual in the act of offering, double amphorae, miniature votive vessels, and rattles). In addition, she argues that two-handled globular jars on a high stand and drinking sets represented a special role in food distribution. She also emphasises that females played an important role in marriage strategies and intergroup competition, as well as in guaranteeing the preservation of the bloodline. Adult male cremation burials containing miniature knives, statuettes, votive vessels, as well as the combination of a miniature sword and lance, indicate that in LP IIA vertical roles for men were related to cult and politics (Bietti Sestieri 1992a, 127). For females, horizontal roles were probably related to weaving; for males, horizontal roles could not be identified (Bietti Sestieri 2010, 279).

Bietti Sestieri has certainly made great efforts to reconstruct in such detail the social roles of both males and females. However, reconstruction of these roles does not automatically ensure a good grasp of gender identities. Gendered social roles were part of gendered activities, social relations, and behaviour, whereas gender

identities comprise the (self-)perception of being a man, a woman, or something in between. Cogle (2009, 66), addressing the subject of gender and other social identities in Osteria dell'Osa as expressed in dress, has drawn some important conclusions on the articulation of gender in this necropolis: (1) Gender divisions were probably binary, although possibly not always correlating with biological sex. (2) Children, even the male subadults, may have been gendered as women (in her view this conclusion has to remain tentative due to the impossibility of reliably attributing sex to children on physical anthropological grounds, but cf. the discussion in the following section on gender identities in subadult burials). (3) Individuals constituting mixed or third genders may also have been present on a very small scale. (4) Some ornament types turned out to be gender-specific but at the same time confined to a limited group of that gender, thus showing the clear intersection of gender identities with age, social status, or other confined social roles. In addition, I have found that some burials lack gender indicators for either men or women, indicating that some individuals were ungendered – at least in the funerary context.

Gendering children in Osteria dell'Osa

Before turning to the subject of children's gender identities in LP IIA, it is important to note that several authors have addressed the subject of gendering children in Osteria dell'Osa, with highly contrasting results. Bietti Sestieri's (2008) reconstruction of gendered social roles provides some indications for her view on the gendering of subadults. As gender and biological sex largely coincided (Bietti Sestieri 2008, 141), I deduce that, in her opinion, subadults under 10 years must have been gendered congruent with their biological sex.

In strong contrast to Bietti Sestieri, Cogle (2009, 60-61; 66) suggests that subadults may have been gendered as women. In her view, subadults appeared completely feminine, even in hairstyle. Moreover, at least in LP IIA, children were never buried with a fibula with serpentine bow. The author emphasises that the unreliable identification of the biological sex of these children makes it impossible to assess whether female and male subadults were both gendered as women or whether male children simply weren't buried in the necropolis.

Cecilie Brøns (2013, 62), similarly, argues that children could have obtained more feminine gender identities, even those who were biologically male. In her view, these more feminine identities can be explained in one of these three ways: (1) subadults were defined as non-males; (2) subadults were not as strongly gendered as adults; and (3) children were ungendered and were buried with a neutral reference to a specific task they conducted in life. This last explanation is based on Brøns's view that weaving equipment has no clear gender connotation.

Both Valentino Nizzo (2011, 55-56) and Van Rossenberg (2008, 169-170) argue that infants did not yet obtain personal identities because they were not able to communicate or were not fully integrated as a member of society. According to Van Rossenberg, infant burials, instead, emphasised collective identities related to the domestic context. The absence of personal identities, in my view, automatically includes gender identity, since gender constitutes part of the range of personal identities.

Expression of gender identities in LP IIA subadult burials

My scrutinisation of LP IIA subadult burials in Latium shows that most subadults between 0-4 years lacked all indicators for gender identity as discerned by Cogle and Bietti Sestieri. At Osteria dell'Osa, this age group was usually buried only with

a number of vessels (generally bowls, pitchers or jugs, cups, and, occasionally, amphorae), often already broken in antiquity (e.g. Bietti Sestieri 1992a, 127; 1992b, 591). Spinning equipment also turned out to be completely absent in LP IIA infant tombs. Except for a bead and suspension ring in tomb 380 (Bietti Sestieri 1992b, 592-593), such tombs also lacked personal ornaments. This view from Osteria dell'Osa is confirmed by the infant in Forum of Caesar tomb 7 (see De Santis 2010a, 268, for the tomb details). Indicators for gender identities proved equally absent in the majority of LP IIA child burials (4-10 years). In my view, the absence of these markers supports the idea that in Latium, subadults under c. 10 years generally were not gendered in the funerary context.

Although most subadult burials thus lack gender indicators at this stage, I found that a few infants and children at Osteria dell'Osa had been buried with arch bow fibulae, hair rings, and, occasionally, a necklace. Contemporary child burials known from the Forum of Caesar (tombs 4 and 10) and from the Forum Romanum (tomb II) contained (part) of this set of ornaments. The child in Forum of Caesar tomb 4 had even been buried with two spindle whorls (De Santis 2010a, 269). I infer from the presence of these gender markers that these subadults were gendered as women. Interestingly, the first and only known example of a subadult buried with a fibula with a serpentine bow outside Osteria dell'Osa was found at the Forum Romanum (tomb P) and may already date to the earliest phase of LP IIA (Gjerstad 1956, 101-102; Bettelli 1997, 136).

Since these children likely were too young to have passed into adulthood, I argue that their gendering must have been a conscious act.³ The deliberateness of this act is further supported by the fact that subadults gendered as women appear to have been buried in a similar funerary costume as adult women, instead of having a different, age-specific costume. The choice to bury these individuals as 'little adult women' indicates that they may not have had gender identities of their own.

Moreover, based on the work of Cuzzo on Early Iron Age and Orientalising Campania (e.g. Cuzzo 2015b, 590-591), Nizzo (2011, 59-60; 75), asserts that in Latium, specific funerary rituals were used to construct identities for children who died too early to have obtained identities in life, in order to compensate for their untimely loss or in order to project social expectations of future roles and status on the deceased child. But why were gender identities constructed for these children, whereas others in the same age range remained ungendered? Fulminante (2013, 220) states that some children were gendered because of their high social position. Interesting in this light is Bietti Sestieri's (1992a, 151; 208) suggestion that male child tombs spatially associated with adult male cremations belonged to first-born sons. But where Bietti Sestieri focuses on what she identified as biological male subadults, I propose that, instead, children consciously gendered as women may have been the first-borns. From my analysis, I have observed three characteristics that support this proposition, at least at Osteria dell'Osa: (1) a central but relatively isolated location (see Fig. 4); (2) a consistent attestation among the earliest burials in the different grave clusters (Fig. 4); and (3) relative wealth in terms of personal ornaments (fibulae adorned with spiral rings, suspension and fused rings, and one or more necklaces) and exceptional features, such as coffins and local imitations of southern-Italian-type vessels. As previously noted, Bietti Sestieri (2008, 149-156) argues that women played an important role in preserving the bloodline and establishing connections between family groups through matrimony. This prearranged role may have been another motive for their gendering.

3 The distribution pattern of personal ornaments, spindle whorls, miniature weapons, and razors in relation to age indicate in my view a transition around 10 years from child to (young) adult. Most likely, this transition was not marked by biological age, but rather social age and perhaps the fulfilment of a *rite de passage* (cf. Gowland 2006). Ungendered children around 12 years old may thus be individuals considered too young for their transition towards adulthood or not having passed the *rite de passage* yet.

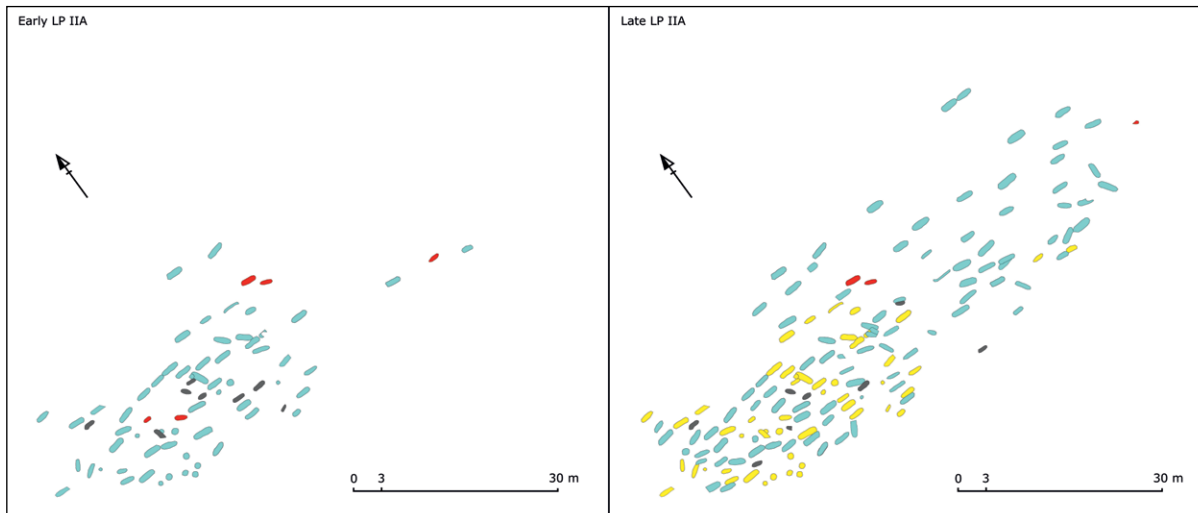


Figure 4. Osteria dell'Osa (prov. Rome, Italy) central burial clusters. Plan illustrating the conspicuous location of children gendered as women (red) in comparison with ungendered children (grey) in the early LP IIA (left) and late LP IIA (right). Contemporary adult burials are marked in blue. In the right-hand drawing, the early LP IIA burials are marked in yellow (drawing: Ilona Venderbos, adapted from Bietti Sestieri 1992b, pl. 4).

Transformations in the expression of gender identities in LP IIB infant and child burials

During LP IIB, the majority of children under 10 years were still buried without clear gender markers, and again a limited group of subadults, too young to have passed the transition into adulthood, had been buried with an almost complete or complete funerary costume for women. In terms of change, however, it seems that society became more inclusive during LP IIB. At the end of LP IIB at Osteria dell'Osa, infants were buried with well-decorated ceramics and occasionally with personal ornaments, instead of being buried with broken vessels (as happened in LP IIA), indicating that infants had become more included in society (Bietti Sestieri 1992a, 126-127; 190-193). Moreover, the first evidence for subadults gendered as men now appears. As Cogle (2009, 60-61) in my opinion rightly states, the three burials under consideration (tombs 51, 446 and 588), possibly indicate a development towards 'a more inclusive male identity'.

I have detected three other evident changes in grave good assemblages associated with subadults at Osteria dell'Osa. Although admittedly the samples are small, the noted changes are, in my view, strong enough to indicate the weakening of the close correlation between age group and grave good composition, and even point at increasing social manipulation of gender identities: (1) the introduction in tombs of fibulae other than arch bow fibulae, (2) imitations of parts of the female funerary costume, and (3) the deposition of spindle whorls in subadult tombs. I will elaborate on each of these changes below:

1. Fibulae types other than arch bow fibulae appeared in child burials in LP IIB, namely, fibulae with a lowered bow with rings, beads, and/or spirals (tombs 475, 544, 556 and 592), fibulae with amber and bone discs (tombs 52 and 559), and a fibula 'a tortiglione' (tomb 331). Although these fibula categories occurred only in contemporary women's burials, they seem not as closely associated with gender as arch bow fibulae; as Cogle argues, some of these fibulae may have been connected to wealth, status, or special roles in society rather than having served as a gender marker on the dress for women in general (Cogle 2008, para. 5.5; 2009, 66). Interestingly, a number of these children had been buried with only such a

fibula, but without hair rings, necklaces, or spinning equipment (tombs 331, 544, and 556), which strengthens my proposal that these fibulae lacked a gender connotation. Possibly the gender connotation was thus completely lost when these fibulae were placed in these child burials, rather the fibulae serving as indicators of certain social status or membership of a particular group.

2. Some infants (tombs 152, 484, 543, and 557) were not buried with a single special fibula but with one or two rings next to the head, perhaps replacing the typical hair rings. Not only did these children not receive the complete set of ornaments, they were given only an imitation of one of the most distinctive ornaments of female gender expression.
3. Seven tombs (tombs 37, 52, 513, 544, 567, 586, and 592) belonging to subadults younger than nine years contained spindle whorls, generally in combination with arch bow fibulae and/or hair rings. Nizzo (2011, 59) describes how these spindle whorls were deposited in a deviant manner in three of these tombs: in tomb 52, all seven spindle whorls were found in the fill instead of at the level of the skeleton; in tomb 37, five spindle whorls had been placed around the head and feet of the deceased, but one had been put under the chest and two others in the fill of the tomb; and in tomb 513, four spindle whorls were dispersed at the head and feet of the child in the tomb. Nizzo (2011, 60) argues that this deviant manner of deposition may have been a funerary custom to mourn the untimely death of a child, by selecting the most characteristic symbol of an adult woman. In my view, the apparent necessity of a different way of deposition, together with, again, the selection of a distinctive symbol of female gender, supports the conclusion that the introduction of spindle whorls is a third example of how gender identities were socially manipulated.

A similar weakening of the close association between age, gender, funerary rituals, and grave good assemblages can be attested to in adult men's tombs from the later LP IIA onwards, accompanied by an impoverishment in the expression of gender identities.

Expression of gender identities in adult men tombs

In contrast to those of subadults, gender identities for adult men (from c. 15 years onwards) were clearly defined in Latium. As said, cremation tombs with miniature ceramics, including corded jars and other house furnishings, were characteristic for the early LP IIA phase. This type of tomb was a prerogative for adult men 15-50 years old. In my view, the hut urn and miniature furniture emphasise the importance of leading or organising the household (including storage of and the control over goods). Knives may indicate that these men were actively involved in ritual and non-ritual feasting. Furthermore, personal enhancement seems to have been an important aspect of lifestyle or social values, given the presence of razors. It is not clear whether the miniature weapons referred to ideals of martiality or constituted a formalised ritual for this specific age and gender group.

A chronological development that is not much discussed in the literature on Latium Vetus, is the more or less gradual disappearance of these cremation tombs. This phenomenon is most clearly traceable at Osteria dell'Osa. As previously said, in the beginning of LP IIA, virtually all adult men were buried according to the rituals described. In contrast, in the later LP IIA and IIB, the practice of cremation had been largely replaced by that of inhumation. I found that in those few instances where cremation was still practised, sometimes the traditional rituals had been maintained, whereas in other cases grave goods were not or only partially miniaturised. Weapons turned out to be absent in these cremations without miniatures,

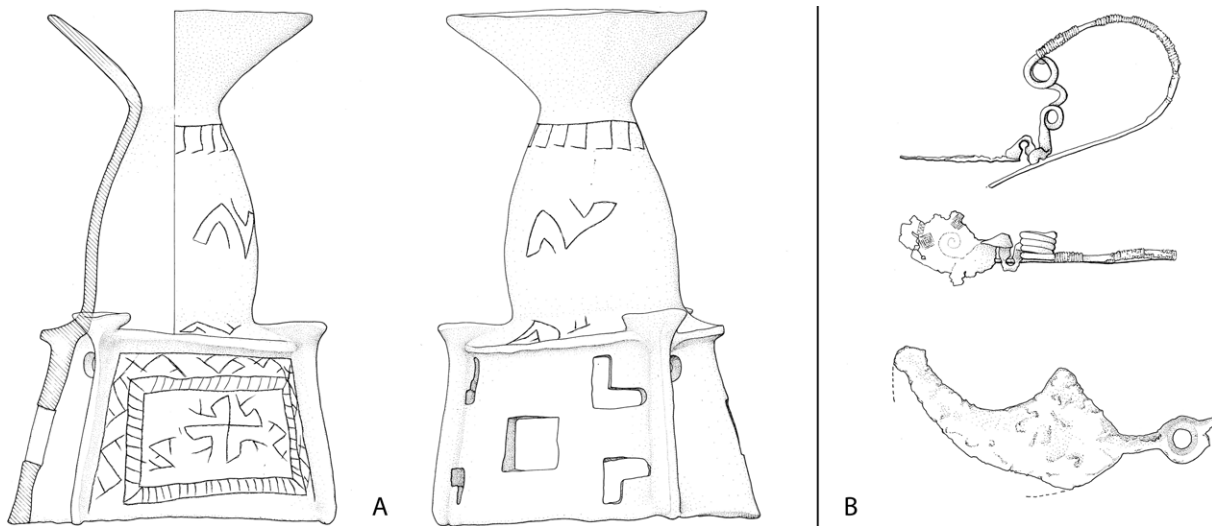


Figure 5. Osteria dell'Osa (prov. Rome, Italy). A Grave 197: brazier, pottery. – B Grave 483: fibula with a serpentine bow and razor, bronze. Not to scale (Bietti Sestieri 1992b, pl. 3a.276,6.7; 337,1).

except for the arrows in tomb 185. These arrows could not have been functional due to their flimsiness (Bietti Sestieri 1992b, 611). My analysis showed that, interestingly, these tombs with few or no miniatures completely lack indications for gender (neither for women nor for men).

This shift towards inhumation in later LP IIA is important in terms of gender identities because it was accompanied by a completely different symbolic language. Not only was the funerary ritual of cremation virtually abandoned, but the use of characteristic miniature objects, such as corded jars, braziers, and weapons, also ceased. Nor did these objects reappear in life-size forms. Only fibulae with a serpentine bow and razors, both now life-size, remained from the original set. The majority of inhumed individuals gendered as men had been buried with only a serpentine fibula. When scrutinising the Osteria dell'Osa catalogue produced by Bietti Sestieri (1992b), I found that only in a limited number of inhumation burials belonging to men, razors co-occurred with these serpentine bow fibulae.

For most individuals gendered as men, it was apparently only considered important to emphasise their gender in dress. The razor may have symbolised an additional aspect of gender identity for men (Fig. 5). The limited number of men buried with a razor indicates that the expression of this additional aspect of gender identity was a privilege for a restricted number of men. One could wonder whether the razor still the same connotation of bodily care had as it had in the beginning of LP IIA. Even if the symbolic meaning of the razor remained the same, the question remains why exactly this aspect of male social identities was considered important enough to be maintained. This relative poverty in identities attested from the later LP IIA onwards stands in strong contrast to the early LP IIA cremations, with their references to martiality, bodily care, ritual feasting, economic wealth, and the ability to control the flow of goods. In LP IIB, these new burial customs and, consequently, the expression of only a very limited range of gendered identities largely became common for adult men. However, some of the early LP IIA customs were not completely lost but reincorporated in different ways. The nature of this reincorporation most clearly illustrates how gender identities of adult men were socially manipulated from the later LP IIA onwards.

Cogle (2008, para. 5.5) points at the remarkable chronological and spatial distribution of double-eye serpentine fibulae at Osteria dell'Osa. She describes how these objects have been found in four LP IIA cremations as well as in two possible incomplete inhumations dating to the same phase and how they recurred in four LP IIB tombs from different clusters (one again in an exceptional example of a cremation with miniatures). In LP IIA, this fibula category related to the south group (one of

Reintroduced characteristic	Late LP IIA	Early LP IIB	Late LP IIB	LP IIB
Cremation with miniatures	men	men	-	men
Inhumation tomb with grave goods reminiscent of early LP IIA cremations	men	men, ungendered*	ungendered	men
Miniaturisation of a portion of the ceramics	-	men, women, ungendered adults	women, subadults gendered as women, ungendered subadults	subadults gendered as women
Travertine crusts or pebbles/pieces of ochre	men	men	Ungendered subadults	-
Animal remains	adult women*	subadult women, adult women, ungendered*	women, ungendered	women, ungendered
Cremation with miniature and normal-size objects	-	ungendered	-	ungendered
Cremation with normal-size objects	-	ungendered	-	women

the earliest grave groups) but lost its association with a particular cluster in the subsequent phase. These observations led her to the conclusion that the fibula type seemingly lost its original meaning in LP IIB, being used instead to symbolise other identities or only liked for aesthetic reasons.

Furthermore, Bietti Sestieri (1992a, 194; 211) points at the recurrence of corded jars, miniature vessels, and roof-shaped urns in LP IIB. She explains this phenomenon as the wish of the next of kin to visually emphasise their connection with the individuals buried in the south group. I found that not only miniaturised ceramics, corded jars, and hut-shaped urns recurred, but also braziers and knives. In addition to these grave goods, other customs characteristic of the early LP IIA cremation tombs were also reintroduced: ochre and travertine crust, pebbles or blocks in the fill of some tombs, as well as the deposition of pieces of meat (usually wild boar or sheep/goat). My analysis showed that this phenomenon could also be attested to in other LP IIB tombs than those from the single cluster that Bietti Sestieri (1992a, 194; 211) cites. Some of these customs turned out to be still confined to adult men. In other instances, however, the gender connotation proved to be partly or completely lost: travertine crusts occurred in the graves of both men and ungendered subadults (although never with subadult or adult women), and the deposition of animal remains, and miniaturised ceramics could be associated with all age groups and genders (table 2).

Moreover, in my opinion, even those customs still confined to men have lost their exclusive association with adult men in their prime. The customs observed for the men in tombs 142, 307, and 503 most strongly harked back to the funerary customs preserved for adult men in early LP IIA. The ash of the individual in tomb 142 was deposited in an urn with a roof-shaped lid, protected by a *dolium*. Among his miniaturised grave goods were three corded jars, a lance, a knife, a statuette, and possibly a shield and razor (Bietti Sestieri 1992b, 606). Tomb 307 contained an urn with a helmet-shaped lid in a hut-shaped *dolium*. Three miniature corded jars, each with a miniature bowl inside, together with a boat vase, were found in the *dolium*. A miniature razor had been placed in the cinerary urn (Bietti Sestieri 1992b, 627-628). Both tombs 142 and 307 appear to seek a spatial association with the early LP IIA cremations. The cinerary urn in tomb 503 was an amphora with a roof-shaped lid, deposited in a *dolium*. Three miniature corded jars had been placed in the *dolium*, accompanied by a miniature bowl and a life-size cup (Bietti Sestieri 1992b, 742).

Five inhumations belonging to men also show multiple references to early LP IIA cremations: tombs 80, 418, 197 and the damaged tombs 572 and 578. Possibly the earliest example is tomb 80 (according to Bettelli 1997 dating to late LP IIA,

Table 2. Reintroduced characteristics of early LP IIA cremations in late LP IIA and IIB tombs, according to gender (men, women, and ungendered individuals) and age group (subadults and adults). * = Damaged tomb with a probably incomplete grave good assemblage (Ilona Venderbos, on the basis of the Osteria dell'Osa catalogue [Bietti Sestieri 1992b]).

and according to Bietti Sestieri 1992b dating to LPIIB). This tomb contained two corded jars and a miniature bowl (Bietti Sestieri 1992b, 657). Two miniature corded jars and a miniature bowl also came to light in tomb 572, one of them containing non-determinable animal bones (Bietti Sestieri 1992b, 738). Tomb 197 yielded a brazier (Fig. 5), a block of yellow ochre, and a travertine crust pebble. Together with tomb 198, belonging to an adult woman, this burial occupied a central position in its grave group (Bietti Sestieri 1992b, 718). Tomb 418, containing a travertine crust block, was situated in a central location within its cluster; later in phase IIB, this grave was reused for an ungendered individual, signifying the importance of the man in tomb 418 (Bietti Sestieri 1992b, 647-648). Finally, tomb 578 contained miniature corded jars, a miniature knife, and an arrow (Bietti Sestieri 1992b, 739-740). Tombs 80, 142, 307, 572, and 578 held men who were between 20 to 40 years old when they died, but tombs 418 and 503 belonged to a 50-year old man and tomb 167 to a man over 65 years old (Bietti Sestieri 1992b, 647-648; 718; 742). The advanced age of these three men shows that these funerary customs were no longer restricted to men in their prime; in my view, these customs could have been selected for other reasons, perhaps related to social status.

Such manipulation of gender identities is not attested to Caracupa in LPIIB, but this necropolis is rather remarkable in terms of gender symbols for men. Arms were still rare in most burial grounds in Latium Vetus in this phase, but I found that at Caracupa life-size spear points and lance point are attested to seven of the eight burials belonging to men. Since this necropolis has only partly been excavated only in part, it is not clear whether the excavated portions just happened to contain the armed men or whether all men got a spear or lance in their grave (Angle and Gianni 1985, 193). Interestingly, another male burial containing a lance (Colonna 1976, 134-135) or spear (Gjerstad 1956, 212) has been found at the Esquiline necropolis in Rome, also dating to LP IIB.

Tomb 6 at Santa Palomba shows that the two IIB cremations with miniatures from Osteria dell'Osa are not an isolated phenomenon. The exceptional features of this tomb are a combination of traditional prestige objects (sword with scabbard and double shields, the latter common in LP I) and with the characteristics of contemporary inhumations (De Santis *et al.* 2010b, 322). This balance between looking back to the past and adapting to the present seems a perfect characterisation of social manipulation of gender identities in Latium Vetus in this period.

Conclusions

Scholars such as Bietti Sestieri and Cogle have provided a strong basis for the reconstruction of gender identities, predominantly regarding Osteria dell'Osa. To a certain degree, I was able to draw comparisons with other Latial sites. In this paper, I have argued that the close associations between age, biological sex, grave goods, and funerary customs loosened after the initial phase of the Early Iron Age. Instead of these strict associations, aspects of gender identity were selected and adapted in an act of social manipulation in order to construct new or competing identities. Transformations in funerary customs and grave good assemblages for subadults and adult men are central to illustrating the nature of this selection, adaptation, and manipulation.

In LPIIA the funerary rules concerning expression of gender identities for infants and children until roughly the age of 10 seem to have been quite strict: most subadults probably were not buried with clear gender markers, implying that these individuals did not have any gender identities yet. However, a number of children were exceptionally gendered as women, wearing a funerary costume similar to adult women. The tombs of these children constituted the earliest burials

of a cluster, were located in a conspicuous location, and often showed considerable wealth and exceptional features. In my view, these special characteristics indicate that these children obtained a special position in the community, perhaps as first-borns. Because of their special position, gender identities were specially constructed for them during the funeral, perhaps in order to compensate for the untimely loss of individuals destined to obtain special roles in their adult life. The emergence of a few subadults gendered as men shows that in LP IIB, the expression of gender identities was no longer confined to women's gender; men's gender identities could also be constructed. Furthermore, the increasing manipulation of gender symbols of adult women in this period is affirmed by the emergence of fibula types other than arch bow fibulae in child burials (often not accompanied by other ornaments), the rings next to the head imitating the characteristic female hair rings, and the introduction of spindle whorls deposited in a deviant manner.

In early LP IIA, adult men were predominantly cremated, deposited in hut-shaped urns and buried with miniature grave goods. Their gendered identities seem related to organising the household, including the storage and control of goods, ritual and non-ritual feasting, and perhaps martiality and physical beauty. From the later LP IIA onwards, most men decided to express their basic gender identity only in dress. In a restricted number of cases a razor – possibly connected to an additional gendered identity – was added. In addition to the impoverishment in the expression of gendered social identities, there was a loosening of the age and gender restrictions, which becomes particularly clear in the way several elements from early LP IIA cremations were reintroduced. In many cases, the gender connotation was largely or completely lost; in those instances where customs remained confined to men, the strict age restrictions for these customs were now lost, since some of the men concerned were over 50 years old at the time of their death. The identities originally connected to these elements were probably not reintroduced one-to-one. In the context of social competition within or between groups, these objects were perhaps used to define new social identities not necessarily related to gender.

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References

- Angle, Micaela, and Gianni, Adolfo 1985. La morte ineguale: dinamiche sociali riflesse nel rituale funerario. Il caso della necropoli dell'età del Ferro di Caracupa. *Opus. Rivista internazionale per la storia economica e sociale dell'antichità*, 4, 179-216.
- Angle, Micaela and Gianni, Adolfo 1990. La necropoli dell'età del Ferro di Caracupa. In: Cherchi, Maria (ed.). *La Valle Pontina nell'antichità: atti del convegno (13-14 aprile 1985)*. Studi e ricerche sul Lazio antico. Roma: Quasar, 23-30.
- Arnold, Bettina 2002. 'Sein und Werden': Gender as Process in Mortuary Ritual. In: Nelson, Sarah M. (ed.). *In Pursuit of Gender: Worldwide Archaeological Approaches*. Walnut Creek: Altamira, 239-256.
- Arnold, Bettina 2006. Gender and archaeological mortuary analysis. In: Nelson, Sarah M. (ed.). *Handbook of gender in archaeology*. Gender and archaeology series. Lanham: AltaMira Press, 137-170.

- Arnold, Bettina, and Wicker, Nancy 2001. Introduction. In: Arnold, Bettina, and Wicker, Nancy (eds). *Gender and the Archaeology of Death*. Walnut Creek: AltaMira Press, vii-xxi.
- Attema, Peter, Burgers, Gert-Jan, van Leusen, Martijn 2010. *Regional pathways to complexity: settlement and land-use dynamics in early Italy from the Bronze Age to the Republican period*. Amsterdam Archaeological Studies 15. Amsterdam: Amsterdam University Press.
- Becker, Marshall J., and Salvadei, Loretana 1992. Analysis of the human skeletal remains from the cemetery of Osteria dell'Osa. In: Bietti Sestieri, Anna Maria (ed.). *La necropoli Laziale di Osteria dell'Osa*. Pubblicazioni della Soprintendenza archeologica di Roma 1. Roma: Quasar, 52-191.
- Bettelli, Marco 1997. *Roma, la città prima della città: i tempi di una nascita: la cronologia delle sepolture ad inumazione di Roma e del Lazio nella prima età del ferro*. Studia Archaeologica 86. Roma: L'Erma di Bretschneider.
- Bietti Sestieri, Anna Maria 1992a. *The Iron Age community of Osteria dell'Osa: a study of socio-political development in central Tyrrhenian Italy*. New studies in archaeology. Cambridge: Cambridge University Press.
- Bietti Sestieri, Anna Maria 1992b (ed.). *La Necropoli Laziale di Osteria dell'Osa*. Pubblicazioni della Soprintendenza archeologica di Roma 1. Roma: Quasar.
- Bietti Sestieri, Anna Maria 2008. Domi mansit, lanam fecit: Was That All? Women's Social Status and Roles in the Early Latial Communities (11th-9th Centuries BC). *Journal of Roman Archaeology*, 21, 1, 133-159.
- Bietti Sestieri, Anna Maria 2010. *L'Italia nell'età del bronzo e del ferro: dalle palafitte a Romolo (2200-700 aC)*. Roma: Carocci.
- Bologna, Lucia 2008. Necropoli, strade e cava. In: Cereghino, Roberto (ed.). *Cancellaria. Una ricerca sul territorio*. Santa Palomba: Rotoform, 99-117.
- Brøns, Cecilie 2013. Manners make the man. Challenging a persistent stereotype in the study of Italian Iron Age graves. *Analecta Romana Instituti Danici*, 38, 53-78.
- Catalano, Paola, Andrea Cucina, and De Santis, Anna 2001. Foro di Cesare. Rinvenimenti di Eta protostorica. In: Filippi, Fedora (ed.). *Archeologia e Giubileo: gli interventi a Roma e nel Lazio nel piano per il grande giubileo del 2000*. Napoli: Electa, 197-199.
- Colonna, Giovanni 1976. Il sepolcreto dell'Esquilino. In: Colonna, Giovanni (ed.). *Civiltà del Lazio Primitivo, Palazzo delle Esposizioni, Roma 1976 (catalogo del mostra)*. Roma: Multigrafica Editrice, 125-141.
- Cogle, Lisa 2008. Dress and Social Identities: the role of GIS in mapping social structure in the central Italian Iron Age cemetery of Osteria dell'Osa. *Internet Archaeology* 24. <doi: 10.11141/IA.24.1>, e-published 30 June 2008.
- Cogle, Lisa 2009. Expressions of gender through dress in Latial Iron Age mortuary contexts: The Case of Osteria dell'Osa. In: Herring, Edward, and Lomas, Kathryn (eds). *Gender identities in Italy in the first millennium BC*. BAR International series 1983. Oxford: Archaeopress, 55-78.
- Cuozzo, Mariassunta 2015a. The Violence of Symbols: Ideologies, Identity, and Cultural Interaction in Central Italian Cemeteries. In: Knapp, Bernard A., and van Dommelen, Peter (eds). *The Cambridge Prehistory of the Bronze and Iron Age Mediterranean*. New York: Cambridge University Press, 585-604.
- Cuozzo, Mariassunta 2015b. Identità di genere, status e dialettica interculturale nelle necropoli della Campania al passaggio tra prima Età del Ferro e Orientalizzante. In: Saltini Semerari, Giulia, and Burgers, Gert-Jan (eds). *Social change in Early Iron Age Southern Italy: proceedings of the international workshop Rome 5th-6th May 2011*. Rome: Palombi, 118-132.
- De Santis, Anna 2009. Il Lazio antico fra l'età del bronzo finale e la I età del ferro. In: Drago Troccoli, Luciana (ed.). *Il Lazio dai Colli Albani ai Monti Lepini tra preistoria ed età moderna*. Roma: Quasar, 107-141.
- De Santis, Anna, Mieli, Gianfranco, Rosa, Carlo, Matteucci, Renato, Celant, Alessandra, Minniti, Claudia, Catalano, Paola, De Angelis, Flavio, Di Giannantonio,

- Stefania, Giardino, Claudio, and Giannini, Pamela 2010a. Le fasi di occupazione nell'area centrale di Roma in età protostorica: nuovi dati dagli scavi nel Foro di Cesare. *Scienze dell'Antichità*, 16, 259-284.
- De Santis, Anna, Colacicchi, Olimpia, Giuliani, Maria Rita, and Santoro, Barbara 2010b. Il processo storico nel Lazio antico tra la tarda età del Bronzo e la prima età del Ferro: i protagonisti. In: Negroni Catacchio, Nuccia (ed.). *L'alba dell'Etruria. Fenomeni di continuità e trasformazione nei secoli XII-VIII a.C. – Ricerche e scavi. Atti del IX incontro di studi Preistoria e Protostoria in Etruria, Valentano, Pitigliano, 12.-14.9.2008*. Milano: Centro Studi di Preistoria e Archeologia, 311-323.
- De Santis, Anna 2011. L'ideologia del potere: le figure al vertice della comunità nel Lazio protostorico. In: Nizzo, Valentino (ed.). *Dalla nascita alla morte: antropologia e archeologia a confronto. Atti dell'incontro internazionale di studi in onore di Claude Lévi-Strauss. Roma, Museo Preistorico Etnografico Luigi Pigorini, 21 maggio 2010*. Antropologia e archeologia a confronto 1. Roma: E.S.S., 171-197.
- Díaz-Andreu, Margarita 2005. Gender Identity. In: Díaz-Andreu, Margarita, Lucy, Sam, Babić, Staša, and Edwards, David N. (eds). *The archaeology of identity: approaches to gender, age, status, ethnicity and religion*. London, New York: Routledge, 13-42.
- Díaz-Andreu, Margarita, and Lucy, Sam 2005. Introduction. In: Díaz-Andreu, Margarita, Lucy, Sam, Babić, Staša, and Edwards, David N. (eds). *The archaeology of identity: approaches to gender, age, status, ethnicity and religion*. London, New York: Routledge, 1-12.
- Fowler, Chris 2013. Identities in Transformation: Identities, Funerary Rites, and the Mortuary Process. In: Nilsson Stutz, Liv, and Tarlow, Sarah (eds). *The Oxford Handbook of the archaeology of death and burial*. Oxford: Oxford University Press, 511-526.
- Fowler, Chris 2015. Change and continuity in Early Bronze Age mortuary rites: a case study from Northumberland. In: Brandt, J. Rasmus, Ingvaldsen, Håkon, and Prusac, Marina (eds). *Death and Changing Rituals: Function and meaning in ancient funerary practices*. Studies in funerary archaeology 7. Oxford: Oxbow Books, 45-91.
- Fulminante, Francesca 2003. *Le sepolture principesche nel Latium Vetus: tra la fine della prima età del ferro e l'inizio dell'età orientalizzante*. Bibliotheca archaeologica 36. Roma: L'Erma di Bretschneider.
- Fulminante, Francesca 2013. *The Urbanisation of Rome and Latium Vetus: From the Bronze Age to the Archaic Era*. New York: Cambridge University Press.
- Fulminante, Francesca 2018. The Latins. In: Farney, Gary D., and Bradley, Guy (eds). *The Peoples of Ancient Italy*. De Gruyter references. Boston, Berlin: De Gruyter, 473-497.
- Gjerstad, Einar 1956. *Early Rome. II. The tombs*. Skrifter utgivna av Svenska Insitutet i Rom 17. Lund: CWK Gleerup.
- Gleba, Margarita, and Horsnæs, Helle W. 2011 (eds). *Communicating Identity in Iron Age Italic Communities*. Oxford: Oxbow Books.
- Gowland, Rebecca 2006. Ageing the past: Examining age identity from funerary evidence. In: Gowland, Rebecca, and Knüsel, Christopher (eds). *Social archaeology of funerary remains*. Oxford: Oxbow Books, 143-154.
- Herring, Edward, and Lomas, Kathryn 2000 (eds). *The Emergence of State Identities in Italy in the First Millenium BC*. Accordia Specialist Studies on Italy 8. London: Accordia Research Institute.
- Herring, Edward, and Lomas, Kathryn 2009 (eds). *Gender identities in Italy in the first millennium BC*. BAR International series 1983. Oxford: Archaeopress.
- Holloway, R. Ross 1994. *The archaeology of Early Rome and Latium*. London, New York: Routledge
- Joyce, Rosemary A. 2008. *Ancient bodies, Ancient lives: Sex, gender and archaeology*. New York: Thames & Hudson.

- Morris, Ian 1987. *Burial and ancient society: The rise of the Greek city-state*. New studies in archaeology. Cambridge: Cambridge University Press.
- Morris, Ian 1992. *Death-ritual and social structure in classical antiquity*. Key themes in ancient history. Cambridge: Cambridge University Press.
- Nelson, Sarah M. 2004. *Gender in Archaeology. Analyzing Power and Prestige*. Gender and Archaeology 9 [2nd edition]. Walnut Creek: AltaMira Press.
- Nijboer, Albert J., van der Plicht, Johannes, Bietti Sestieri, Anna Maria, and De Santis, Anna 1999-2000. A high chronology for the early Iron Age in central Italy. *Palaeohistoria*, 41, 163-176.
- Nizzo, Valentino 2011. Visibilità e invisibilità dell'infanzia nei sepolcreti dell'Italia Tirrenica dalla prima età del Ferro all'Orientalizzante: dalla discriminazione funeraria alla costruzione dell'identità. In: Nizzo, Valentino (ed.). *Dalla nascita alla morte: antropologia e archeologia a confronto. Atti dell'incontro internazionale di studi in onore di Claude Lévi-Strauss. Roma, Museo Preistorico Etnografico Luigi Pigorini, 21 maggio 2010*. Antropologia e archeologia a confronto 1. Roma: E.S.S., 51-93.
- Pacciarelli, Marco 2001. *Dal villaggio alla città: la svolta protourbana del 1000 a.C. nell'Italia tirrenica*. Grandi contesti e problemi della protostoria italiana 4. Firenze: All'Insegna del Giglio.
- Parker Pearson, Michael 1999. *The archaeology of death and burial*. Stroud: Sutton.
- Perego, Elisa, and Rafael Scopacasa 2016 (eds). *Burial and social change in first millennium BC Italy: approaching social agents: gender, personhood and marginality*. Studies in funerary archaeology 11. Oxford: Oxbow Books.
- Pitzalis, Federica 2011. *La volontà meno apparente: donne e società nell'Italia centrale tirrenica tra VIII e VII secolo a.C.* Studia archaeologica 181. Rome: L'Erma' di Bretschneider.
- Smith, Christopher John 1996. *Early Rome and Latium. Economy and society c. 1000 to 500 BC*. Oxford classical monographs. Oxford: Oxford University Press.
- Søfaer Derevenski, Joana 1997. Linking gender and age as social variables. *Ethnographisch-Archäologischen Zeitschrift*, 38, 485-493.
- Sørensen, Marie-Louise S. 2007. On Gender Negotiation and Its Materiality. In: Hamilton, Susan, Whitehouse, Ruth D., and Wright, Katherine (eds). *Archaeology and Women. Ancient & Modern Issues*. Publications of the Institute of Archaeology, University College London. Walnut Creek: AltaMira Press, 41-51.
- Van der Plicht, Johannes, Bruins, Hendrik, and Nijboer, Albert 2009. The Iron Age around the Mediterranean: a high chronology perspective from the Groningen radiocarbon database. *Radiocarbon*, 51, 213-242.
- Van Rosenberg, Erik 2005. Open Endings at Osteria dell' Osa (Lazio): Exploring domestic aspects of funerary contexts in the Early Iron Age of Central Italy. In: Briault, Camilla, Green, Jack, Kaldelis, Anthi, and Steliatou, Anna (eds). *Soma 2003: Symposium on Mediterranean Archaeology*. BAR International Series 1391. Oxford: Archaeopress, 129-132.
- Van Rosenberg, Erik 2008. Infant/child burials and social reproduction in the Bronze Age and Early Iron Age (c. 2100-800 BC) of Central Italy. In: Bacvarov, Krum (ed.). *Babies reborn: Infant/Child Burials in Pre- and Protohistory*. BAR International Series 1832. Oxford: Archaeopress, 161-173.
- Whitehouse, Ruth D. 2007. Gender Archaeology and Archaeology of Women: Do We Need Both? In: Hamilton, Susan, Whitehouse, Ruth D., and Wright, Katherine (eds). *Archaeology and Women. Ancient & Modern Issues*. Publications of the Institute of Archaeology, University College London. Walnut Creek: AltaMira Press, 27-40.
- Whitehouse, Ruth D. 2015. Investigating gender in the Italian Iron Age. In: Saltini Semerari, Giulia, and Burgers, Gert-Jan (eds). *Social change in Early Iron Age Southern Italy: proceedings of the international workshop Rome 5th-6th May 2011*. Rome: Palombi, 91-101.

Time- and space-related genders and changing social roles. A case study from Archaic southern Italy

Christian Heitz

Abstract

Southern Italy from the 8th to 4th centuries BCE was an area of intensive cultural contact and exchange. Even prior to the Roman conquest, local communities experienced significant social and cultural change. It will be argued here that these changes also had a considerable impact on gender roles. The paper furthermore addresses the impact of time and space on the development of social roles connected to gender, both on the subjective, personal and on the objective, absolute scale. It will be demonstrated that there seems to be a remarkable shift in gender conceptions in pre-Roman southern Italy. The study discusses the role that the new, eastern Mediterranean influences and people may have played in this process, looking at possible forms of interaction, disposition, and agency, both on the indigenous and on the immigrant side. Finally, these observations and suggestions will be compared with an apparently analogous and better documented situation in the colonial past and its long-term consequences. While one should exercise caution in drawing parallels between the protohistoric and recent pasts, it seems that strikingly similar processes, especially regarding the development of gender conceptions and inequalities, can be observed – in both cases leading to the empowerment of the male side and a de-empowerment of the female side within the indigenous communities.

Keywords: *Archaic Italian communities, dynamic gender relations, diachronic change, spatial variety, interaction impacts, power*

Introduction

The early Iron Age and Archaic period in southern Italy (Fig. 1) are mainly studied through the analysis of burial evidence. Settlement remains are scarce, and, in fact, in many cases only suggested by the presence of burial plots. Thus, our knowledge

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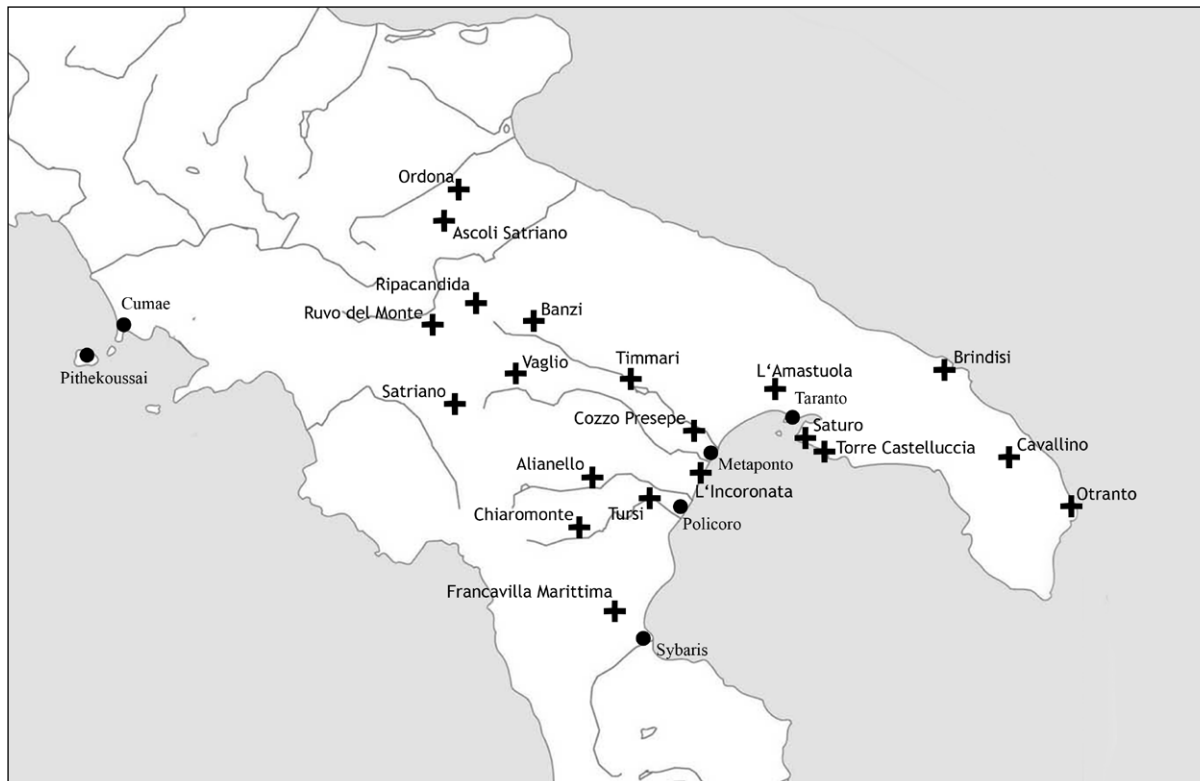


Figure 1. Map of southern Italy with indigenous (crosses) and Greek (dots) sites of the 8th to 5th centuries BCE (Christian Heitz).

concerning social structure and gender conception of this period is primarily based on the study of the dead and the grave goods they were equipped with. At least from the 8th century BCE onwards, the communities of the region start to express notable differences, in terms of both status and gender: Rich male graves (often presumed to be male, as anthropological analyses have rarely been carried out) contain weapons, while wealthy (presumed) females are equipped with a lavish fitting of ornaments (so-called *parures*; cf. D'Agostino 1998, 36-43), often exceeding the wealth displayed in male burials. Although it is extremely difficult to assess the precise value of these assemblages and whether the grave goods reflect the social standing of the person buried or just that person's association with preeminent bereaved (cf. Hofmann 2008), it nevertheless has to be assumed that rich burial assemblages reflect high status in the living society, of whatever form. It also has to be assumed that the objects placed in the tomb were chosen meaningfully, at least in some way referring to the social identity of the deceased. Thus, the assemblages should at least partly reflect the person's prominence or status and occupations, competences, and activities.

While these richer tombs (commonly termed *tombe principesche*, see Bottini 1999; Montanaro 2008; 2016; for the very limited value of this term, see Morris 2016; Obojes 2018) start occurring in the 8th century BCE, generally it seems that prior to the Archaic/Classical era no stable dynastical hierarchies were established in southern Italy. These preeminent tombs occur quite frequently but never show any signs of close dynastic succession (similar or equal composition or iconography/symbolism, close spatial coherence, or the like), instead indicating the largely egalitarian character of the communities and the possible competition of different emerging/pending elites scattered over a vast territory. If the takeover of authority was situational and connected to single individuals by virtue of their lifetime achievements, and not by descent, it seems significant that females were also so

prominent in the status expressed in their tombs, which points to the conclusion that this prominence was not solely influenced by their association with men¹.

It is, however, difficult to take a ‘top-down’ approach to this issue, that is, taking into account the evidence of just a few, widely dispersed, incoherent, and not necessarily contemporary graves (see, *e.g.*, Bottini and Setari 1995). These are, furthermore, so richly equipped with items that it is difficult to filter out the objects that are meaningful for the self-conception and placement of the individual, or, rather, the social group to which they were affiliated – and therefore also the tasks and functions connected to this group (see Hofmann 2008; 2009; 2012). In order to get closer to these, it seems more reasonable to turn to smaller and more coherent contexts, in which the burials and the community are likely to have directly referred to one another and have expressed social tasks in a more immediate and intimate way.

In the following sections, the constitution, contents, and changes of identities will be analysed in the context of a small Archaic graveyard and subsequently compared with the wider regional context. Special attention will be paid to possible transformations of identity concepts (especially concerning gender) and the role that time and space played in this process. The study will focus on what Roberta Gilchrist (1999) and others (*e.g.* Foxhall 1994) have exemplified, addressing the different layers of time to be taken into account when approaching archaeological data and the reconstruction/recognition of gender (cf. Hofmann 2009, also on the division between sex and gender). With the recognition of human lifecycles, -courses, and -histories (Gilchrist 1999, 79-81), the notion of changing gender roles becomes apparent. Therefore, reference will be made to different age categories that have consequences for the content of gender roles. Jennie Keith (1985, 240) singled out ‘function’ as the normal social measure of age. The change of gender identity according to age and/or the ability to perform (social) acts/tasks was addressed by Jay Ginn and Sara Arber (1995, 5), who distinguish between three different age categories: While ‘chronological age’ is measured (rather neutrally) in calendar years, the two remaining age categories are highly socially determined. ‘Social age’ describes the membership of an individual in a social group, itself strongly influenced by ‘physiological age’, which is dependent on the fitness to perform, be that physical, mental, *etc.* Jo Appleby (2018) has recently outlined the vast potential of (old) age studies for the understanding of archaeological populations, having profound consequences for the different gender conceptions, not only for children, but especially for adult and older people, and this has resulted in the suggestion to classify a ‘functional age’ (Tayles and Halcrow 2015, 233). Since the burial record, created after the deceased passed away at a certain age and social stage, may, or may not, just mirror the ‘current state of affairs’ but may also refer to past or anticipated future status (see on this issue recently, Cuzzo 2016, 4-7), a pursuit of this approach calls for detailed anthropological and palaeopathological studies – not always a given in archaeological contexts. However, in the following paper, I will try to show that some suggestions in this respect might be possible on the basis on grave assemblages. I will also suggest that space (immediate geographic/social context) is a relevant factor in the development and change of gender identities, even within the rather small area of the Archaic Italian hinterland.

Case study

Trying to understand different and changing gender conceptions from a *bottom-up* perspective, the paper will first examine the finds of the small Iron Age necropolis of

1 It is also striking that, in the case of reused tombs especially, items of bodily adornment and weapons, but hardly any pottery, were still associated with their original ‘owner’ when that person’s bones were repositioned within the tomb to create space for the new interment, indicating the ‘individuality’ of the association of these objects and their bearer (Hoernes *et al.* 2018).

Ripacandida (prov. Potenza, Italy) in the southern Italian hinterland, comparing the results of its micro-archaeological analyses with those of other, contemporary sites in order to develop a model of changing gender conceptions in the Archaic era (7th to 5th centuries BCE) in larger parts of indigenous southern Italy (see Fig. 1).

The graveyard of Ripacandida was in use from the end of the 7th to the 5th century BCE (Bottini 1979; 1986; Setari 1999; Heitz 2014; in press). All 134 excavated graves are inhumations in roughly rectangular pits. As was the custom in the region, the dead were placed in a semi-crouched position (spine straight, legs flexed), which requires the decision as to whether to lay down the corpse on its left or right side (Fig. 2). Of the 68 burials for which the original position of the corpse could be ascertained from photographs or drawings, 35 individuals were buried on



Figure 2. Ripacandida (prov. Potenza, Italy) tomb 7. Grave pit with skeleton and inventory during the 1982 excavation (courtesy: Soprintendenza Archaeologia Belle Arti e Paesaggio della Basilicata).

their right side, and 33 on their left side. The bones were not subjected to anthropological analysis and are no longer available for study.

Gender, age, and social roles

There are no significant differences between the ceramic grave goods of the left- and right-lying burials. The standard pottery set comprises at least one storage vessel, mostly in the indigenous shape of an *olla* (in the 5th century BCE sometimes replaced by Greek shapes, such as *amphora* or *krater*), jug(s), and at least one drinking vessel (Fig. 3). However, the differences in the equipment with other objects are diagnostic. This is visualised by the graph in Figure 4, which gives an overview of the similarities and differences in the equipment of individuals placed on the left side (pink) and right side (purple): While various shapes of pottery likewise occur in both contexts, personal adornment occurs much more frequently on the pink side. Precious fibulae of silver or iron fibulae with amber-coated bows, as well as amber pendants or necklaces, are restricted to these burials. This also applies to fine silver spirals probably serving as hair adornments (*fermatrecce*). The graph also shows that features such as indigenous iconography and (rarely) textile tools are almost exclusively associated with individuals buried on their left side. The jewellery assemblage of corpses placed on their right side is significantly smaller and simpler. In these burials, weapons are quite frequent, normally spearheads. Real combat weapons, such as swords are rare, and protective gear, such as shields or greaves, is completely absent. The abundant large, curved knives should instead be viewed as tools. A comparison with other cemeteries of the same period in other regions – such as Ascoli Satriano (prov. Foggia, Italy), Ortona (prov. Foggia, Italy), Ruvo del Monte (prov. Potenza, Italy), and so on – shows very similar patterns (Heitz in press).

The dichotomy of weapons vs. numerous pieces of jewellery corresponds to contemporary iconography: The so-called Daunian *stelai* are distinguished into jewellery *stelai* and weapon *stelai*, according to their decoration with either many pieces of adornment (Fig. 5,1), such as fibulae and pendants, or elements of armament (Fig. 5,2), such as swords, *cardiophylakes*, and shields (Norman 2009; Tunzi 2011). It is commonly assumed that the former marked the tombs of women while the latter marked those of men, thus mirroring the local burial record. This gender allocation, however, cannot securely be ascertained since none of the *stelai* were documented in their original context and there is a strange numerical bias, the number of jewellery *stelai* vastly outnumbering that of weapon *stelai*. In sum,

Figure 3. Ripacandida (prov. Potenza, Italy) tomb 54. Ceramic inventory (courtesy: Soprintendenza Archaeologia Belle Arti e Paesaggio della Basilicata; photograph: Nicola Figliuolo).



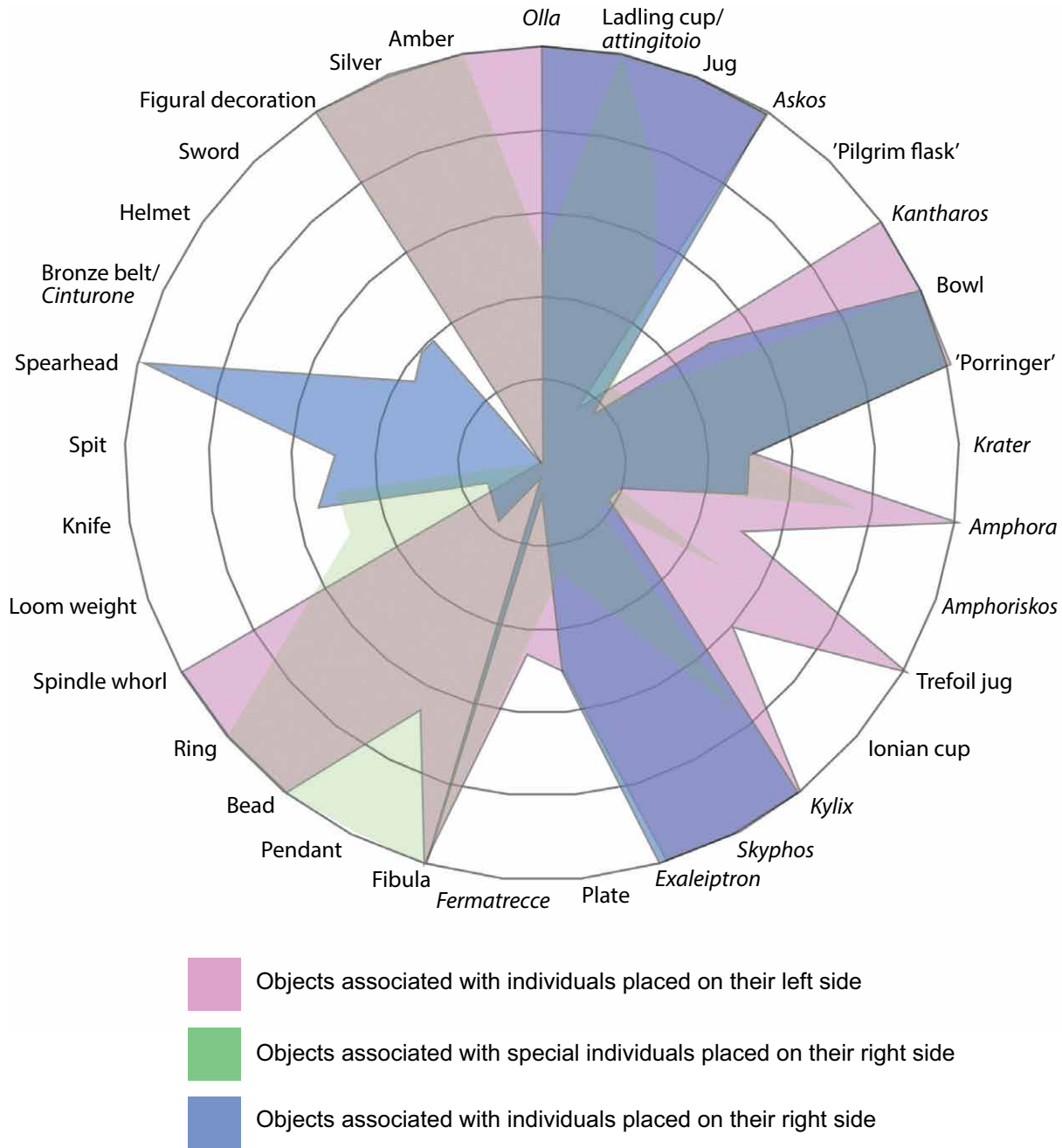


Figure 4. Distribution of grave goods in relation to body placement in the cemetery of Ripacandida (prov. Potenza, Italy) (Christian Heitz).

however, the most likely explanation is that, normally, individuals placed on the right side are men and those placed on the left side are women (for a more elaborate discussion of this categorisation, largely based on the methodology employed by Vida Navarro 1992, see Heitz in press).

An analysis of the tomb assemblages may give a more nuanced understanding and reveal more about gender conceptions. At Ripacandida, apart from the plastic bull's head *protomes* of the locally made *askoi* (pouring vessels of dubious function), indigenous figural depictions of zoo- or anthropomorphic shape are restricted to female tombs. They occur as bronze pendants in the shape of rams or dogs and as amber pendants showing a male or female face whose facial features (large eyes, moustache) suggest non-human beings, such as satyrs (Fig. 6). The very few depictions on pottery show figures in contexts that may classify them as ritual (with raised

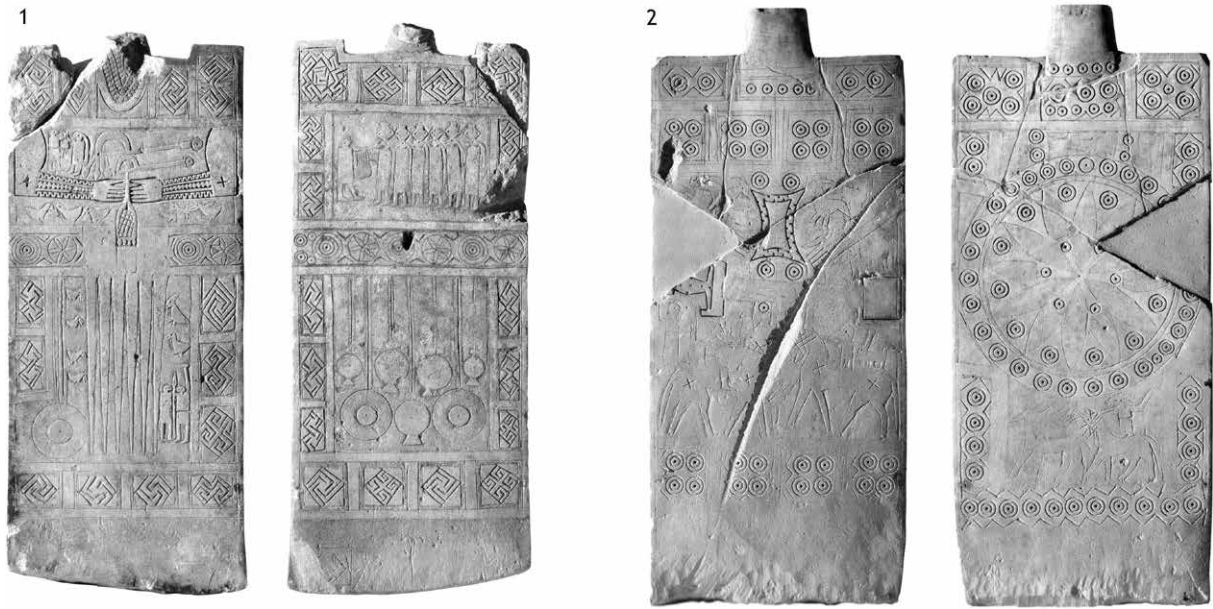


Figure 5. Daunian stelai from the area of Manfredonia (prov. Foggia, Italy). 1 jewellery stele, max. height 99 cm (Manfredonia, Museo Nazionale Archeologico inv. nos. 1207, 1395); 2 weapon stele, max. height 90 cm (Manfredonia, Museo Nazionale Archeologico inv. nos. 0945-0949). Limestone (Tunzi 2011, 63, 65).

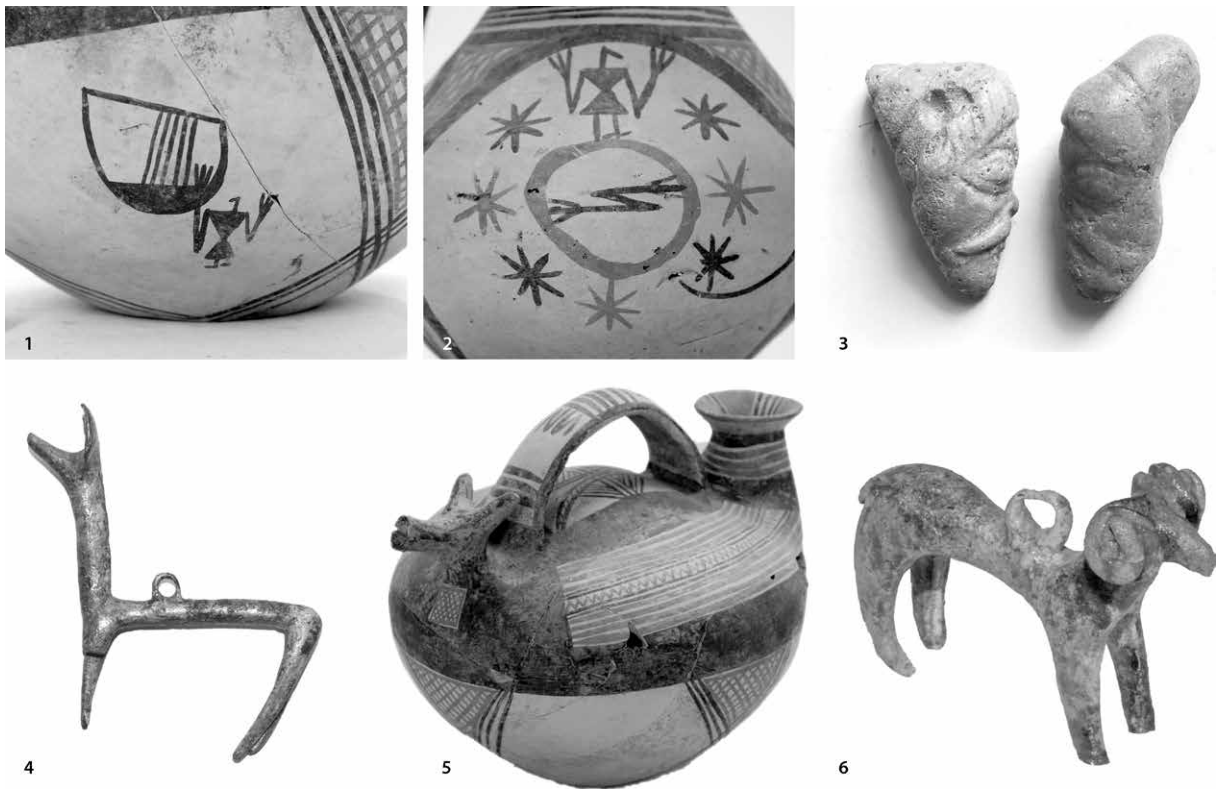


Figure 6. Ripacandida (prov. Potenza, Italy). Compilation of human (top row) and animal (bottom row) iconography. 1.2.5 pottery; 3 amber; 4.6 bronze). Not to scale (photographs: Christian Heitz).

hands in adoration?) or even divine (cf. Fig. 6, upper row, centre: Tagliente 1996, 41-45). This suggests that the local women especially were the keepers of stories and rituals, and thereby the guardians of the (spi)ritual well-being of the community. On the other hand, it seems unlikely that, although at least a large part of the male population, also at Ripacandida, was armed, these men can be termed ‘warriors’ as suggested by the *stelai*. Within such small, household-based communities, their main role was probably that of protectors of family and community and their belongings (including, *e.g.*, livestock) from any threat, both human and animal. Real combat weapons, such as swords, are very rare, and the frequent spears and knives are to be considered as all-purpose, everyday items rather than as indicators of a mainly martial occupation of their bearers. Their abundance and their occurrence in otherwise modestly equipped graves at Ripacandida speaks against their exclusiveness and primary function as status markers (this role, rather, seem to have taken over by bronze helmets and belts, as noted below; Heitz 2016; in press).

While the fundamental pattern of funeral (and most likely gender-based) body treatment outlined above is valid for the vast majority of the tombs of Ripacandida and the region (Heitz in press; for a rare and early deviation see Colucci 2009, 110), a more detailed view reveals some variations. A major factor of these variations is age: Young individuals can be identified by small and shallow tombs, occasionally equipped with miniature vessels and normally placed at the fringes of the different tomb clusters probably representing household units (Heitz 2014; in press). This may mirror their borderline status as not yet fully integrated members of these core groups.

Other graves suggest that elderly people (who, according to the still widely used anthropological age categorisation of Martin [1928] fall into the mature/senile stage, *i.e.* 41 years and older) may have lost gender-related social roles after their physical prime. In tombs 8 and 11 of the graveyard, two at least adult individuals (one clearly placed on the right side) were buried accompanied by a very reduced but wealthy set of goods, including fire spits, which are normally associated with weapons. They are likely to be old men who had lost their physical ability to fulfil their protective role while maintaining some of their earlier responsibility, that is, in preparing/consuming foodstuffs, such as meat (Heitz 2018). The individuals in tombs 8 and 11 thus seem to have changed their male identity into a less physically determined form due to reaching a new stage in their individual life course.

Diachronic dynamics

But there are hints that the gender conceptions described above were also subject to changes on the absolute, supra-individual time scale. From the 5th century BCE onwards at Ripacandida, special graves occur (*e.g.* tombs 36 and 48) of individuals placed on their right side but quite lavishly equipped with a ‘female assemblage’ (the green area of Fig. 4). These tombs are still part of the grave clusters. The deceased in these special tombs are, on the basis of their grave goods, very likely women. Since the basic equipment pattern concerning the objects and related tasks remain the same, gender-based conceptions seem to remain unaltered as well. It is likely that the costumes were highly symbolically charged and could not be exchanged between the genders (regardless of sex). The meaning of the respective costume elements can hardly be ascertained just on the basis of archaeological finds – for example, whether objects such as the silver hair spirals (*fermatrecce*), locally only occurring with adult individuals, served as signs of maternity. However, the way that their corpses were placed suggests that these 5th century BCE women of at least adult age at Ripacandida had acquired certain male associations. The richness of their assemblages and their firm rootedness in the grave clusters perhaps indicate the role of head of household. The grave goods



Figure 7. Ripacandida (prov. Potenza, Italy) tomb 82. Helmet, bronze, height approx. 16.5 cm (photograph: Christian Heitz).

may also point to the special skills and even ritual authority connected to these persons. The early 'preeminent' women are equipped with such extraordinary items as a needle, a spoon, a mortar(?), and loom weights in tomb 36 and a zoomorphic ram pendant in tomb 102, while in the second half of the 5th century BCE, in tomb 48, three amber beads in the shape of human faces were placed, while in tombs 59 and 66 also loom weights occur (Heitz in press). Thus, at least the skill of weaving seems to be shared by these women (Gleba *et al.* 2018).

Contemporary to these special deceased, other tombs also indicate a revision of traditional, 6th century BCE schemes of social roles and affiliation. Tombs 3 and 82 contain lavishly equipped individuals, equally placed on their right side. Unlike the aforementioned tombs, they are spatially isolated (the graves associated with tomb 3 being much later), which is a very uncommon feature at Ripacandida. The single inhumation of each tomb was accompanied by weapons (spearheads), as was the case with other males, but the most conspicuous pieces of both assemblages were the remains of helmets and broad bronze belts, so-called *cinturoni* (Bottini 1993; Romito 1995; Sannibale 1995). Thus, the two tombs, in their exceptional grave goods, show close similarities. Regarding the scarcity but, if present, connection of helmet and *cinturone* in the local cemetery, they may be regarded as some kind of special 'uniform'/costume, the more so since these objects, although martial in appearance, can only have served a symbolic purpose. Helmets of Apulo-Corinthian type, as the one in tomb 82 (Fig. 7) are, although in shape derived from functional Corinthian prototypes, of purely ornamental value, since the facial openings are reduced to a minimum (strongly hampering sight) or sometimes even completely eliminated, making it impossible to use them in combat (Bottini 1988). The broad and stiff

bronze *cinturoni* equally must have hampered movement in combat while barely protecting especially vulnerable body regions. Additionally, no known example is fitted with anything that might function as a baldric for a sword.

Traditional patterns of equipment and placement of the corpse change in the following century at Ripacandida. While in the 6th century BCE social roles acted on an egalitarian basis, with different responsibilities/tasks according to gender, in the 5th century BCE, some women seem to have acquired a higher social status within their household. That this came about with seniority is suggested by similar observations on the roles of aged women in other societies (Gilchrist 1999, 106-108). This seems quite contrary to what was encountered with old men, probably due to the 'main' male responsibility and source of authority being dependent on the ability to engage in physical protection and, correspondingly, their social age (and social esteem), which was largely determined by their physiological age (Heitz 2018).

As we do not know about the age of those individuals who were equipped with standardised and probably highly symbolic martial costume and detached from the traditional household structure, we cannot predict whether this changed (at least for some individuals) in the 5th century BCE. But within a context of otherwise fluid gender-related social roles, these helmet- and *cinturone*-bearers of the 5th century BCE seem to be the first indicators that the local community became part of a complex, overarching hierarchical structure.

Further observations made at Ripacandida may not only shed light on the question of the organisation of the local and the regional communities and their relationships, but even allow us to reflect on their economic basis. A number of facts shed doubt on the permanently sedentary character of the (entire) local community: (1) the earliest graves of the cemetery were those of women quite lavishly adorned with jewellery but with only a very reduced pottery set, (2) local pottery production started no earlier than some two generations after the first burials, (3) evidence for the use of the warp-weighted, probably stationary, loom starts to appear no earlier than the 5th century BCE, and (4) there is a rather low number of interments (also per cluster) within the two-century span of the use of the graveyard. Cross-cultural comparison of ethnographic observations has shown that mobile pastoralists share the basic structuring principle of their organisation into small, household-based units of mostly core families not exceeding some 8 to 10 persons (Heitz 2015). Women are responsible for the household and take over such tasks as low-scale, self-sufficient textile production; even if sheep are kept, most of the wool is sold. Men are responsible for stock keeping and the protection of both livestock and family (Heitz 2015). Different household units work together on an egalitarian basis (e.g. Barth 1961), but often a common head is elected or appointed to take decisions on communal issues, for example, the planning of routes and negotiations with strangers. If the household communities become part of a larger and more stratified (tribal) structure, these persons also act as representatives mediating between the local, or, rather, mobile, community and regional or inter-regional higher authorities. They may actually have to be confirmed by and report to these authorities, and in turn are rewarded, for example, with status symbols and weapons (Barth 1961, 28). It is feasible to tentatively suggest that at Ripacandida a similar social organisation prevailed – in the 6th century BCE with organisation based on egalitarian households, and in the 5th century BCE becoming connected to a regional hierarchy with local representatives. The isolation of the *cinturone*-bearers from the household grave clusters may have resulted from their detachment from their respective household group because of their overarching local status or may indicate that they were not part of the local community but delegates of a higher authority (Heitz 2016).

The wider regional framework

In order to discuss the hypotheses described above, the wider regional context has to be taken into account and evaluated with special reference to sites that show contemporary or slightly earlier features of social reorganisation.

At Braida di Vaglio (prov. Potenza, Italy), some 30 km south-west of Ripacandida (Fig. 1), a very rich necropolis of Archaic date was discovered (Bottini and Setari 2003). The small cemetery lies on a terrace under the settlement plateau of Serra di Vaglio (prov. Potenza, Italy), less than 1 km farther west (Greco 1980, 373; Ranaldi 1960). The graves are distributed over a relatively narrow time horizon, which comprises only a few generations within the 6th to 5th centuries BCE (Bottini and Setari 2003, 13). The necropolis consisted of a total of nine graves. All of the deceased were placed in semi-crouched position in wooden boxes or chambers. The arrangement of the burial objects in the tomb corresponds to the customs that are also found in other cemeteries of the region, including Ripacandida.

All of the graves are very richly equipped, regardless of the age and sex of the dead. The bones have been subjected to anthropological analysis. Grave 101 (second half 6th century BCE) contained the remains of a mature/senile man of about 60 years (Bottini and Setari 2003, 13; 23-32). In addition to numerous items of Greek pottery (especially *kylices* and 'Ionian' cups), its furnishings included Italian pieces. His costume was relatively modest, encompassing only some fibulae made of iron, but the equipment of tools and weapons is extraordinary: Besides a grater, several meat skewers, and a fire goat, the deceased was buried with three *cinturoni* and two swords, as well as a helmet, a shield, leg guards, and equestrian equipment. Tomb 105 (first half 5th century BCE), also of a mature man (approx. 50 years), shows similar characteristics (Bottini and Setari 2003, 57-63). The tableware consisted of Attic and Greek, even Greek-oriental style vessels and a share of Italian pottery; the grave also contained some bronze basins, roasting spits, and a fire dog. There were no fewer than three bronze belts, in addition to probably two swords, spearheads, and two Corinthian-style helmets, as well as the remains of a shield. Additionally, elements of a cart were found. A horse harness was found in tomb 103 (second half 6th century BCE), one of the rare double burials in the North Lucanian area (Bottini and Setari 2003, 41-51; Bottini and Setari 2013, 245-256): One individual was an approximately 40-year-old man. The mixed drinking set was accompanied by a grater, skewers, and a fire dog (tripod). The weapon set is limited to just two spearheads and defensive weapons of possibly purely representative/symbolic value: Beside remains of a shield and greaves, two helmets and no less than five *cinturoni* were found. Beside the man, the remains of a 12-year-old child, probably a girl due to the silver miniature brooches and amber pendants assigned to it, were placed. Even younger was the girl placed in tomb 102 (5th century BCE; Bottini and Setari 2003, 32-40). The body of the approximately seven-year-old girl was completely covered by some 300 amber pendants (including one in the shape of a winged sphinx) and almost 40 silver brooches. The child was also equipped with a golden diadem and golden *fermatrecce*. The vessel set completely resembled that of the adult deceased, and even a grater and meat preparation equipment such as skewers and a fire dog were part of the equipment. Tombs 107 (second half 6th century BCE; c. 40-year-old man; Bottini and Setari 2003, 66-74), 108 (first half 5th century BCE; c. 60-year-old man; Bottini and Setari 2003, 75-80; cf. Bottini and Setari 2013, 257-260) and 109 (5th century BCE; c. 30- to 40-year-old man; Bottini and Setari 2003, 80-83) each contained the corpse of a fully armed man, including helmets, *cinturoni*, and swords. The ceramic assemblage, as usual, combines Greek- and Italian-style drinking utensils. Bronze basins and skewers, often in combination with fire dogs, are also standard.

Tomb 106 contained the only burial of an adult woman in the entire necropolis (5th century BCE; Bottini and Setari 2003, 63-66). The mature/senile woman of about

60 years of age was equipped with Greek- and Italian-style drinking utensils, bronze basins, a grater, and skewers, showing no difference with the male assemblages. One of her bronze basins showed an Etruscan inscription, suggesting that the object was the subject of an elite gift exchange (Torelli in Bottini and Setari 2003, 116). It would be very interesting to know whether the woman was part of an elite system of intermarriage. The jewellery ensemble is of a particularly exquisite character. Besides *fermatrecce* of thin gold wire, 74 small gold and 24 amber beads, probably distributed on two chains, as well as two ivory discs, were placed with the woman. Whether the latter were worn as decorative pendants on belts or served as discoid spinning whorls is not certain. However, the very different diameters (and thus also weights) may indicate the latter, in order to obtain diverging yarn thicknesses (Bottini and Setari 2003, 66). In addition, two large amber pendants in the shape of the head of a satyr (with moustache) and a maenad or nymph were found. The disc-shaped pendants and especially the amber heads can be compared with the analogous pieces from tomb 48 at Ripacandida (cf. Fig. 6).

None of Braida's female interments are equipped with textile tools, and many of the martially equipped males are much beyond their physical prime. This either indicates completely different types of gender- and age-related occupations at the different sites or that within the necropolis of Braida, status was not achieved through personal performance. Unlike at Ripacandida, where the community was structured in groups of gendered physiological/social age performing different social responsibilities, neither age nor performance played a role in the cluster of rich burials at Braida. Instead, egalitarian strategies for gaining authority were abandoned. Children clearly point to an inter-generational connection between the individuals in this group, and thus to their hereditary affiliation or dynastic structure. However, a cluster structure reflecting household units is not visible, neither in terms of age nor in terms of sex and gender distribution. All tombs are associated with (prestigious) elite 'banqueting equipment'. As a social category, only gender seems to have played a role, specifically in the massive over-representation of males. The almost complete lack of women may indicate that prominent status at Braida was increasingly a male domain.

The vast majority of the objects and iconography associated with the deceased at Braida (men as well as girls) are of Greek character, which reflects their good access to foreign items. The only clear and direct hint of Italian connections is an Etruscan bronze basin in the grave of the mature woman. The finds suggest that the site was a centre of supra-regional elite power, connected both to the indigenous population and to the foreign (Greek as well as Etruscan) elites, and at least developing or aspiring towards institutionalised and hereditary structures, for which possibly traditional symbolic schemes were manipulated. For instance, *fermatrecce* at other sites, like Ripacandida, are only associated with adult women, while at Braida they occur with a girl.

That these new (emerging) indigenous elites primarily interacted with Greeks and shaped themselves according to the Greek model is also exemplified in the architectural design of a building erected in the vicinity of the elite necropolis (Fig. 8). The so-called 'sanctuary' of Braida is a large, rectangular building of 12 × 24 m, with a stone foundation supporting a brick or timber frame wall and a tiled roof. It dates back to the beginning of the 6th century BCE and shows traces of a slab floor, at a time when the nearby settlement of Serra consisted of simple huts (Lo Porto and Ranaldi 1990, 297). The visually most outstanding element of the building is its decoration. It features a clay frieze in which two warriors armed with lance and shield face each other in a duel, each accompanied by a mounted squire holding another, riderless horse (Fig. 9,1; Lo Porto and Ranaldi 1990, 302 Fig. 3; Osanna 2013b, 96-98 Fig. 9). This depiction clearly shows the work of Greek craftspeople – such reliefs are otherwise only known in contemporary southern Italy at the temple buildings at

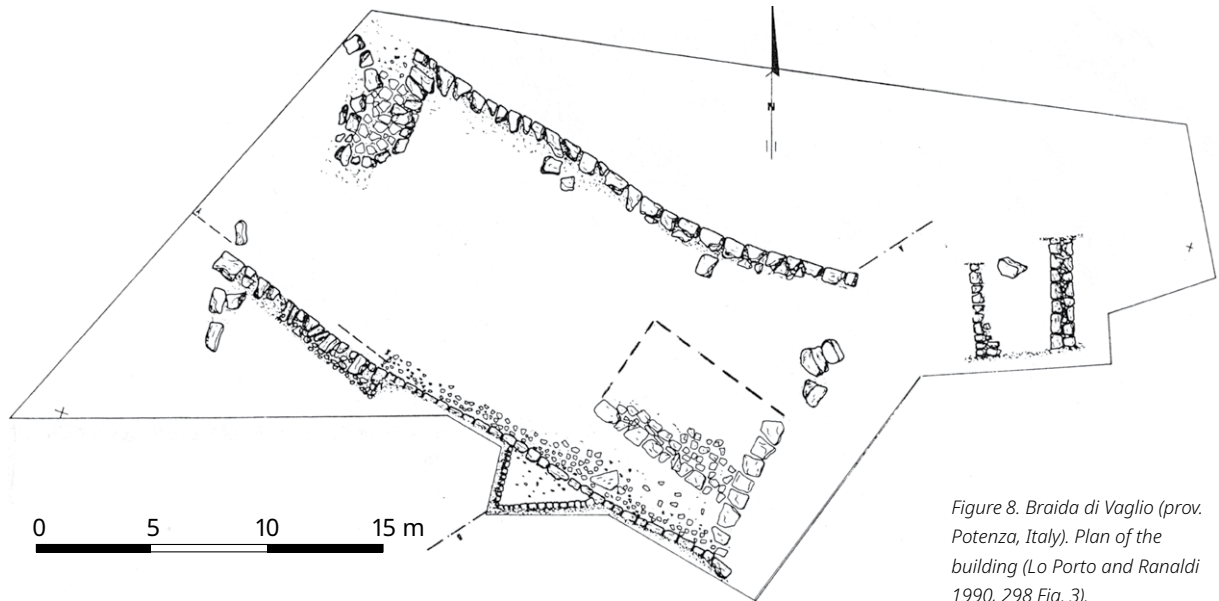


Figure 8. Braida di Vaglio (prov. Potenza, Italy). Plan of the building (Lo Porto and Ranaldi 1990, 298 Fig. 3).

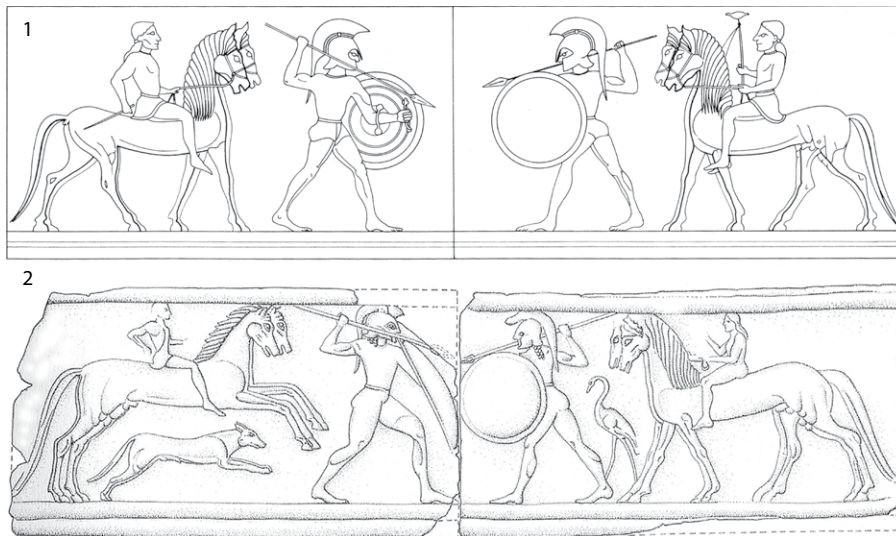


Figure 9. Comparison of Terracotta friezes. 1 Braida di Vaglio (prov. Potenza, Italy); 2 Torre di Satriano (prov. Potenza, Italy). Not to scale (1 Lo Porto and Ranaldi 1990, 300 Fig. 4; 2 Osanna 2009, 163 Fig. 8).

Metaponto (Mertens 2006, 92-93). With regard to the appellation of the building as a sanctuary, however, it must be noted that votives are largely absent. The ceramic inventory consisted of large *pithoi* and imported vessels, such as Ionian cups, as well as Italian pottery mainly suited for drinking and eating (Russo Tagliente 1992, 79-81; Lo Porto and Ranaldi 1990, 297). Madeleine Mertens-Horn (1990, 79-80) suggests that the structure was not a shrine in the true sense of the word, but rather a kind of 'meeting place', where people 'dined and drank, but did not primarily carry out ritual acts for a certain deity'. Urte Steininger (1996, 262-264) plausibly argues for the interpretation of the building as a banqueting house, especially in view of the slabs along the southern wall, possibly to be interpreted as a *klinai* foundation.

The structure at Braida, with its frieze, layout, building technique, and possible function has certain parallels with a recently uncovered building at Torre di Satriano (prov. Potenza, Italy), the so-called *anaktoron* (Fig. 10). The rectangular building, with *pisé* walls on a stone base, was constructed in the middle of the 6th century BCE (Osanna 2013a, 55-63). The earliest structure consisted of three parts: a large hall with a vestibule and a longitudinally placed entrance hall along the west side (dimensions of this core building approx. 13 × 19m). It was rebuilt twice before its abandon-

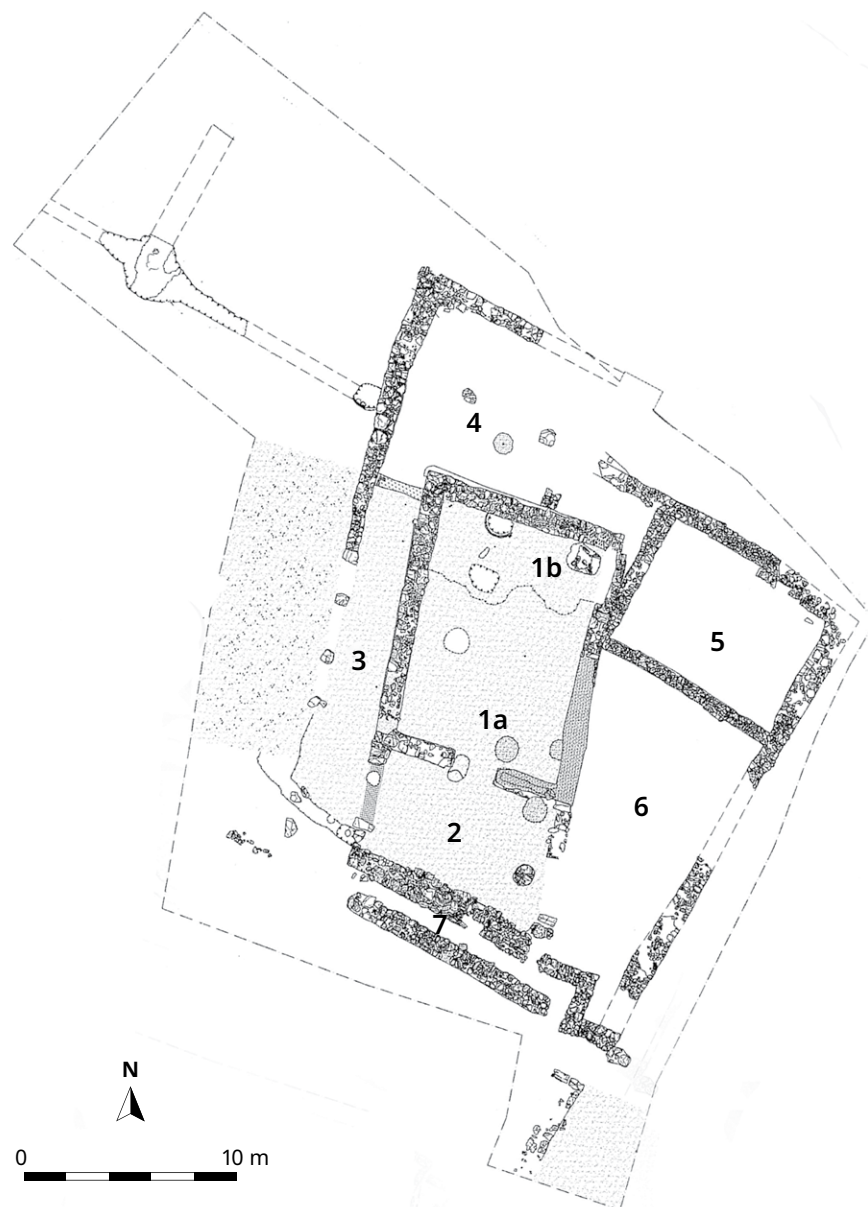


Figure 10. Torre di Satriano (prov. Potenza, Italy). Plan of the anaktoron (Ferreri et al. 2013, 188 Fig. 1).

ment in the 5th century BCE (Capozzoli 2009, 144-149; Colangelo 2009, 15; Osanna 2013c, 121-129; Ferreri and Vullo 2013, 116). By the end of the 6th century BCE, three further, partially open rooms had been added, one with storage vessels (Osanna 2013a, 57-59; Ferreri and Vullo 2013, 102 Fig. 4).

The roof had a terracotta frieze depicting two similar scenes directed in opposite directions (Fig. 9,2; Osanna and Scalici 2011, 672). One shows a pair of galloping horses, with a young man sitting on the front horse and a dog running below. Just in front of it, a large warrior with a round shield and Corinthian helmet steps in the same direction, his right arm raised, wielding a spear in attack. In the second scene, the events are almost repeated. Taken together, a duel of two warriors appears, each accompanied by two horses and a young man (Osanna 2009; 2013b, 83-98; cf. Setari 2009). That this roof design was at least partly carried out by Greeks is indicated not only by the style of the terracotta frieze, but also by the inscriptions (short builder's marks) found on the roof tiles. They were written in Laconian dialect, suggesting the presence of craftspeople from Taranto (Capozzoli 2009; Baglivo 2013; Osanna 2013b,

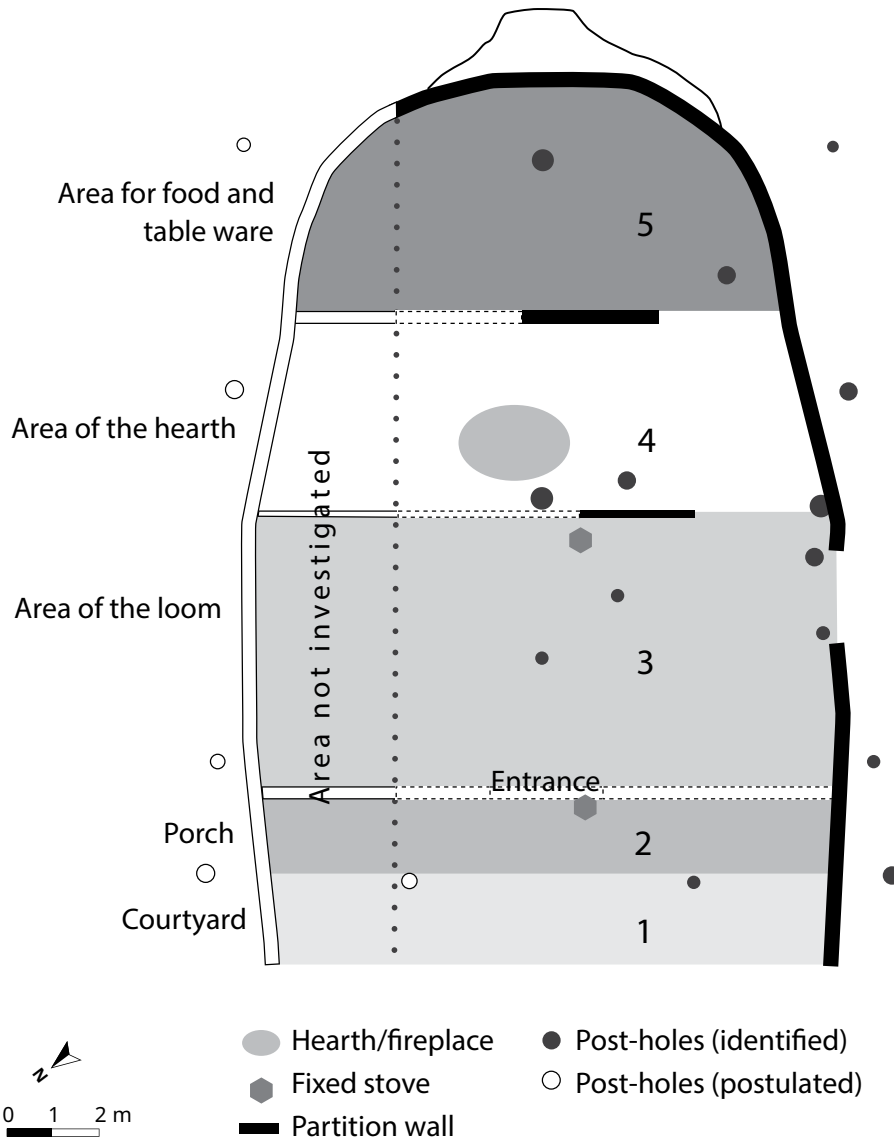


Figure 11. Torre di Satriano (prov. Potenza, Italy). Plan of the residenza ad abside with activity zones (Carollo 2009, 20 Fig. 1).

88-98). Unfortunately, the contemporary tombs directly associated with the building were not published in the same detail. Although richly equipped, they do not rival those of Braida. The gender of the deceased was not determined anthropologically, but it seems that here, too, men and children predominate. The ceramic goods are a mixture of indigenous vessels and especially Greek drinking gear (Scalici 2012; 2013), just like within the *anaktoron*, where more than 100 drinking cups (mainly ‘Ionian’ cups B2, but also, e.g., *Kleinmeisterschalen*) and many other banqueting vessels (e.g. a high quality black-figure crater) were found. These were located almost exclusively in room 1a (the so-called ceremonial hall) and room 2 (the vestibule), while pottery of indigenous Italian style was relatively rare (Ferreri and Vullo 2013). When visitors entered the building, after passing the transverse entrance hall (room 3), they reached the vestibule, in which obviously high quality Greek drinking utensils were stored and displayed. A necklace of gold beads and small, partly zoomorphic (resting lion) gold pendants also comes from this room (Guzzo 2013, 159-162). In the eastern part of the vestibule there was a round ‘*altar*’, which was possibly used for sacrificial ceremonies, such as libations (Osanna 2013c, 129). By passing through a huge, bronze-framed wooden door (Osanna 2013c, 117-124 Figs. 4, 5), it was then

possible to enter the ceremonial hall, also equipped with prestigious tableware. In the rearmost part of the building, a small storeroom, room 1b, was located, partly divided from the ceremonial hall. It also contained precious objects, but of a slightly different character, including a silver bird-shaped brooch and a glass paste bead that could be interpreted as female status symbols. In contrast, a large iron axe and the remains of a wooden bow, both of which are rarely found, have a more ‘male’ appearance (Osanna 2013a, 59-61). Of particular note is the blade of a prehistoric stone axe, equipped with a small hole possibly in order for it to be worn as a pendant. It is striking that most of the items from this room seem to be of indigenous tradition, even referring to prehistoric times. This differs a lot from the objects displayed in the ‘public’ part of the building, which suggest the presence of a Greek-oriented elite and the practice of banqueting (Osanna 2015).

In fact, the furnishings of this small, rear room more closely resemble the finds of a local predecessor of the *anaktoron* (Fig. 11). Discovered only some 500 m away, an exceptionally large but typically indigenous apsidal hut (*residenza ad abside*) shows completely different characteristics. This building, used between the late 8th century BCE and the first third of the 6th century BCE, closely resembles Italian Iron Age traditions in its construction. It shows an internal subdivision, which suggests metal processing and grinding of grain, as well as wool processing (combing, *etc.*) in the front yard, while in the portico such activities as preparation of food (cutting meat) and weaving of textiles took place. Farther inside, the hearth was located, separated by an internal wall. The rearmost part, again separated by a wooden internal wall, was perhaps the private area of the owners and served as a storage area for prestige goods (Osanna and Scalici 2011, 671-72; Osanna 2013a, 53-55). The scientific analysis of an impasto vessel of the first third of the 6th century BCE from the hut detected traces of wine (Pepe *et al.* 2009, Fig. 2), possibly already indicating (social) beverage consumption. It also seems significant that in the *residenza ad abside* a large loom was situated in the main room, while in the later *anaktoron* only some loomweights were found in the entrance porch (Ferreri 2009, 187-88). This may indicate that in such large banqueting or meeting structures of probably supra-regional and inter-cultural character, the primary focus increasingly shifted to the male.

Discussion

To sum up: Local (possibly seasonal) ‘village communities’ such as Ripacandida were, until the 5th century BCE, likely to be based on egalitarian principles, strongly influenced by notions of age and gender and thus retaining traditional structures of community integration for a longer period of time. But in the course of the emergence of regional elites, as at Braida di Vaglio and Torre di Satriano, those small communities became part of larger social groups and dependent on the superordinate (central) elites, with local intermediaries acting as mediators to the central authority – a process that also deeply influenced and altered the underlying principles of social structuration and in particular gender roles.

From the 7th to 5th centuries BCE, changes can be observed regarding gender roles and their significance in indigenous south(-east)ern Italy. As the analysis of the small and local community of Ripacandida has shown, in the late 7th and 6th century BCE it seems to have been based on small kinship or household groups, in each of which the members took over tasks, often according to gender and age, such as textile production, and possibly relating to the (spi)ritual well-being of the community (in the case of women; Saltini Semerari 2008, 128; Markantonatos 1998) or its physical protection (in the case of men; Heitz *in press*). Over the course of time, a gradual shift is noticeable, less in terms of gender conceptions and gender

roles in general, and more in the way they are played out at different levels of time and space. At Ripacandida, the 'special' female burials suggest the enlargement of female authority within the respective households in the 5th century BCE, possibly connected to the advanced age of these women and their resulting supra-generational authority/competence (cf. Foxhall 1994, 136). At the same time, however, males occur who, at least in the placement of their tombs, were dispatched from the traditional household structure and almost uniformly equipped with prestigious and precious items of non-local but Italian origin and (in the case of the Apulo-Corinthian helmets) Greek inspiration.

Comparing this situation with contemporary centres that were obviously inhabited by an (emerging) elite, such as Braida di Vaglio and Torre di Satriano, it is apparent that at these sites women and their social responsibilities had been marginalised and male ideology had become dominant by the 6th century BCE. As this is accompanied by increased evidence of Greek or Greek-style objects and iconography, it is feasible to assume that these changes were triggered or enhanced by contact and interaction with the newcomers. The complex situation of indigenous societal development happening at the same time as the creation or augmentation of (inter)regional control by powerful elites and the contemporary establishment of foreign settlements at the coasts – with new cultural elements and their own conceptions, not least regarding gender – probably created a very challenging atmosphere and triggered new social developments.

This seems to have gone hand in hand with a reduction of the importance or relevance of certain sources of female authority within the framework of traditional Iron Age/Archaic southern Italian society, at least in terms of outward/external influence. The reasons may be rooted in the indigenous gender conceptions and responsibilities. Marina Markantonatos (1998) has already rightly stressed the fact that especially the burial evidence suggests that indigenous women in southern Italian Iron Age communities, and indeed also in the context of prime contact with newcomers, probably held or could acquire an important position as bearers of 'ceremonial paraphernalia' (the settlement evidence gathered and presented by her is much more debatable). This fits well into an important social role postulated for the females on the basis of the findings at Ripacandida. At this small site, with its rather egalitarian structure, this role manifested itself as keeper of the household unit, associated with safeguarding its well-being on a spiritual level, a task probably deeply rooted in local customs and traditions. In more socially stratified indigenous Iron Age contexts, as discussed by Markantonatos, such objects indeed are likely to have been used as symbols of the power and rank of powerful elite women. She also stresses the fluidity of gender differentiation, something that in the above considerations was also argued for in the context of smaller, less-elitist communities. It is very likely that especially during contact with new cultural elements and ideas, the role of women as spiritual authorities may have been enhanced – not to speak of their function as cultural mediators in the context of 'mixed' personal relationships/inter-marriage with foreigners – a practice that may already have been customary within indigenous social networks, as the bronze basin of the woman in Braida discussed above may suggest (Markantonatos 1998).

On the other hand, however, the findings seem to suggest that the self-conception of male members of the local community at Ripacandida and elsewhere was, rather, based on activities such as the warding off and dealing with potentially hostile environmental conditions in natural, animal, and human form. In their external engagement, they were at least equally likely to come into contact with foreign elements – in this cultural situation most probably men from the newly established coastal Greek *poleis*. These contact persons, for their part, who most likely come from a rather patriarchal background, were probably used to dealing with men rather than women as appropriate partners in trade, commerce, and festivities – in

a much more exclusive way than, for instance, Etruscans or indeed (judging from the indifferent pottery grave goods) the inhabitants of southern Italy. This complex situation, however, in the end could have led to the male side of Italian societies being strengthened and the authority of the female side being increasingly limited, in these foreign encounters and beyond. This suggestion does not run counter to the observation that in 6th century BCE hinterland southern Italy, females frequently were buried with Greek objects (Saltini Semerari 2008). Quite the opposite, it illustrates that in the given situation, indigenous women tried to maintain their traditionally important status by adapting to the new forms of status display.

Ethnological comparison (tentative ...)

That the above discussion is not a mere 'hypothetical thought experiment' is demonstrated by a final example, which shows that such a development is not unique. A fundamentally similar process can be seen in recent 'colonial' contexts. Without being able to go deeper into this issue, and bearing in mind the risk involved in drawing a comparison with a context characterised by a strong political power bias, some of the points encountered here may be comparable. After the establishment of British colonial rule in northern Kenya in 1890 and its end in 1963, the egalitarian culture of the pastoral communities of the Borana underwent significant changes (Guyo 2017). Pre-contact Borana society was traditionally guarded by the so-called Gada system. Men and women were ascribed different social roles, but the male and female spheres were deeply interwoven and one was no less valued than the other. The former was responsible for building *kraals* and defending them, as well as, for example, water sources and religious shrines, while the latter was in charge of child rearing, cooking, hut construction, as well as livestock keeping and management. Although men exercised greater formal power, women had a strong 'backstage' influence. The British and colonial officials (even when power was exercised in the form of indirect rule), however, were just interested in contact with males, as the political realm and external affairs on both sides were dominated by them and the Borana men were the ones who could provide services demanded by the British – within the army, as workers, as transportation agents, and the like. The duties of women were of no interest to them. This led to an increase in the influence, privileges, and dominance of the Borana men, not only in their encounters with colonial officials, but also in terms of a raised self-esteem and indeed a feeling of superiority in the indigenous realm, especially regarding gender constellations. Thus the new situation of cultural (and in this case also colonial) contact strongly, although not always wittingly, bolstered the already existing, albeit minor, inequalities in Borana society, leading to a disempowerment of women.

I am not arguing that the situation of the Borana people under British colonial rule in Kenya is straightforwardly analogous to what happened in Archaic southern Italy – many variables certainly differ considerably. We do not know, for instance, whether the new situation in Archaic southern Italy at least in some instances and in special contexts may have led also to a local empowerment of women, as in the case of 5th century BCE preeminent females acting as household heads, possibly because the male family members were absent, in the service of indigenous chiefs. Their new status runs counter to the observations made on the subjective time layer for males who seem to have lost status at an advanced age. On the other hand, however, some men seem to have acquired supra-household authority connected to supra-regional networks, also probably mirroring their empowerment and engagement in a (probably newly created) hierarchical context.

Concluding remarks

Although there is still much to be clarified, I wanted to show that it is the temporal and spatial context in which gender conceptions and roles are developed and on which they are adapted. Gender is no long-term, monolithic concept, but is constantly negotiated on the basis of everyday practice – and can be subject to quick and pragmatic as well as more fundamental changes. It is not unlikely that the encounter with the Greeks sent a shockwave through the web of gender conceptions of the indigenous societies, causing or influencing a process that, over the course of decades and centuries, deeply altered traditional/previous gender conceptions.

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References

- Appleby, Jo 2018. Ageing and the Body in Archaeology. *Cambridge Archaeological Journal*, 28, 1, 145-163. doi: <10.1017/S0959774317000610>, e-published 28 September 2017.
- Baglivo, Bruno 2013. Un ergasterion tarantino a Torre di Satriano: installazioni artigianali per il tetto dell'anaktoron. In: Osanna, Massimo, and Vullo, Mariasilvia (eds). *Segni del potere. Oggetti di lusso dal Mediterraneo nell'Appennino lucano di età arcaica. Exhibition Potenza. Polieion*. Venosa: Osanna Edizioni, 69-73.
- Barth, Fredrik 1961. *Nomads of South Persia. The Basseri Tribe of the Khamseh Confederacy*. Bulletin Universitetets Etnografiske Museum Oslo 8. Oslo: Oslo University Press.
- Bottini, Angelo 1979. Una nuova necropoli nel Melfese e alcuni problemi del periodo arcaico nel mondo indigeno. *Annali dell'Istituto universitario orientale di Napoli. Dipartimento di studi del mondo classico e del Mediterraneo antico. Sezione di archeologia e storia antica*, 1, 77-94.
- Bottini, Angelo 1986. Scavi e scoperte. Ripacandida. *Studi etruschi*, 52, 480-481.
- Bottini, Angelo 1988. Apulisch-korinthische Helme. In: Bottini, Angelo, Egg, Markus, and von Hase, Friedrich-Wilhelm (eds). *Antike Helme. Sammlung Lipperheide und andere Bestände des Antikenmuseums Berlin*. Monographien RGZM 14. Mainz: Verlag des Römisch-Germanischen Zentralmuseums, 107-136.
- Bottini, Angelo 1993 (ed.). *Armi. Gli strumenti della guerra in Lucania. Exhibition Melfi*. Le mostre, i cataloghi 2. Bari: Edipuglia.
- Bottini, Angelo 1999. Principi e re dell'Italia meridionale arcaica. In: Ruby, Pascal (ed.). *Les princes de la Protohistoire et l'émergence de l'État. Actes de la table ronde internationale organisée par le Centre Jean Bérard et l'École française de Rome, Naples, 27-29 octobre 1994*. Collection du Centre Jean Bérard 17 = CEFR 252. Naples: Centre Jean Bérard, 89-95.

- Bottini, Angelo, and Setari, Elisabetta 1995. *Basileis. Antichi re in Basilicata. Exhibition Rome 1995/6*. Naples: Electa.
- Bottini, Angelo, and Setari, Elisabetta 2003. *La Necropoli italica di Braida di Vaglio in Basilicata. Materiale dallo Scavo del 1994 con una Appendice di Mario Torelli e Luciano Agostiniani*. Monumenti antichi. Serie miscellanea 7. Rome: Bretschneider.
- Bottini, Angelo, and Setari, Elisabetta 2013. Braida di Vaglio. Le tombe 103 e 108. In: Osanna, Massimo and Vullo, Mariasilvia (eds). *Segni del potere. Oggetti di lusso dal Mediterraneo nell'Appennino lucano di età arcaica. Exhibition Potenza. Polieion*. Venosa: Osanna Edizioni, 245-260.
- Capozzoli, Vincenzo 2009. I rivestimenti fittili dell'anaktoron di Torre di Satriano: le coperture e le decorazioni architettoniche. In: Osanna, Massimo, Colangelo, Lucia, and Carollo, Gianfranco (eds). *Lo spazio del potere. La residenza ad abside, l'anaktoron, l'episcopio a Torre di Satriano. Atti del secondo convegno di studi su Torre di Satriano, Tito, 27-28 settembre 2008*. Archeologia. Venosa: Osanna Edizioni, 127-156.
- Carollo, Gianfranco 2009. La residenza ad abside: la struttura, l'organizzazione degli spazi, le fasi. In: Osanna, Massimo, Colangelo, Lucia, and Carollo, Gianfranco (eds). *Lo spazio del potere. La residenza ad abside, l'anaktoron, l'episcopio a Torre di Satriano. Atti del secondo convegno di studi su Torre di Satriano, Tito, 27-28 settembre 2008*. Archeologia. Venosa: Osanna Edizioni, 19-32.
- Colucci, Rosanna 2009. L'area bradanica: contesti funerari da Matera. In: Osanna, Massimo, and Scalici, Michele (eds). *Lo spazio della memoria. Necropoli e rituali funerari nella Magna Grecia indigena. Atti della Tavola rotonda, Matera 11 dicembre 2009 = Siris, 10, 99-112*.
- Colangelo, Lucia 2009. Le necropoli arcaiche di Torre di Satriano. Distribuzione delle tombe e rituale funerario. In: Osanna, Massimo, and Scalici, Michele (eds). *Lo spazio della memoria. Necropoli e rituali funerari nella Magna Grecia indigena. Atti della Tavola rotonda, Matera 11 dicembre 2009 = Siris, 10, 2009, 7-19*.
- Cuozzo, Mariassunta 2016. Theoretical issues in the interpretation of cemeteries and case studies from Etruria to Campania. In: Perego, Elisa, and Scopacasa, Rafael (eds). *Burial and social change in first-millennium BC Italy: approaching social agents*. Studies in funerary Archaeology 11. Oxford: Oxbow, 3-30.
- D'Agostino, Bruno 1998. Greek and Indigenous People in Basilicata from the 8th to the 3rd Century B.C. In: Nava, Maria Luisa, and D'Agostino, Bruno (eds). *Treasures from the South of Italy. Greeks and Indigenous People in Basilicata. Exhibition Strasbourg*. Milano: Skira, 25-57.
- Ferreri, Gianclaudio 2009. I manufatti: presentazione preliminare delle classi. In: Osanna, Massimo, Colangelo, and Lucia, Carollo, Gianfranco (eds). *Lo spazio del potere. La residenza ad abside, l'anaktoron, l'episcopio a Torre di Satriano. Atti del secondo convegno di studi su Torre di Satriano, Tito, 27-28 settembre 2008*. Archeologia. Venosa: Osanna Edizioni, 183-191.
- Ferreri, Gianclaudio, and Vullo, Mariasilvia 2013. L'arte del convivio, fra rappresentanza e prassi. I manufatti in ceramica dall'anaktoron di Torre di Satriano. In: Osanna, Massimo, and Vullo, Mariasilvia (eds). *Segni del potere. Oggetti di lusso dal Mediterraneo nell'Appennino lucano di età arcaica. Exhibition Potenza. Polieion*. Venosa: Osanna Edizioni, 99-116.
- Ferreri, Gianclaudio, Guzzo, Piero Giovanni, Osanna, Massimo and Vullo, Mariasilvia 2013. I manufatti dell'anaktoron. In: Osanna, Massimo, and Vullo, Mariasilvia (eds). *Segni del potere. Oggetti di lusso dal Mediterraneo nell'Appennino lucano di età arcaica. Exhibition Potenza. Polieion*. Venosa: Osanna Edizioni, 187-229.
- Foxhall, Lin 1994. Pandora Unbound: A Feminist Critique of Foucault's History of Sexuality. In: Cornwall, Andrea, and Lindisfarne, Nancy (eds). *Dislocating Masculinity: Comparative Ethnographies*. New York: Routledge, 133-146.

- Gilchrist, Roberta 1999. *Gender and Archaeology: Contesting the Past*. London: Routledge.
- Ginn, Jay, and Arber, Sara 1995. "Only connect": gender relations and ageing. In: Arber, Sara, and Ginn, Jay (eds). *Connecting Gender and Ageing: a Sociological Approach*. Buckingham: Open University Press, 1-14.
- Gleba, Margarita, Heitz, Christian, Landenius Enegren, Hedvig, and Meo, Francesco 2018. At the Crossroads of Textile Cultures: Textile Production and Use at the South Italian Archaic Site of Ripacandida. *Journal of Mediterranean Archaeology*, 31.1, 27-51.
- Greco, Giovanna 1980. Le fasi cronologiche dell'abitato di Serra di Vaglio. In: Lattanzi, Elena (ed.). *Attività archeologica in Basilicata – Scritti in onore di Dinu Adamesteanu*. Matera: META, 367-404.
- Guyo, Fatuma B. 2017. Colonial and post-colonial changes and impact on pastoral women's roles and status. *Pastoralism: Research, Policy and Practice*, 7, 13. doi: <10.1186/s13570-017-0076-2>; e-published 2 Juni 2017.
- Guzzo, Pier Giovanni 2013. Parate come dee. Oggetti di ornamento in oro e in argento dall'anaktoron di Torre di Satriano. In: Osanna, Massimo, and Vullo, Mariasilvia (eds). *Segni del potere. Oggetti di lusso dal Mediterraneo nell'Appennino lucano di età arcaica. Exhibition Potenza. Polieion*. Venosa: Osanna Edizioni, 159-162.
- Heitz, Christian 2014. Ripacandida – an indigenous graveyard and the Greek periphery. *Accordia Research Papers*, 14, 103-121.
- Heitz, Christian 2015. The archaeology of mobile pastoralism: The use of social and material evidence for the detection of an ancient economy in Archaic southern Italy. *Ethnographisch-Archäologische Zeitschrift*, 56, 135-164.
- Heitz, Christian 2016. Von „ganzen Häusern“ zu großen Männern? Beobachtungen zu Veränderungen in der Struktur süditalischer Gemeinschaften in archaischer Zeit am Beispiel der Nekropole von Ripacandida/Basilicata. *Bulletin antieke beschaving. Annual Papers on Classical Archaeology*, 91, 43-67.
- Heitz, Christian 2018. No Country for Old Men? Gender and Age in a small Archaic Southern Italian Community. In: Herring, Edward, O'Donoghue, Eòin (eds). *The Archaeology of Death. Proceedings of the Seventh Conference of Italian Archaeology held at the National University of Ireland, Galway, April 16-18, 2016*. Papers in Italian Archaeology 7. Oxford: Archaeopress, 254-262.
- Heitz, Christian, in press. *Gesellschaft und Wirtschaft im archaischen Süditalien – Ein Modell zu Identität und Hexis, ausgehend von Ripacandida und weiteren binnländischen Gemeinschaften*. Italikà Series. Wiesbaden: Reichert.
- Hoernes, Matthias, Heitz, Christian and Laimer, Manuele 2018. Revisiting the Dead: Tomb Reuse and Post-Burial Practices at Ascoli Satriano (Pre-Roman Apulia, Seventh-Fourth Century BC). *Cambridge Archaeological Journal*, first view. doi: <10.1017/S0959774318000537>, e-published 6 December 2018.
- Hofmann, Kerstin P. 2008. Ritual und Zeichen. Zum Umgang des Menschen mit dem Tod anhand eines Fallbeispiels. In: Kümmel, Christoph, Schweizer, Beat, and Veit, Ulrich (eds). *Körperinszenierung – Objektsammlung – Monumentalisierung: Totenritual und Grabkult in frühen Gesellschaften. Archäologische Quellen in kulturwissenschaftlicher Perspektive*. Tübinger archäologische Taschenbücher 6. Münster: Waxmann, 353-374.
- Hofmann, Kerstin P. 2009. Grabbefunde zwischen sex und gender. In: Rambuscheck, Ulrike (ed.). *Zwischen Diskursanalyse und Isotopenforschung – Methoden der archäologischen Geschlechterforschung. Bericht 3. Sitzung AG Geschlechterforschung, 78. Tagung des Nordwestdeutschen Verbandes für Altertumsforschung, Schleswig 2007*. Frauen – Forschung – Archäologie 8. Münster: Waxmann, 133-161.
- Hofmann, Kerstin P. 2012. Der Identität ihr Grab? Zur archäologischen Identitätsforschung anhand bronzezeitlicher Bestattungen des Elbe-Weser-Dreiecks. In:

- Heske, Immo, and Horejs, Barbara (eds). *Bronzezeitliche Identitäten und Objekte. Beiträge aus den Sitzungen der AG Bronzezeit auf der 80. Tagung des West- und Süddeutschen Verbandes für Altertumsforschung in Nürnberg 2010 und dem 7. Deutschen Archäologiekongress in Bremen 2011*. Universitätsforschungen zur prähistorischen Archäologie 221. Bonn: Habelt, 13-25.
- Keith, Jennie 1985. Age in anthropological research. In: Binstock, Robert H., and Shanas, Ethel (eds). *Handbook of Aging and the Social Sciences*. New York: Van Nostrand Reinhold, 231-63.
- Lo Porto, Felice G., and Ranaldi, Francesco 1990. Le “lastre dei cavalieri” di Serra di Vaglio. *Monumenti Antichi Serie Miscellanea*, 3, 6, 291-317.
- Markantonatos, Marina J. 1998. Women’s roles in Iron Age Basilicata, south Italy. In: Whitehouse, Ruth D. (ed.). *Gender and Italian Archaeology: challenging the stereotypes*. Accordia Specialist Studies on Italy 7. London: Accordia Research Institute UCL, 181-195.
- Martin, Rudolf 1928. *Lehrbuch der Anthropologie in systematischer Darstellung*. Jena: Fischer.
- Mertens, Dieter 2006. *Städte und Bauten der Westgriechen. Von der Kolonisationszeit bis zur Krise um 400 vor Christus*. Munich: Hirmer.
- Mertens-Horn, Madeleine 1992. Die archaischen Baufriese aus Metapont. *Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung*, 99, 1-122.
- Montanaro, Andrea C. 2008. La “nascita dei principes” in Daunia e le influenze dell’Orientalizzante tirrenico: alcune riflessioni. *Taras*, 27/28, 7-48.
- Montanaro, Andrea C. 2016. Non solo ornamenti. Parures e oggetti-simbolo dalle tombe dei principi indigeni dell’area apulo-lucana. In: Negroni Catacchio, Nuccia (ed.). *Preistoria e protostoria in Etruria. Ornarsi per comunicare con gli uomini e con gli dei. Gli oggetti di ornamento come status symbol, amuleti, richiesta di protezione. Ricerche e scavi. Atti del Dodicesimo Incontro di Studi, Valentano (VT) – Pitigliano (GR), 12-14 Settembre 2014*. Milano: Centro Studi di Preistoria e Archeologia, 503-528.
- Morris, Owain 2016. Quid in nomine est? What’s in a name: re-contextualizing the princely tombs and social change in ancient Campania. In: Perego, Elisa, and Scopacasa, Rafael (eds). *Burial and social change in first-millennium BC Italy: approaching social agents, gender, personhood and marginality*. Studies in funerary Archaeology 11. Oxford: Oxbow, 139-159.
- Norman, Camilla 2009. Warriors and weavers: sex and gender in Daunian stelae. In: Herring, Edward, and Lomas, Kathryn (eds). *Gender Identities in Italy in the First Millennium BC*. BAR International Series 1983. Oxford: Archaeopress, 37-54.
- Obojes, Lisa 2018. Only princes in Daunia? Critical considerations on the conception of the ‘elite’ in Iron Age North-Apulia on the basis of the so-called tombe principesche. In: Herring, Edward, and O’Donoghue, Eòin (eds). *The Archaeology of Death. Proceedings of the Seventh Conference of Italian Archaeology held at the National University of Ireland, Galway, April 16-18, 2016*. Papers in Italian Archaeology 7. Oxford: Archaeopress, 303-308.
- Osanna, Massimo 2009. Le terrecotte architettoniche dell’anakton di Torre di Satriano: il fregio e la sfinge. In: Osanna, Massimo, Colangelo, Lucia, and Carollo, Gianfranco (eds). *Lo spazio del potere. La residenza ad abside, l’anakton, l’episcopio a Torre di Satriano. Atti del secondo convegno di studi su Torre di Satriano, Tito, 27-28 settembre 2008*. Archeologia. Venosa: Osanna Edizioni, 157-175.
- Osanna, Massimo 2013a. Un palazzo come un tempio: l’anakton di Torre di Satriano. In: Osanna, Massimo, and Vullo, Mariasilvia (eds). *Segni del potere. Oggetti di lusso dal Mediterraneo nell’Appennino lucano di età arcaica. Exhibition Potenza. Polieion*. Venosa: Osanna Edizioni, 45-68.
- Osanna, Massimo 2013b. Le coperture e le terrecotte architettoniche dell’anakton. In: Osanna, Massimo, and Vullo, Mariasilvia (eds). *Segni del potere. Oggetti di*

- lusso dal Mediterraneo nell'Appennino lucano di età arcaica. Exhibition Potenza. Polieion. Venosa: Osanna Edizioni, 83-98.*
- Osanna, Massimo 2013c. A banchetto in casa del “principe”. In: Osanna, Massimo, and Vullo, Mariasilvia (eds). *Segni del potere. Oggetti di lusso dal Mediterraneo nell'Appennino lucano di età arcaica. Exhibition Potenza. Polieion. Venosa: Osanna Edizioni, 117-136.*
- Osanna, Massimo 2015. Seats of Power and Power of Consumption in the Hinterland of the Ionian Coast of Southern Italy during the Archaic Age. In: Kistler, Erich, Öhlinger, Birgit, Mohr, Martin, and Hoernes, Matthias (eds). *Sanctuaries and the Power of Consumption. Networking and the Formation of Elites in the Archaic Western Mediterranean World. Proceedings of the International Conference in Innsbruck, 20th-23rd March 2012. Philippika 92. Wiesbaden: Harrassowitz, 435-457.*
- Osanna, Massimo, and Scalici, Michele 2011. Nascita delle aristocrazie e sistemi di parentela in area nord-lucana. In: Nizzo, Valentino, and Lévi-Strauss, Claude (eds). *Dalla nascita alla morte: antropologia e archeologia a confronto. Atti dell'Incontro Internazionale di studi in onore di Claude Lévi-Strauss, Roma, Museo Nazionale Preistorico Etnografico “Luigi Pigorini” 21 maggio 2010. Rome: Editorial Service System, 669-681.*
- Pepe, Antonietta, Bianco, Giuliana, and Tamburro, Antonio Mario 2009. Identificazione di tracce di vino all'interno di reperti archeologici mediante l'impiego di tecniche analitiche avanzate. In: Osanna, Massimo, Colangelo, Lucia, and Carollo, Gianfranco (eds). *Lo spazio del potere. La residenza ad abside, l'anaktoron, l'episcopio a Torre di Satriano. Atti del secondo convegno di studi su Torre di Satriano, Tito, 27-28 settembre 2008. Archeologia. Venosa: Osanna Edizioni, 233-236.*
- Ranaldi, Francesco 1960. *Ricerche archeologiche nella Provincia di Potenza 1956-1959. Potenza: Amministrazione della provincia di Potenza, Museo archeologico provinciale.*
- Romito, Matilde 1995. *I Cinturoni Sannitici. Naples: Electa.*
- Russo Tagliente, Alfonsina 1992. *Edilizia domestica in Apulia e Lucania. Ellenizzazione e società nella tipologia abitativa indigena tra VIII e III secolo A. D. Quaderni di archeologia e storia antica 4. Galatina: Congedo Editore.*
- Saltini Semerari, Giulia 2008. Heroic status for women in Basilicata. The adoption and adaption of Greek ideology in Southern Italy. *Accordia Research Papers, 11, 119-135.*
- Sannibale, Maurizio 1995. Cinturoni italici della Collezione Gorga. *Mélanges de l'Ecole française de Rome. Antiquité, 107/2, 937-1020.*
- Scalici, Michele 2012. La necropoli ad ovest dell'anaktoron di Torre di Satriano. In: Osanna, Massimo, and Capozzoli, Vincenzo (eds). *Lo spazio del potere II. Nuove ricerche nell'area dell'anaktoron di Torre di Satriano. Atti del terzo e quarto convegno di studi su Torre di Satriano. Tito, 16-17 ottobre 2009; 29-30 settembre 2010. Archeologia. Venosa: Osanna Edizioni, 111-129.*
- Scalici, Michele 2013. Torre di Satriano. Le tombe dell'anaktoron. In: Osanna, Massimo, and Vullo, Mariasilvia (eds). *Segni del potere. Oggetti di lusso dal Mediterraneo nell'Appennino lucano di età arcaica. Exhibition Potenza. Polieion. Venosa: Osanna Edizioni, 236-244.*
- Setari, Elisabetta 1999. Produzioni artigianali indigene. La ‘fabbrica’ di Ripacandida. *Siris, 1, 69-119.*
- Setari, Elisabetta 2009. Le “lastre dei cavalieri” di Vaglio: alcune considerazioni. In: Osanna, Massimo, Colangelo, Lucia, and Carollo, Gianfranco (eds). *Lo spazio del potere. La residenza ad abside, l'anaktoron, l'episcopio a Torre di Satriano. Atti del secondo convegno di studi su Torre di Satriano, Tito, 27-28 settembre 2008. Archeologia. Venosa: Osanna Edizioni, 239-245.*

- Steininger, Urte 1996. *Die archaische und frühklassische Großplastik Unteritaliens und ihr Verhältnis zum Mutterland*. Charybdis 11. Münster: Lit.
- Tagliente, Marcello 1996. Ceramiche figurate nel mondo indigeno della Basilicata. Il caso di Ripacandida. In: Gelao, Clara (ed.). *Archeologia, Arte, Restauro e Tutela, Archivistica*. Matera: R&R, 39-45.
- Tayles, Nancy, and Halcrow, Siân E. 2015. Age-at-death estimation in a sample of prehistoric Southeast Asian adolescents and adults. In: Oxenham, Marc, and Buckley, Hallie (eds). *The Routledge Handbook of Bioarchaeology in Southeast Asia and the Pacific Islands*. London: Routledge, 220-238.
- Tunzi, Anna Maria 2011 (ed.). *Pagine di pietra. I Dauni tra VII e VI secolo a.C. Exhibition Rome 2011*. Foggia: Grenzi.
- Vida Navarro, M. Carmen 1992. Warriors and weavers. Sex and gender in Early Iron Age graves from Pontecagnano. *Accordia Research Papers*, 3, 67-100.

2 Tracing gender transformations

2.4 In ritual and art

'Shaman' burials in prehistoric Europe. Gendered images?

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Abstract

Numerous burials of individuals with associated zoomorphic characteristics are known from cemeteries in Europe, dating to the Upper Palaeolithic, Mesolithic, and Neolithic. This paper focuses on burials exhibiting attributes associated with cervids (including red or roe deer antlers, skulls, or bones, and/or elk-headed staffs) from Saint-Germain-la-Rivière, in south-western France; Téviec and Hoëdic, in Brittany; Vedbæk and Skateholm, in Scandinavia; Bad Dürrenberg, in central Europe; Lepenski Vir, Vlasac, Padina, and Haiducka Vodenica, in the lower Danube region; Olenii Ostrov, in northern Russia; Zveinieki, in the Baltic; and Bazaikha, in Siberia. Ethnographic materials relating to the study of Siberian shamanism are employed in the article to help understand the semantic metaphors implied by these attributes. These persons may have been classified as ritual adepts, also known as shamans. 'Shaman' activity is connected with transformations: transformation of consciousness, male-female transformation, human-animal transformation. A virtual connection with animals is the basic feature of shamanism, and it can be studied with the help of archaeology.

Keywords: *Stone Age, ethnoarchaeology, shamanism, cult of the deer, burials, elk-headed staffs*

Introduction

Numerous burial complexes with animal remains have been found in different Stone Age cemeteries in Europe. Some of them were supplemented with red deer or roe deer antlers, skulls, or bones; others were accompanied by elk-headed¹ staffs. I will argue below that these burials are connected with a deer/elk cult.

1 Elk in the context of the present paper means *Alces alces*, which is called elk in Europe and moose in North America.

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The deer/elk cult is a myth-ritual complex. The object of worship is a sacred deer, incarnated as a female deity known as Deer-Mother, who is a zoomorphic and, later, zooanthropomorphic ancestor (Anisimov 1958, 104; Simchenko 1976, 270; Popov 1936, 88-89; Potapov 1935, 139; Okladnikov 1950; Jacobson 1993; 2001; Mykhailova 2017a, 57-58). The most important evidence supporting the existence of a deer cult in traditional societies is the totemic mysteries connected with the reproduction of deer and with hunting magic rituals (Bogoraz 1939; Anisimov 1958; Mykhailova 2009; 2016; 2017, 27-44). During those ceremonies, participants dressed as a deer, imitated deer coupling, and then killed and ate the sacral animal and buried its bones and antlers in sacred places for future regenerations of deer (Charnolussky, 1966, 310-311; Kharusin, 1890, 340-383, Mykhailova, 2015). The main participant in these rituals was the shaman (Vasilevich 1957; Anisimov 1958; Mazin 1984; Mykhailova 2017a, 52-57).

The cult of the deer/elk apparently formed during the Upper Palaeolithic and was at its height in the northern Eurasia Mesolithic. It appears most clearly in art. In the Franco-Cantabrian Upper Palaeolithic caves in particular, deer depictions mark semantically important places of 'The Border of the Worlds', meaning a liminal zone (Mykhailova 2017b). In the Iberian Peninsula Mesolithic and Neolithic, depictions of deer occupy prominent places in scenes that, I believe, mostly reflect totemic and shamanic myths and/or rituals (Bahn 1989, 558; Varela Gomes 2007; Mykhailova 2017a, 101-115). Some sites have yielded anthropozoomorphic (animal-human conflation) figures with antlers (Dams 1981, 475-494). In the northern Eurasia Neolithic, the deer/elk is one of the predominant depictions in both portable art (Carpelan 1975; Studzitskaya 2004, 251) and rock art (Lahelma 2008, 23; Helskog 1987, 19; 24; Okladnikov 1966, 129; Mykhailova 2017a, 115-156). There are numerous depictions of humans with elk-shaped sticks in northern Eurasia. Some investigators interpret these humans as shamans (Gurina 1956, 202; 206; Ribakov 1981, 62-66; Studzitskaya 2004, 250-251).

Overview of research about shamanism

Applied to prehistoric societies, the term *shamanism* is rather restricted in its meaning. Shamanism is a practice that involves a practitioner reaching 'altered states of consciousness' (see Hoffmann 1998) in order to perceive and interact with a spirit world and channel these transcendental energies into this world (Hoppál 1987). In contemporary traditional societies, shamanism is a developed and complicated institute of consciousness. According to contemporary investigators, the roots of shamanism lie in the Upper Palaeolithic.

The notion of shamanism as an 'ecstatic technique' or 'obsession' is very popular among investigators of both prehistoric and contemporary societies alike. The creators of the 'neuropsychological model', David Lewis-Williams, Jean Clottes, and Thomas Dowson, compare the motifs and stylistic aspects of the Franco-Cantabrian and Levantine rock art with those of San rock art. They suggest that Palaeolithic and Mesolithic paintings reflect a shaman's visions (Lewis-Williams and Dowson 1988, 171-178; Clottes and Lewis-Williams 1996). Some research on Levantine rock art interprets the anthropomorphic depictions with unusual headdresses as shamanistic (Hameau and Painaud 2004; Utrilla and Martinez-Bea 2005). David Whitley (2000) compared the archaeological and rock art evidence for shamanism in western Northern America and the rock art of Southern Africa with the European Upper Palaeolithic rock art. Carolyn Boyd and Kim Cox (2003) studied shamanistic items in North American rock art, especially Lower Pecos 'shamanic' rock art in Texas (USA). These authors compared these ancient drawings with the Huicholi mythology. Antti Lahelma (2005; 2008) studied northern European Neolithic rock art depictions in comparison with Saami mythological and ethnographic materials. This author in-

vestigated manifestations of the shamanic trance and shamanic metamorphosis in Finnish rock paintings. Knut Helskog (1987) compared the subjects of Scandinavian rock depictions with the images depicted on Saami drums. Ekaterina Devlet (2001) elucidated the X-ray anthropomorphic depictions of northern Asia as images of shamans dismembered during the shamanic initiation. Andrzej Rozwadowski (2012) investigated rock art depictions of the Bronze Age and Iron Age of northern Asia in the context of Siberian shamanism. Esther Jacobson (1993; 2015) interprets the ancient rock depictions of Northern Asia as pre-shamanic. According to Jacobson, 'shamanism was in some sense a late-comer, the last layer of belief within the deep sedimentation of time' (Jacobson 2015, 351).

Investigators of the material evidence of ancient shamanism compare archaeological and ethnographic data. Gernot Tromnau has compared evidence of Siberian shamanic practice within the archaeological materials and rock art of Europe. He supposes that the similarity in climatic conditions of the polar and subpolar regions today and Stone Age Europe resulted in the similarity in material and spiritual culture (Tromnau 1991). Joëlle Robert-Lamblin draws parallels between the modern population of north-eastern Siberia and the hunters-gatherers of Upper Palaeolithic Europe; this researcher considers that such a comparison is legitimate because cultural models, despite their diversity, are due to economic patterns and natural factors (Robert-Lamblin 2005, 199-211). Thomas Dowson and Martin Porr interpret the Upper Palaeolithic mobile animal statuettes as evidence of prehistoric shamanism (Dowson and Porr 2004). The British archaeologists Shantal Conneller and Tim Schadla-Hall, and others, studied the deer frontlets from the Mesolithic site of Star Carr (County North Yorkshire, Great Britain) and interpreted these frontlets as shamanic headdress (Conneller and Schadla-Hall 2003). A.M. Serikov (2003) has investigated shaman cemeteries in the Ural (northern Russia) and distinguished some characteristics of the shaman's grave, among them a deep pit, a sitting position, and weapons.

Introduction to the project "Shaman" burials in prehistoric Europe: Gendered images'

Although a complete reconstruction of the holistic ancient ideological system seems impossible, a reconstruction of separate, conservative, universal elements of the ancient world view is feasible. According to the famous anthropologist and investigator of the northern Asian spiritual culture A.M. Sagalaev, '*Once formulated ideas and images satisfied society during all the period. [...] Fundamental ideas of the worldview remained relevant during all cultural genesis*' (Sagalaev 1991, 15).

I propose to consider cemeteries with cervid antlers and zoomorphic artefacts (the signs [знак] of the deer) as relating to 'shamans' in a semiotic way. I am aware of the complexity of doing so, since the archaeological record cannot indicate one of the most important shamanistic features, namely, obsession. So, I propose to accent a different shamanistic property, that of the virtual connection with zoomorphic spirits, for which I collected ethnographic evidence from northern Europe to northern Asia. Shamans played the role of the main executors of the most significant and complicated rituals connected with the natural cycles of the deer. Shamans were mediators between the world of the people/living and the world of the spirits/animals/dead. The shaman's spirit-patrons were zoomorphic beings, and the shaman had 'consanguineous' relations with them (Gracheva 1981; Anisimov 1958). In my investigation, I consider only shamans whose major spirit-patron was Deer or Elk. Mostly this spirit-patron was Mother-Animal or Deer-Mother (Jacobson 1993; 2001). Evenkian shamans had virtual contact with Deer-Mother during their shamanic initiation. Deer-Mother virtually 'swallowed' the soul of the young shaman and then created a zoomorphic spirit-double of the shaman, her or his spirit-patron

(Anisimov 1958, 144). The new status of the shaman was marked by zoomorphic attributes (Anisimov 1958, 144). The shaman's burial was marked by the antlers of offered deer (Bogoraz 1939, 192; Khomich 1981, 37). In my opinion, the semantically important parts of the deer (the antlers or skull) and the artefacts with deer/elk depictions excavated from Stone Age burials can be considered as the signs of these animal-patrons.

Archaeological examples from the Upper Palaeolithic and the Mesolithic between the Atlantic and the Pacific

Burials in the Atlantic region

One of the most ancient 'shaman' burials is the Upper Palaeolithic burial known as the Lady of Saint-Germain-la-Rivière (Dép. Gironde, France; 15780 ± 200 BP [GifA 95456]; Vanhaeren and D'Errico 2005, 121). It was attributed to a young adult woman. The stone structure, comprising four blocks, was disturbed, and therefore a reliable reconstruction of the burial structure is not possible. A bison skull and reindeer antlers painted with ochre were found near this stone structure. There was rich grave inventory, including lithic tools, shells, weapons, and animal bones, including a fox mandible. Two 'antler daggers' were found near the skeleton. The skeleton was covered with red ochre. A hearth and a certain number of bones were found close to the burial. The most fascinating feature is the 71 red deer canines, perforated and decorated with parallel notches. They must have been obtained through long-distance trade and represented prestige items (Vanhaeren and D'Errico 2005). The stone structure and the inventory of the burial indicate the high status of the buried woman. The painted remains of bison and deer may be the signs of the animal-patrons. The fox mandible appears to be very significant. Mandibles were semantically important parts of the animal body (Mykhailova 2017a, 182). Fox mandibles were also discovered in Epipalaeolithic burials in the Levant. Natufian burials at Ain Mallaha and Hayonim Cave (Southern District, Israel) contain isolated fox mandibles or, more commonly, perforated teeth. In the Neolithic, foxes are common, particularly at the ritual burial site of Kfar HaHoresh (Northern District, Israel), where fox mandibles were found associated with human skulls and partially articulated fox remains are known from two child burials (Maher *et al.* 2011). According to ethnographic and archaeological materials, animal mandibles were used in rituals aimed at the rebirth of the animals (Mykhailova 2017b, 182).

The Late Mesolithic complex at Tévéc (Dép. Morbihan, France) comprised a grand total of 10 individual and collective burials in pits covered with stone slabs, along with the remains of ritual fires and offerings (Péquart *et al.* 1937). Tent-like red deer antler structures are associated with two adult females (grave A; Fig. 1) and one adult female with a child (grave D). There was an unusual richness of grave goods in comparison with the other graves at that site: flint tools, ornamented bone points, daggers, a worked boar tusk, perforated red deer teeth, and an abundance of perforated marine shell of various species. The authors of the excavation report concluded that the presence of antlers on top of the burial allows us to assume that the dead people were connected with religious activity (Péquart *et al.* 1937). Especially ornamented bone pins, used as garment fasteners, and long flint blades were found in the cemeteries with antlers. 'Tests of association show a relationship between antler structures, flint blades and bone pins....' (Schulting 1996, 346). 'An interesting finding is that those graves with antler structures – all adults – have markedly greater artefact richness than those without such struc-

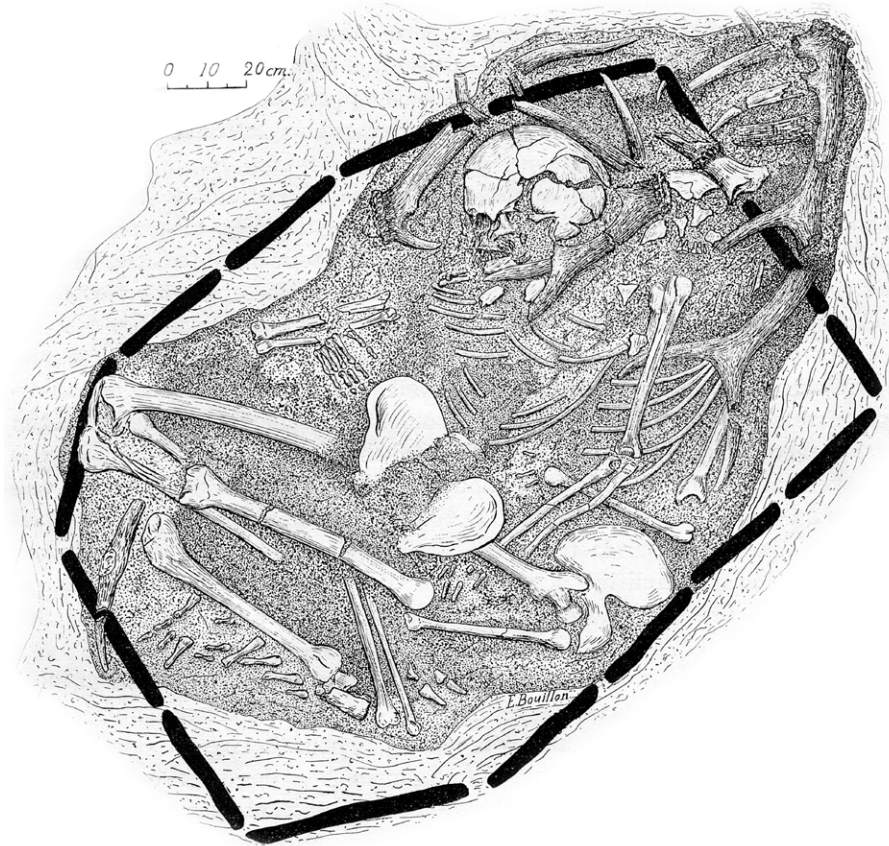


Figure 1. Tévéc (Dép. Morbihan, Brittany, France) cemetery A. Mesolithic burial complex (Pequart et al. 1937, 29, Fig. 15).

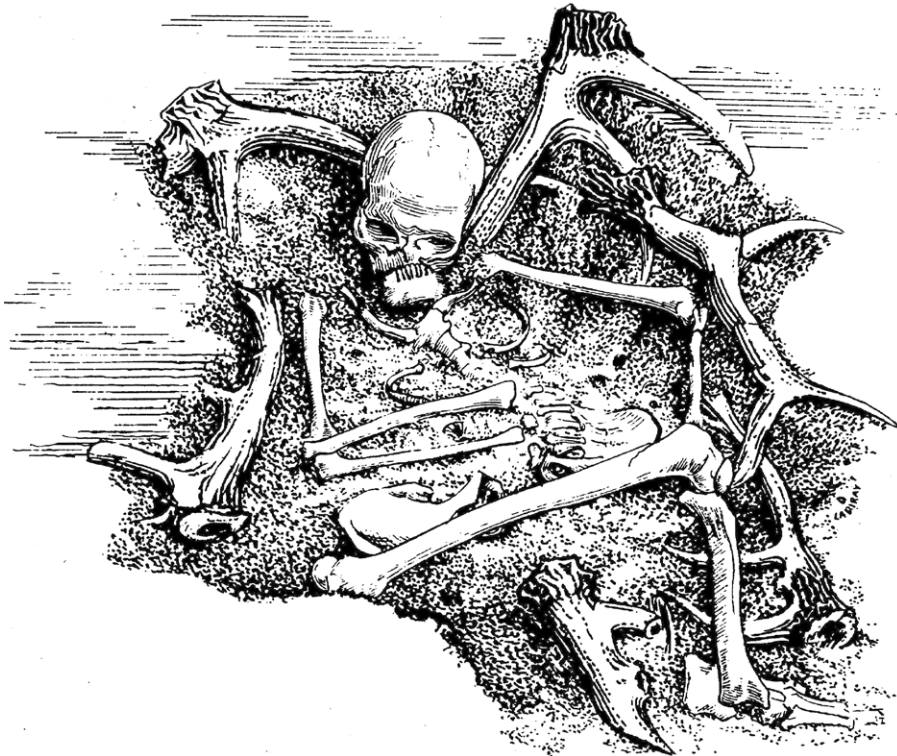


Figure 2. Hoëdic (Dép. Morbihan, Brittany, France). Mesolithic cemetery grave K (Schulting 1996, 345 Fig. 11).

tures. Bone garment pins and flint blades, both of which may have been made specifically as grave inclusions, are also associated with significantly higher than average artefact richness' (Schulting 1996, 349).

In the Mesolithic burial complex at Hoëdic (Dép. Morbihan, France; 6575±350 BP; Fig. 2), which comprises nine graves, four adults (two males and two females: graves F, H, J, K) were accompanied by shed red deer antlers (Fig. 2; Péquart and Péquart 1954). The two female burials were especially rich. To my mind, the blades and other flint tools in the female burials may testify to certain male activity on the part of the deceased women.

A small test excavation at the contemporaneous site of Beg-er-Vil (Dép. Morbihan, France), located between Tévéc and Hoëdic, revealed a pit surmounted by three antlers. There was a bone pin in the pit (Kayser and Bernier 1988, 45). It was probably an attribute of a person of high status. A similar find was made at the Tévéc cemetery.

Southern Scandinavia

The Mesolithic cemetery at Vedbæk, Henriksholm-Bøgebakken (Rudersdal Kommune, Denmark) belongs to the late Kongemose culture and the early Ertebølle culture (4100 BCE). Twenty-two graves were excavated there. Three of them had deer antlers. The undisturbed grave 10 contained the unusually well-preserved skeleton of a 50-year-old male (Fig. 3A). Two large flint blades were found to the right of and just above the pelvis. The deceased had been laid to rest on a pair of red deer antlers, one placed under the shoulders, the other under the pelvis. Five big stones had been placed on the person's lower extremities. The skull was surrounded by ochre. There were remains of a wooden structure, probably a boat, around the body. Burials in boats are well known from prehistoric times. The undisturbed grave 11 was of the same type as the other burials. A red deer antler, a bone awl, and a shaft-hole axe were found at the bottom. The floor of the grave was coloured by ochre, but there were no traces of the interred person. The explanation offered by the excavators is that the detailed stratification of the fill suggests that the body was disinterred shortly after burial. The composition of the grave goods suggests that grave 11 originally contained a man.

The undisturbed grave 22 at Vedbæk, Henriksholm-Bøgebakken, contained the well-preserved skeleton of a 40- to 50-year-old female (Fig. 3B). There was no ochre in the grave, but a pair of deer antlers lay below the head and shoulders of the deceased. The antlers were from slain animals. It was noted that the graves containing antlers were the deepest in the cemetery. Grave 10 had stones to weigh down the legs of the deceased (Albertsen and Petersen 1976, 28).

So, the deceased with antlers were old men and women. Antlers marked semantically important parts of the body – the shoulder, pelvis, and head. These burials had some distinguishing features. The graves were deeper, but the grave goods were poorer than in other graves. The deep pits and the stones like in grave 10 indicate that the deceased were people of high status (Mykhailova 2017a, 196).

A woman with a three-year-old child was buried in the Vedbæk-Gøngehusvej 7 burial complex in Denmark (5480-5390 BCE; Schulting 1988). The grave was deep, and the sides of the grave, beginning at the top, had been strewn with ochre. There was bird beak near the head of the woman, probably part of a headdress. There were roe deer phalanges on the torso; possibly the woman had been wrapped in a roe deer skin. Both individuals were accompanied by pendants made from animal teeth, bone and stone pendants, flint and bone knives, a bone hairpin and needles, and an abundance of red ochre.

The Skateholm II site (Trelleborgs kommun, Skåne län), in Sweden, comprises a settlement area and cemetery, both of Late Mesolithic age. Twenty-two graves

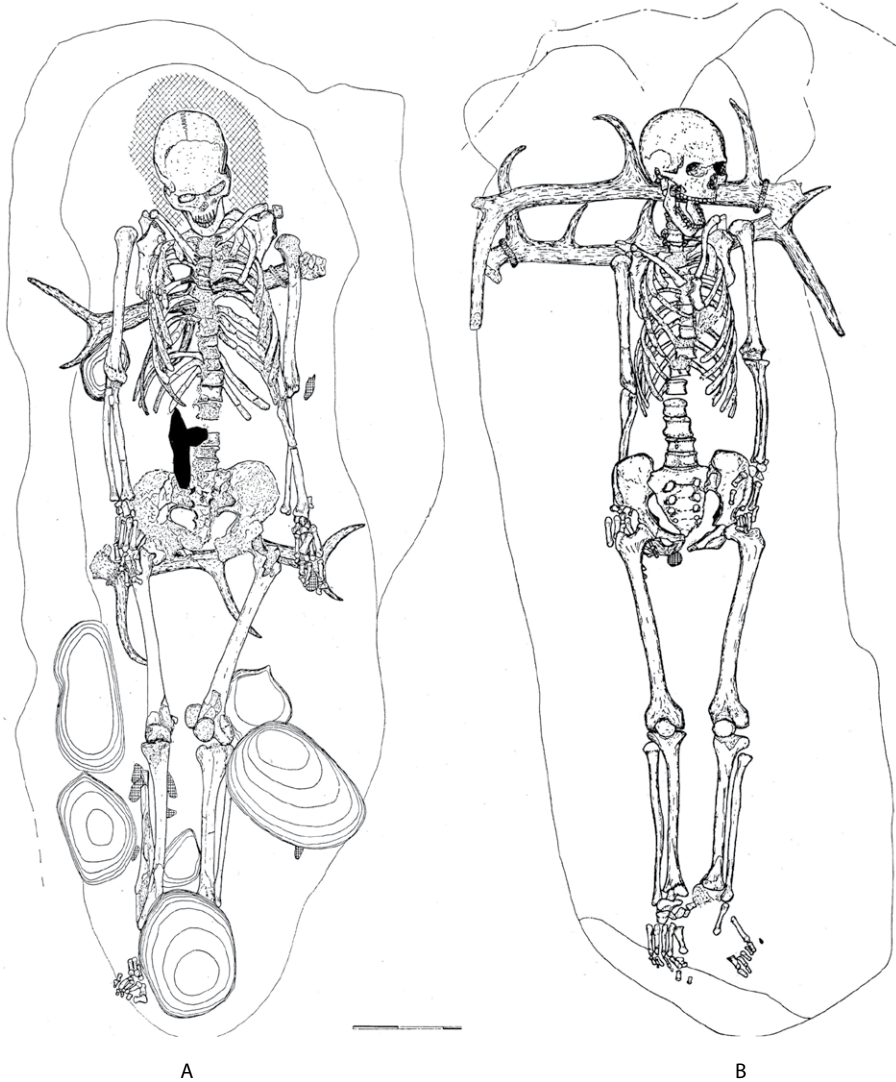


Figure 3. Vedbæk, Henriksholm-Bøgebakken (Rudersdal Kommune, Denmark). Late Mesolithic burial complex. A grave 10. – B grave 22 (Albertsen and Petersen 1976, 13 Fig. 12; 19 Fig. 17).

have been examined at Skateholm II. Grave XI, with a young adult male in a supine position, featured a veritable network of red deer antlers placed transversely across the man's shins. Two antlers were still attached to a cranial fragment. Grave XV contained a young male placed in a seated position. Two red deer antlers lay by the man's head, while a further large antler lay by his feet. A row of perforated red deer teeth ran across the top of the cranium – evidently the remains of an elaborate headdress. Two flint blades lay by the hip, and a core axe lay at the left of the thigh. Several teeth of wild boar lay below the right underarm. Grave XX contained a young female in a supine position. A row of perforated tooth beads extended around the waist, including teeth of aurochs. Tooth beads were also found behind the head. A dog was found in a pit behind grave XX, a red deer antler lying along its back. In addition, three flint knives and an ornamented hammer of red deer antler were found on the dog's stomach. A pit with no traces of a skeleton contained three large deer antlers. This feature has, with some reservation, been interpreted as a cenotaph (Larsson 1989, 373). Grave XXII included a woman seated on deer antlers, accompanied by animal tooth beads and shale a blade (Hansen 2003).

Burials in central Europe

A Mesolithic burial of a woman with a baby was excavated at Bad Dürrenberg (Saalekr., Germany; 7930±90 BP [OXA-27244], 5625-5490 cal BCE; Grünberg 2016, 17). The body of the woman was in a vertical position; the little baby was between the woman's hips. The rich inventory includes roe deer antlers, boar tusks, turtle shell, stone and antler axes, the teeth and jaws of animals, shells, and a drilled bone item (probably a musical instrument). The pathology of the cervical spine is said to be an indirect argument for the shamanic interpretation of the burial (Porr 2004, 292-293). The roe deer antlers may have been part of the shaman's costume (Porr 2004, 299 Fig. 24.14). The tradition of burials with red deer symbolism was continued into the Neolithic, particularly in the burial complexes near the Iron Gates, in the lower Danube region (Budja 2006). The cemeteries at Lepenski Vir, Padina, Vlasach, and Gayduchca Vodenitsa (all Borsky okrug, Serbia) include trapezoidal limestone structures with rectangular hearths and sculptured boulders with fish-human features. Skulls of red deer were founded near several skeletons, of men, women, and children (Budja 2006).

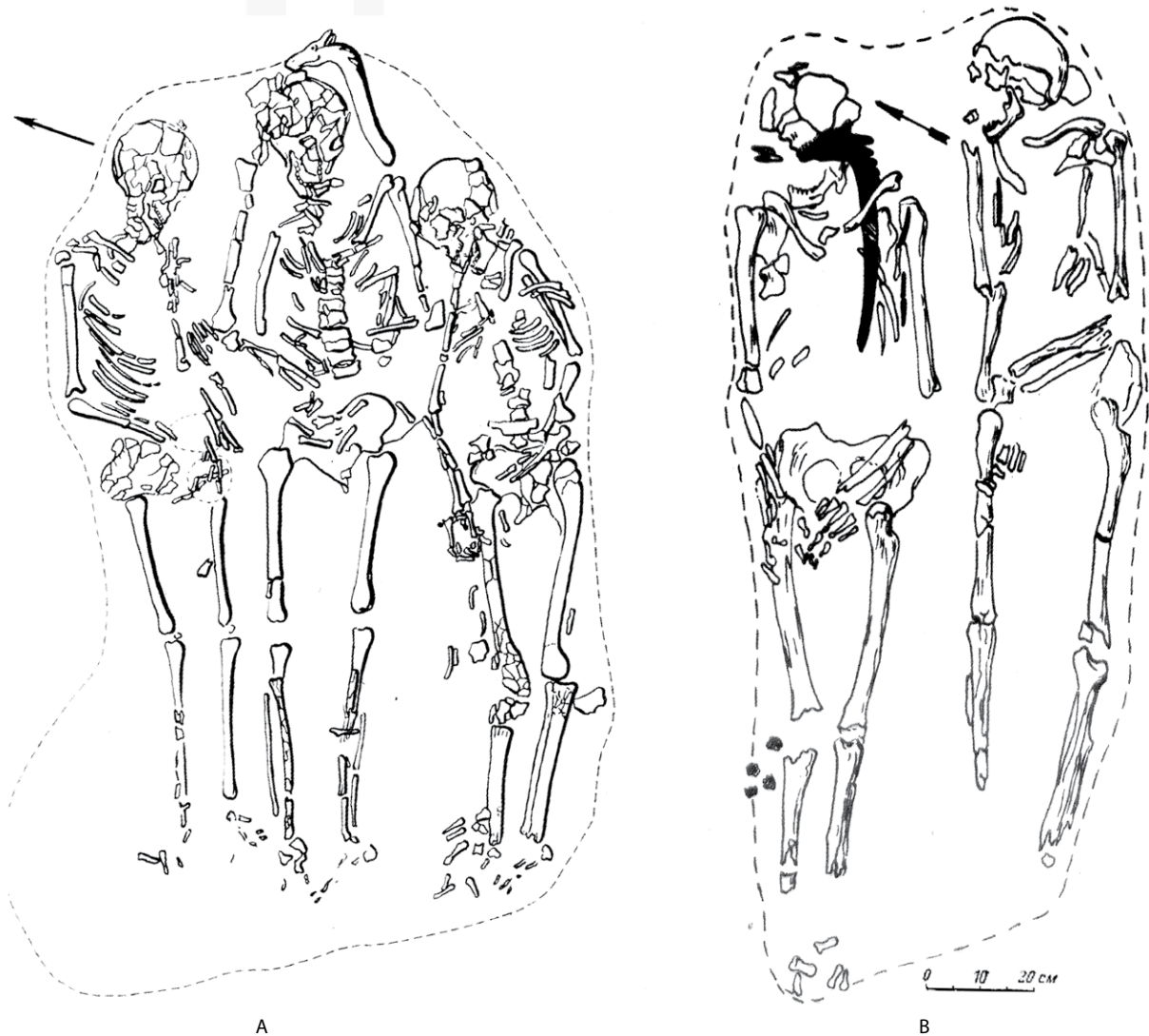
Burials in the eastern Mediterranean

The use of antlers to signify deer is known from the Near East as well, for example, from the Uyun al-Hammam cemetery (Irbid Governorate, Jordan), dated to the Epipalaeolithic (17,250-16,350 cal BP and 15,000-14,200 cal BP; Maher *et al.* 2011). 'Two adjacent graves contain the articulated remains of several individuals and include the following elements: 1) the earliest human-fox burial, 2) the movement of human and animal (fox) body parts between grave, and 3) the presence of red ochre, worked bone implements, chipped and ground stone tools, and the remains of deer, gazelle, aurochs, and tortoise' (Maher *et al.* 2011, 2). 'A nearly complete fox skeleton, missing its skull and right humerus, was discovered in Grave VIII, adjacent to a bone "spoon", red deer antler, several large flint blades and flakes, and several flat, unmodified cobbles' (Maher *et al.* 2011, 4). Spoons, as an implement for eating ritual meals, had high semantic status in northern Eurasia in historical times, where they often served as attributes of priests (Mykhailova 2017, 151).

The so-called shaman's burial from the Upper Palaeolithic cave site of Hilazon Tachtit (Northern District, Israel), in the southern Levant, should also be mentioned. The grave was constructed and specifically arranged for an elderly disabled woman, who was accompanied by exceptional grave offerings. The grave goods comprised 50 complete tortoise shells and selected body parts of a wild boar, an eagle, a cow, a leopard, and two martens, as well as a complete human foot (Grosman *et al.* 2008). In my opinion, the zoomorphic features of the cemetery, especially the eagle wing and the cow's tail, undoubtedly indicate a connection between the buried woman and animal-patrons.

Rock carvings and burials in north-eastern Europe and Siberia

The elk became the main traded animal in northern Eurasia in Neolithic times. Numerous staffs with one end shaped like a female elk's head have been found, from Denmark to the Far East (Carpelan 1975). There are numerous depictions of humans with elk-headed staffs in northern European rock art (Ravdonikas 1936). Sometimes these people were depicted in elk-headed boats (Lahelma 2005; Mykhailova 2017a, 136). Some scholars have compared them with rock carvings found in northern Europe of people with emphasised sexual attributes and holding zoomorphic objects (Helskog 1987, 24-25), such as at Alta (*Finnmark* county, Norway), Zalavruga (Karelia



Republic, Russia), Peri Nos (Karelia Republic, Russia), and Namforsen (Sollefteå kommun, Sweden). Some of them are dancing or conducting ritual activity.

Many burials of people with elk-headed staffs are known from northern Eurasia. The most famous is the Mesolithic burial (55-56-57) of a man and two women on Oleniy Island, in Lake Onega (Karelia Republic; end of 7th century-beginning of 6th century BCE; Fig. 4B; Gurina 1956). The skeletons were buried in the same pit, under a single stone covered with red ochre. They were accompanied by numerous elk teeth, bones of animals, and a snake figurine. The richest was the male burial (56). It had an elk-headed staff near the head (Gurina 1956, 202; 204). The women do not look like victims. It seems that they had equal rights to men (Khlobystina 1993). Another six burials had the same kind of staff (Fig. 4A; Gurina 1956, 203). The staff probably became an incarnation of the elk-patron, most likely Great Elk-Mother (Mykhailova 2017, 205).

The Mesolithic burial complex at Zveinieki (Tukuma District, Latvia) is the richest in Europe (Zagorska 1998). Grave 57 (6825 ± 60 BP [Ua-3636]), of a female, was deep, and the sides of the grave had been strewn with ochre. A thick layer of ochre surrounded the skeleton. The grave goods consisted of a stone axe, flint artefacts, and animal tooth pendants (elk, red deer, and aurochs). This individual

Figure 4. Oleniy Ostrov, Lake Onega (Karelia Republic, Russia). Mesolithic cemetery. A grave 152-153. – B grave 55-56-57 (Gurina 1956, pl. 27; 76).

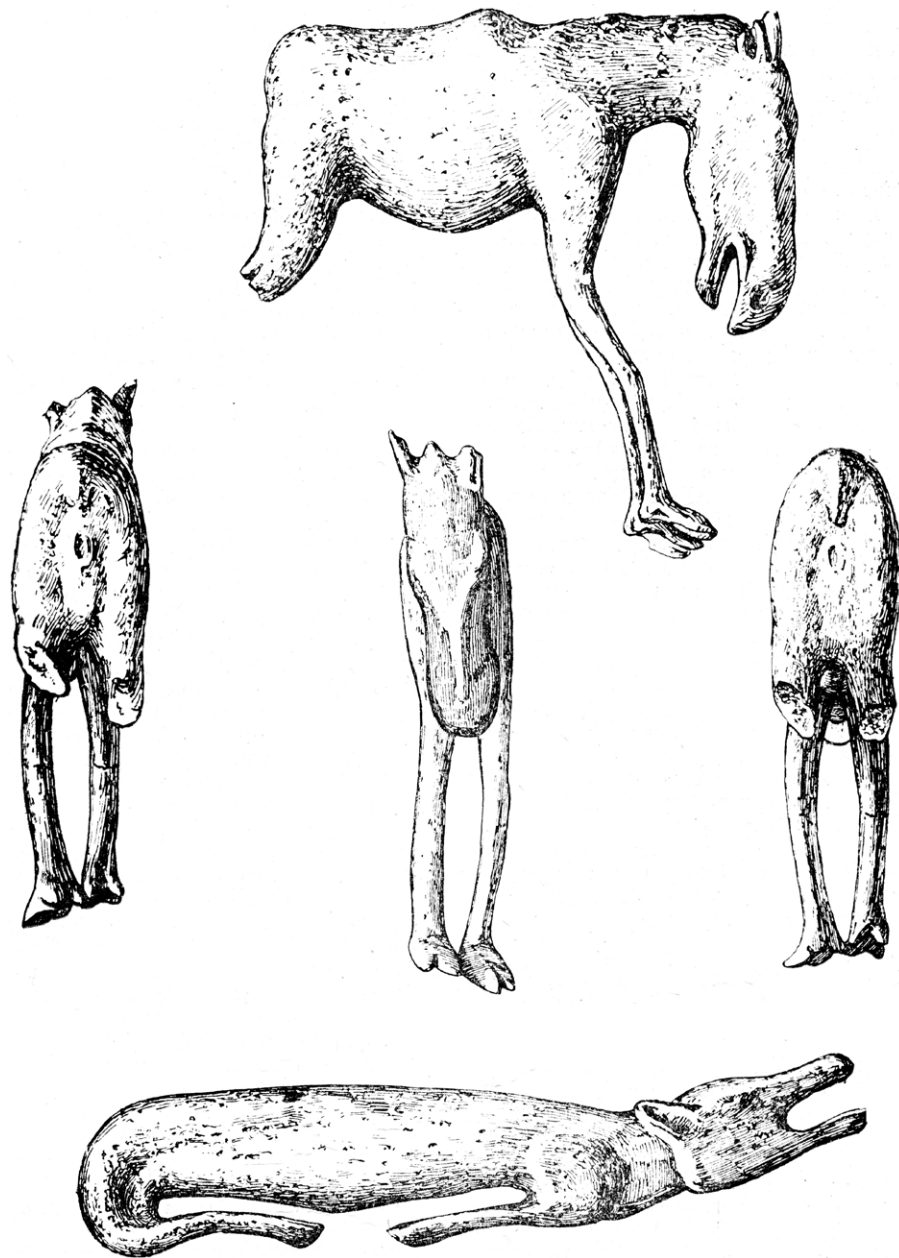


Figure 5. Bazaikha (Irkutsk oblast, Russia). Neolithic burial complex. Elk figurines, bone. No scale (Okladnikov 1950, 280-283).

had been provided with a bone spearhead and an elk-headed staff. Her grave was the richest female grave in the entire cemetery, confirming the special role of this person in the Late Mesolithic community. The stone axe and flint artefacts look like male inventory.

The Neolithic burial at Bazaikha (Irkutsk District, Russia) belongs to the Serovo culture of Siberia (6th-3rd century BCE). An elk-like staff and four realistic figurines of elks shown during their mating ritual were found near the male skeleton (Fig. 5). A zooanthropomorphic figurine was found in the cemetery as well (Okladnikov 1950, 280-283).

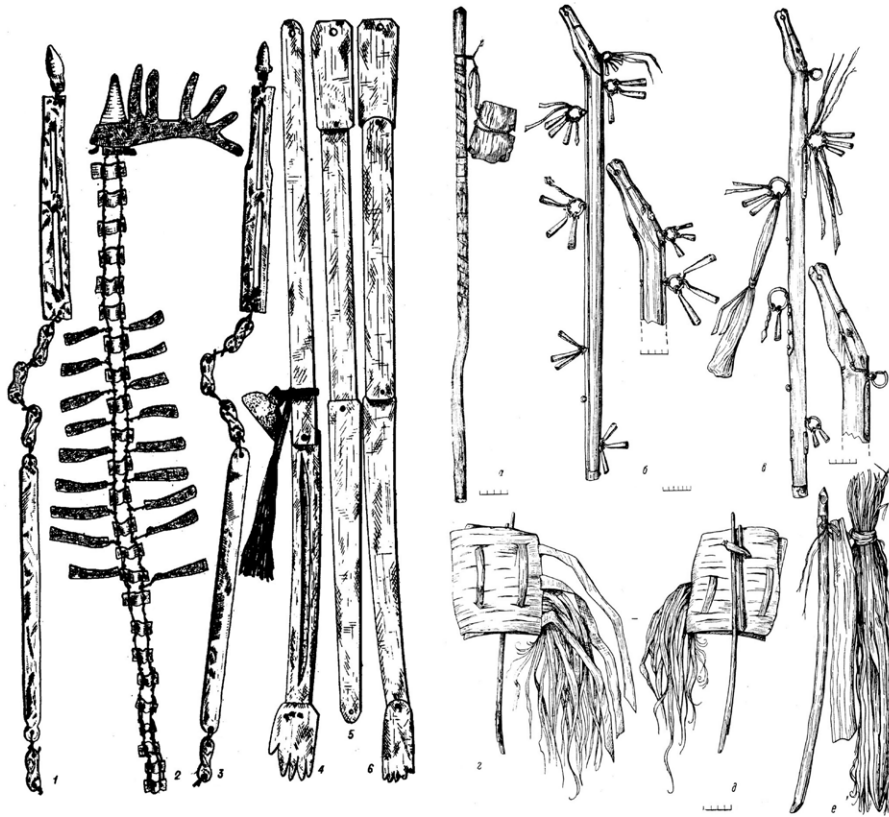


Figure 6. Siberian shaman's attributes from Tuva Republic (Russia), 20th century CE. Metal and wood. Muzej Antropologii i Ètnografii AN SSSR (Museum of Anthropology and Ethnography of the Academy of Sciences of the USSR), Inv. 1951-1; 11093-3 (Dyakonova 1981, 149 Fig. 2).

Ethnographic evidence from Siberia

The Soviet ethnographers A. D. Anisimov (1958), G. M. Vasilevich (1957), A. A. Popov (1936), U. H. Popova (1981), E. D. Prokofieva (1959), L. P. Potapov (1934), Y. S. Vdovin (1981), A. I. Mazin (1984), and others have gathered and published unique materials from the 19th and 20th centuries CE relating to Siberian shamanism, which can serve as a source for many generations of researchers.

In the ideological system of the indigenous peoples, shamans played the role of mediators between the world of humans and the world of the spirits. According to Evenkian mythology, the giant Elk-Female, Bugady-Eninteen, was the mother of the animals and hostess of the forest. Her image was portrayed on the sacral Bugady rocks (Evenkia District, Russia), dating from the Neolithic (Okladnikov 1950, 317; Anisimov 1958, 104). The shaman had a virtual connection with the Great Mother during shamanistic sessions. This 'relationship' was reflected in the shaman's attributes.

Ethnographic materials

The coat of the Evenkian shaman was made of deer hide, and it had small iron antlers on the shoulders – a very important element of a costume. Initially, real antlers were used. When the shaman danced, the antlers rose over the shaman's head (Fig. 6; Alexeenko 1981, 106; Potapov 1935; Mazin 1984, 66). The most important feature of the shaman's costume was a headdress with antlers – a symbol of the shaman's power and strength (Fig. 7). By putting on this crown, the shaman acquired the mystical qualities of a heavenly deer (Potapov 1935; Anisimov 1958, 179) (Fig. 7).

The embodiment of the deer-ancestor or spirit-helper of the shaman was a tambourine – the most important attribute of a shaman, made from the sacred deer's



Figure 7. The hut of an Udege shaman. Far east of Russia, historical era. Gosudarstvennyj muzej etnografii (State Museum of Ethnography, Saint Petersburg), Inv. 4987-3a (Ivanov 1954, 359).

skin. The shaman was 'reincarnated' in this deer during the initiation ceremony (Potapov 1947, 163-172). In South America, Huicholi shamans also used a drum made from the divine skin (Fig. 8; Furst 1977, 11).

Shamans initially used the bow and arrow for musical accompaniment. Later, the tambourine replaced the functions of a bow and got given the same name. Siberian shamans used the model of the bow as an accessory on their parkas (Potapov 1934, 64-77; Anisimov 1958, 26-35). The Huicholi used a bow for 'charming' game (Furst 1977, 11).

Gender roles of shamans

Women as well as men could be shamans in the hunting societies of Siberia. Female shamans were engaged in 'domestic' forms of shamanism, and sometimes they were more skilled in shamanic practice than men. The Chukchi believed that a female shaman could influence the success of the hunt just as well as a male hunter could (Bogoraz 1939). Many folkloric, written, linguistic, and archaeological data testify to these female shamans' high social status (Sorokina 2005). The costume of the female shaman was more richly ornamented, and this is argued to be evidence that women need more protection against spirits (Sorokina 2005).

Transvestism was common among shamans in various Siberian cultures. So-called 'soft men' sometimes changed their appearance, clothes, and pendants. Their attributes were not weapons but needles and scrapers (Bogoraz 1939). Sometimes there was a hormonal change in the body. The transformation began



Figure 8. An antlered shaman praying for the deceased, 20th century CE. Selkup drawing, watercolour (Prokofieva 1959, 369 Fig. 31).

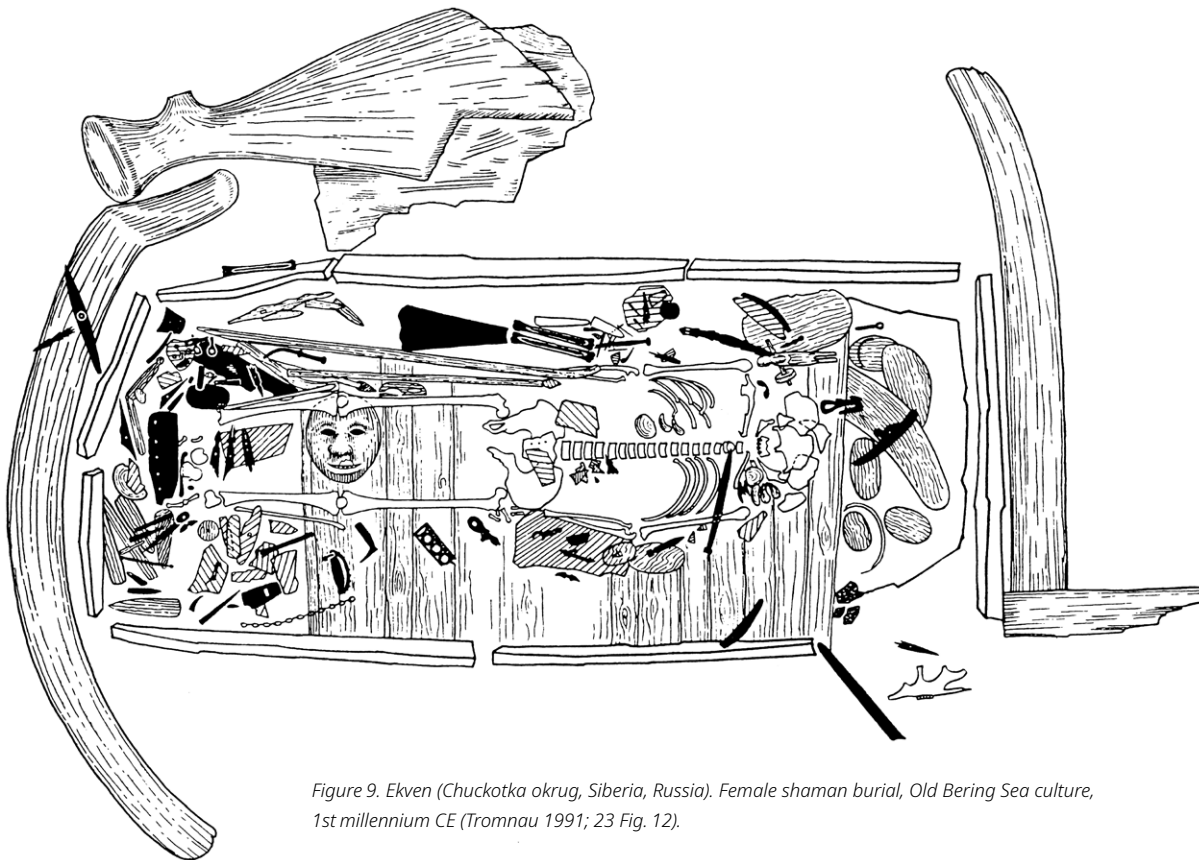


Figure 9. Ekven (Chukotka okrug, Siberia, Russia). Female shaman burial, Old Bering Sea culture, 1st millennium CE (Tromnau 1991; 23 Fig. 12).

shaman. ‘Soft man’ lost his male power, legerity, hardiness, and courage; he became helpless, like a woman. Such shamans even ‘married’ men. These ‘transformed’ specialists were very skilful in their shamanistic activities (Bogoraz 1939; Torchinov 2005, 123-143).

Sometimes female shamans cut their hair, changed their clothes, and learned to use a spear and a gun. But such cases were rare (Bogoras 1939).

Among North American indigenous peoples, there is strong tradition of male transvestism, called *two-spirits* (*berdaches*). When *two-spirits* (*berdaches*) became shamans, they were regarded as exceptionally powerful (Vitebsky 1995, 93).

Vladimir Bogoraz thought that shaman transvestism was a remnant of early shamanism, when its ‘female’ element prevailed (Bogoraz 1910). This statement can be confirmed with the archaeological materials.

Some female burials of the Stone Age of Europe had flint tools (Teviec, Hoedic, Zveinieki) or stone and bone axes (Bad-Dürrenberg), which can be defined as male. I propose to compare them with the cemetery in the Far East. Different materials were discovered in the female shaman cemetery of Ekven (Fig. 9; Chukotka autonomous okrug, Russia). It is one of the important sites of the Old Bering Sea culture, which existed from 400 BCE to possibly as late as 1300 CE (Ackerman 1984; Arutiunov and Sergeev 2006). In burial 145, the body was surrounded by large bones of a whale – it was ‘inside’ the whale symbolically. The skeleton was lying face down. The rich burial inventory is associated with woman’s activity and sacral practice (scrapers, pottery paddles, knives, a walrus ivory chain, wooden dance goggles, drum handles, and a wooden anthropomorphic mask), but also with men’s activity, as evidenced by a number of tools, including lance points and harpoons. So, the woman performed the functions of a male shaman (Tromnau and Loffler 1991).

Buried shamans in historic times

Death is the transition to the Other's world – the world of the dead and the animals. A person acquires zoomorphic features after death (Petrukhin 1986, c. 11). This idea of acquiring zoomorphic features is well reflected in the materials in the female shaman cemetery of Ekven (Fig. 9), mentioned above.

Siberian shaman's graves were marked by deer antlers, as is documented by single burials erected in modern times in the Siberian landscape, separated from the usual cemeteries (Fig. 10). An eyewitness described a Siberian shaman's grave as follows: *'It is low chest made of boards, strengthening by six stakes. The cross-beams*



Figure 10. Shaman burial with antlers in Siberia, 20th century CE (photograph: Joëlle Robert-Lamblin).

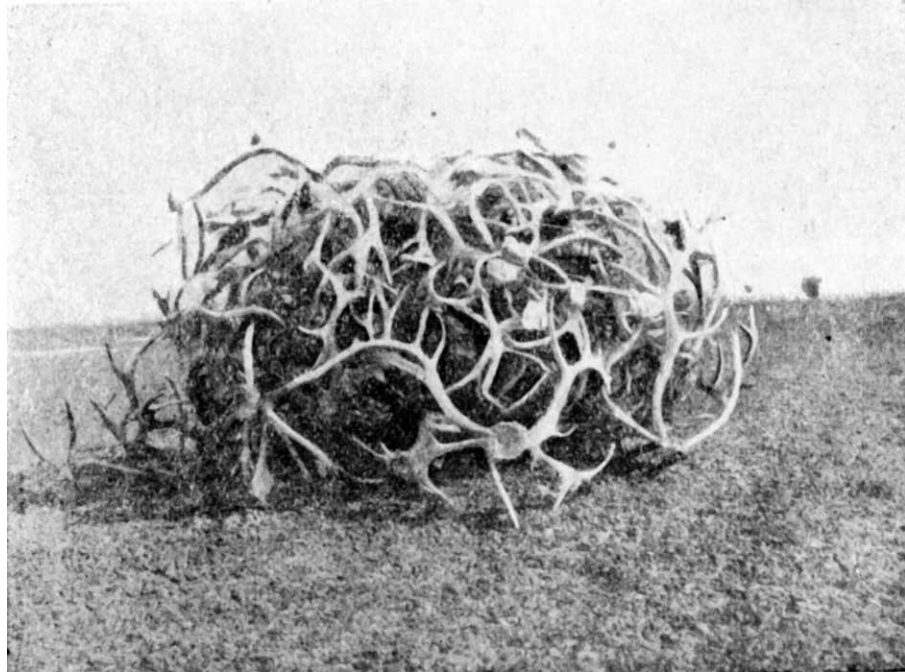


Figure 11. Female shaman burial with antlers in Siberia, 20th century CE (Bogoraz 1939, Table II, Fig. 2).

are decorated with nice branchy antlers of wild deer, as a symbol of last funeral repast, as an offering. The chest was covered by red cloth. The stones are lying on the cloth, to hold from the storm. There is the opened sacral shaman's box behind [...]' (Khomich 1981, 37). According to Vladimir Bogoraz, 'Giant antler storages were grown on the Big Men or shaman's burials. On the great island Ayon the ancient fence, made from antlers, situated. It was connected with the name of "Qeeqe", female shaman, which was buried there' (Fig. 11; Bogoraz 1939, 192).

Indigenous peoples believe that shamans receive very independent additional power after death. Tribes people disfigured their bodies to protect against these powers: they put the bodies in an unusual position or put stones or weapons on the body (Kosarev 2000, 534, Serikov 2003, 141-164; Chernetsov 1959, 144). Investigators of Siberian shamanism have distinguished some common features of shaman's cemeteries: burials in caves or under stone slabs; unusual positioning of the deceased (e.g. sitting); deep pits; dismemberment; and bones of animals, birds or fishes as a detail of the costume (Serikov 2003). There was a custom among indigenous peoples to exhume dead bodies of sorcerers and other dangerous diseased and to bury them in another place, or to drown them in water (Varavina 2008).

Conclusions

Reconstructing the phenomena of the primeval worldview is an enormously complicated task. For a complete understanding of the archaeological objects as elements of the primordial mytho-ritual complex, extensive use of ethnographic analogy is necessary.

Numerous burials with associated zoomorphic characteristics discovered in Europe dating to the Upper Palaeolithic, Mesolithic, and Neolithic may be interpreted as burials of ritual executors or shamans. The zoomorphic features may relate to the existence of a virtual connection between the buried person and a deer/elk-like patron or ancestor (Animal Mother). The burials that have Cervidae (deer and elk) elements associated with them are of men as well as women. In many cases, the graves of females have the same inventory as those of males. Sometimes, however,

the grave offerings can be far more extensive, indicating that the deceased were more dependent on the animal-patron. The Upper Palaeolithic burial at Saint-Germain-la-Rivière was supplemented by spectacularly abundant adornment, made from red deer teeth. Two 'antler daggers' are reminiscent of the 'beaters' of the northern shamans. Similar items have been found in many Upper Palaeolithic sites of Europe (Mykhailova 2017a, 163). A fox jaw was an outstanding attribute of the Lady of Saint-Germain-la-Rivière cemetery. As noted above, fox mandibles were also discovered in Epipalaeolithic burials in the Levant. Animals mandibles, as important attribute of the rituals of the rebirth of the animals, are found in numerous burial complexes and offering places of ancient and historical times in both Europe and Asia (Mykhailova 2017b, 182).

Especially rich female burials, covered with antlers, come from the Tévéc and Hoëdic Mesolithic burial complexes. I assume that certain features of cemeteries with antlers demonstrate that they may be 'shaman's' graves. The unusual richness of grave goods (in comparison to those of other graves of both complexes) looks like a feature of 'shaman' burials.

In the Mesolithic funerary complex at Vedbæk, Henriksholm-Bøgebakken, the deceased, laid on deer antlers, also have the features of 'shamans'. In the Skateholm II Mesolithic burial complex, two female graves were accompanied by deer antlers and richly ornamented with beads made from animal teeth. The deceased have the features of a shaman – seated position and headdresses with deer teeth.

Especially prominent were cemeteries of women with young children. Burial D at Tévéc was accompanied by abundant adornments. In the Vedbæk-Gøngehusvej Mesolithic cemetery, the grave of a woman with a six-month-old child was richly ornamented. The most fascinating is the Mesolithic burial at Bad Dürrenberg, of a woman with a baby. The rich grave inventory, which includes a wide variety of flint, bone, and stone tools, allows us to characterise the inventory as being both male and female.

I would argue that these outstanding findings are comparable to those from the so-called shaman's burial from the Upper Palaeolithic cave site of Hilazon Tachtit, in the southern Levant, where the zoomorphic features mentioned above indicate a connection between the buried woman and animal-patrons.

Cemeteries with elk-headed staffs, as the signs of the Elk-Mother, are widespread in northern Europe and northern Asia in Mesolithic and Neolithic times. The staff probably became an incarnation of an elk-totem, the sacral animal-ancestor. People with elk-shaped staffs were probably shamans who had had virtual relations with the Great Elk-Mother. Elk-headed staffs look like the horse-headed shaman's sticks of the Yakuts (Fig. 6; Diakonova 1981). The grave of the old woman with the elk-headed staff from the Mesolithic complex at Zveinieki was the richest of all contemporaneous burials in Europe. The stone axe and flint artefacts look like male inventory.

Based on the deer/elk symbolism in these burials, we may assume that in the hunter-gatherer societies of the Stone Age women occupied an outstanding place in sacred practice.

We can summarize that Stone Age burials with the signs of the deer can be the evidence of shamanic transformations. Buried persons had a virtual connection with the Deer Patron or Ancestor (Great Mother), and, during shamanic mysteries, 'transformed' into the sacral Deer for the 'journey' to the supernatural world. Given that women played a great role in primeval ritual activity, many of the deceased with the signs of the deer were female. Simultaneously, some of the buried women had both female and male inventory. They probably had 'fluid' gender or 'changed' their gender role during shamanic séances.

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References

- Ackerman, Robert 1984. *Prehistory of the Asian Eskimo zone*. In: Damas, David, and Sturtevant, William V. (ed.). *Handbook of North American Indians 5. The Arctic*. Washington: Smithsonian Institution, 106-118.
- Albertsen, Svend, and Petersen, Erik 1976. Excavation of a Mesolithic cemetery at Vedbæk. *Acta Archaeologica*, 47, 1, 1-28.
- Anisimov, Arkadij F. 1958. *Religija Evenkov V Istoriko-genetičeskom Izučenii I Problemy Proischoždenija Pervobytnych Verovanij*. Moskva, Leningrad: Akademija Nauk SSSR, Inst. Archeologii, Leningrad.
- Arutiunov, Sergei A., and Sergeev, Dorian A. 2006. Ancient Cultures of the Asiatic Eskimos: The Uelen Cemetery. Anchorage: Shared Beringian Heritage Program.
- Bahn, Paul 1989. The early postglacial period in the Pyrenees: some recent work. In: Bonsall, Clive (ed.). *The Mesolithic in Europe. Papers presented at the third International Symposium, Edinburg 1985*. Edinburgh: John Donald, 556-560.
- Bogoraz, Vladimir 1910. *The Chuckchee mytology*. Publication of the Jesup North Pacific Expedition 8,1. Leiden.
- Bogoraz, Vladimir 1939. *Chukchi*. Leningrad: Izdatelstvo Hlavsevmorputi.
- Boyd, Carolyn, and Cox, Kim 2013. La peinture rupestre du Chaman blanc. *Dossiers d'archeologie*, 358, 72-76.
- Budja, Mihael 2006. The transition to farming and the ceramic trajectories in Western Eurasia: from ceramic figurines to vessels. *Dokumenta Praehistorica*, 33, 183-201.
- Carpelan, C. 1975. Alg-och björn huvudföremål från Europas nordliga delar. *Finkst museum*, 82, 5-67.
- Chernetsov, Valerij N. 1959. Predstavleniia o dushe u obskich ugrov. *Trudy Instituta etnografii AN SSSR*, 51, 114-156.
- Clottes, Jean, and Lewis-Williams, David 1996. *Les chamanes de la préhistoire: transe et magie dans les grottes ornées*. Paris: Seuil.
- Conneller, Chantal, and Schadla-Hall, Tim. 2003. Beyond Star Carr: The Vale of Pickering in the 10th millenium BP. *Proceedings of the Prehistoric societies*, 69, 85-105.
- Dams, Lya 1981. La Roche peinte d'Algodonales (Cadiz). In: *Altamira Symposium. actas del symposium internacional sobre arte prehistórico celebrado en conmemoración del primer centenario del descubrimiento de las pinturas de Altamira (1879-1979), Madrid 1979*. Madrid: Ministerio de Cultura, Subdirección General de Arqueología, 475-494.
- Devlet, Ekaterina 2001. Rock art and the material culture of Siberian and Central Asian shamanism. In: Price, Neil S. (ed.). *The Archaeology of Shamanism*. New York: Routledge, 43-55.
- Diakonova, Vera P. 1981. Predmety k lechebnoi funktsii shamanov Tuvy i Altaia. In: Boris Putilov (ed.). *Materialnaia kultura i myfolohiia Soobcheniia Muzeya Archeologii i Etnographii*, 37. Leningrad: Nauka, 138-153.
- Dowson, Thomas, and Porr, Martin 2004. Special objects – special creatures: Shamanistic imagery and the Aurignacian art of south-west Germany. In: Price, Neil S. (ed.). *The Archaeology of Shamanism*. New York: Routledge, 165-178.

- Furst, Peter T. 1977. The roots and continuities of shamanism. In: Trueblood Brodzky, Anne, Danesewich, Rose, and Johnson, Nick (eds). *Stones, bones and skins. Ritual and Shamanic art*. Toronto: Society of Art, 1-28.
- Gracheva, Galina N. 1981. Shamany u nganasan. In: Vdovon, I. S. (ed.). *Problemy istorii obshchestvennogo soznaniia aboryhenov Sibiri (po materialam vtoroy poloviny XIX – nachala XX v)*. Leningrad: Nauka, 69-90.
- Grosman, Leore, Munro, Natalie D., and Belfer-Cohen, Anna 2008. A 12,000-year-old Shaman burial from the southern Levant (Israel). *Proceedings of the National Academy of Sciences of the United States of America*, 105, 17665-17669. <www.ncbi.nlm.nih.gov/pmc/articles/PMC2584673/>.
- Grünberg, Judith 2016. Remains of the mortuary rituals of upright seated individuals in central Germany. In: Meller, Harald., Grünberg, Judith M., Gramsch, Bernhard, Larsson, Lars, and Orschiedt, Jörg (eds). *Mesolithic Burials: Rites, Symbols and Social Organisation of Early Postglacial Communities: International Conference Halle (Saale), Germany, 18th-21th September 2013*. Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt, 18-21.
- Gurina, Nina N. 1956. *Oleneostrovskij Mogil'nik*. Materialy I Issledovaniya Po Archeologii SSSR 47. Moskva: Izdatel'stvo Akademii Nauk SSSR.
- Hameau, Philippe, and Painaud, Albert 2004. L'expression schématique en Aragon présentation et recherches récentes. *L'Anthropologie*, 108, 5, 617-651.
- Hansen, Keld 2003. Preboreal elk bones from Lungby Mose. In: Larsson, Lars, Kindgren, H., Knutsson, K., Loeffler, D., and Akerlunci, A. (eds). *Mesolithic on the Move. Papers presented at the Sixth International Conference on the Mesolithic in Europe, Stockholm 2000*. Oxford: Oxbow, 521-526.
- Helskog, Knut 1987. Selective depictions. A study of 3,500 years of rock carvings from Arctic Norway and their relationship to the Sami drums. In: Hodder, Ian (ed.). *Archaeology as long-term history*. New directions in archaeology. Cambridge: Cambridge University Press, 17-31.
- Hoffman, Kay 1998. *The Trance Workbook: Understanding and Using the Power of Altered States*. New York: Sterling.
- Hoppál, Mihály 1987. *An Archaic and/or Recent System of Beliefs*. Wheaton: Theosophical Publishing House.
- Ivanov, S. V. 1954. *Materialyi po izobrazitelnomu iskusstvu narodov Sibiri HIH – nachala HH v. Syuzhetnyiy risunok i drugie vidyi izobrazheniy na ploskosti*. Trudy Instituta Etnografii, Novaya seriya 22. Moskva, Leningrad: Izdatel'stvo AN SSSR.
- Jacobson, Esther 2001. Shamans, shamanism and anthropomorphizing imagery in prehistoric rock art of the Mongolian Altay. In: Francfort, Henri-Paul, and Hamayon, Roberte (eds). *The concept of shamanism: Uses and abuses*. Bibliotheca Shamanistica 10. Budapest: Akadémiai Kiadó, 277-294.
- Jacobson-Tepfer, Esther. 2015. *The Hunter, the Stag, and the Mother of Animals. Image, Monument, and Landscape in Ancient North Asia*. Oxford: Oxford University Press.
- Kayser, Olivier, and Bernier, Gildas 1988. Nouveaux objets decors du mesolithic Armoricaïn. *Bulletin de la Société préhistorique de France*, 85, 45-47.
- Khlobystina, Maria. D. 1993. Problema sociogeneza kultur severnoy Evrasii v neolite-paleometalle. *AD Polus. Archeologicheskiye isyskaniia*, 10, 69-74.
- Khomich, Lulmila. V. 1981. Shamany u nentsev. In: Innokentiy, Vdovin (ed.). *Problemy istorii obshchestvennogo soznaniia aborigenov Sibiri*. Leningrad: Nauka, 5-41.
- Kosarev, Michail F. 2000. Priobscheniie k nesemnym sferam v sibirskom yasychestve. In: Akimova, Ludmila, and Kifishin, Anatoliy (eds). *Zertvoprinosheniie*. Moskva: Yazyki russkoy kultury, 42-53.
- Lahelma, Antti 2005. The boat as a symbol in Finnish rock art. In: Devlet, Ekaterina, and Devlet, Marianna A. (eds). *Mify v kamne: mir naskal'nogo iskusstva v Rossii. Étnokul'turnoe vzaimodeistvie narodov Evrazii*. Moskva: Aleteia, 359-363.

- Lahelma, Antti. 2008. *A Touch of Red: Archaeological and Ethnographic Approaches to Interpreting Finnish Rock Paintings*. Iskos 15. Helsinki: Finnish Antiquarian Society.
- Larsson, Lars 1989. Late Mesolithic settlements and cemeteries at Skateholm, Southern Sweden. In: Bonsall, Clive (ed.). *The Mesolithic in Europe. Papers presented at the third International Symposium, Edinburg 1985*. Edinburgh: John Donald, 367-378.
- Lewis-Williams, David, and Dowson, T. 1988. The signs of all times: entoptic phenomena in Upper Palaeolithic art. *Current Anthropology*, 29, 2, 21-45.
- Maher, Lisa, Stock Jay, Finney Sarah, Heywood James, Miracle Preston, and Banning Edward 2011. Unique Human-Fox Burial from a Pre-Natufian Cemetery in the Levant (Jordan). *PLoS ONE*, 6, 1. Article e15815. doi: <10.1371/journal.pone.0015815>.
- Mazin, Anatolij I., and Derevjanko, Anatolij 1984. *Tradicionnyye verovanija i obrjady évenkov-oročonov: konec XIX – načalo XX v.* Novosibirsk: Nauka.
- Mykhailova, Nataliia. 2009. Obryadovi aspect kulta olenia po materialam archeologicheskikh pamiatnikov Evrazii. In: Vasilev, Sergei, and Kulakovska, Larisa (eds). *S. N. Bibikov I pervobytnaya archeologija*. Sankt-Peterburg: IIMK RAN, 269-276.
- Mykhailova, Nataliia 2016. Deer offerings in the archaeology and art of Prehistoric Eurasia. *Expression*, 10, 53-59.
- Mykhailova, Nataliia 2017a. *Cult olenya u starodavnokh myslyvtsiv Evropy ta Pivnichnoi Asii*. Kyiv: Stylos.
- Mykhailova, Nataliia 2017b. Cult sites and art. Images of the deer and cult places of Europe and Northern Asia. *Expression*, 17, 37-48.
- Okladnikov, Aleksej P. 1950. *Neolit i bronzovyi vek Pribaikal'ia: istoriko-arkheologicheskoe issledovanie*. Materialy i issledovaniia po arkheologii SSSR 18. Moskva, Leningrad: Izd-vo Akademii nauk SSSR.
- Okladnikov, Aleksej P. 1966. *Petroglify Angary*. Moskva, Leningrad: Nauka.
- Péquart, Marthe, Boule, Marcellin, and Péquart, Saint-Just 1937. *Téviac: Station-nécropole Mésolithique Du Morbihan*. Archives de l'Institut de Paléontologie Humaine, Mémoire 18. Paris: Masson et Cie.
- Péquart, Marthe, and Péquart, Saint-Just 1954. *Hoëdic: Deuxième station-nécropole du Mésolithique côtier armoricain*. Anvers: De Sikkel.
- Petrukhin, Vladimir 1986. Cheloveki zivotnoe v mife i rituale. In: Zhukovskaia, Nataliia (ed.). *Mify, culty, obryady narodov zarubeznoy Asii*. Moskva: Arthaaaintustarseline.
- Popov, Andrej A. 1936. *Tavgiytsy [The Tavgi]*. Trudy Instituta Antropologii 1, 5. Moskva, Leningrad: Izdatelstvo Akademii Nauk SSSR.
- Popova, Uliana H. 1981. Perezhitki shamanizma u evenov. In: Vdovin, I. S. (ed.). *Problemy istorii obshchestvennogo soznaniia aboryhenov Sibiri (po materialam vtoroy poloviny XIX – nachala XX v.)*. Leningrad: Nauka, 233-253.
- Porr, Martin 2004. Grenzgängerin. Die Befunde des mesolithischen Grabes von Bad Dürrenberg. In: Meller, Harald (ed.). *Paläolithikum und Mesolithikum*. Kataloge zur Dauerausstellung im Landesmuseum für Vorgeschichte Halle 1. Halle (Saale): Landesamt für Denkmalpflege und Archäologie Sachsen-Anhalt Halle (Saale), 291-300.
- Potapov, Leonid P. 1934. Luk i strela v shamanstve u altaytsev. *Sovetskaya etnografiia*, 3, 64-76.
- Potapov, Leonid P. 1935. Sledy totemisticheskikh predstavleniy u altaytsev. *Sovetskaya etnografiia*, 4-5, 130-137.
- Potapov, Leonid P. 1947. Obryad ozivleniia shamanskogo bubna u tyutkoyasychnikh plemen Altaya. *Trudy Instituta etnografii AN SSSR*, 1, 139-183.
- Prokofieva, Ekaterina D. 1959. Kostium selkupskoho shamana. *Sobranijach Muzeia Archeologii i Etnografii*, 11, 335-372.

- Ravdonikas, Vladislav I. 1936. *Naskal'nye izobrazhenija Onezskogo ozera i Belogo Morja* [Les gravures rupestres des bords du lac Onéga et de la mer Blanche]. Trudy Instituta antropologii, arkheologii i etnografii 9. Moskva, Leningrad: Izdatelstvo Akademii nauk SSSR.
- Ribakov, Boris A. 1981. *Jazyčestvo drevnich slavjan*. Moskva: Nauka.
- Robert-Lamblin, Joëlle 2005. La symbolique de la grotte Chauvet à Vallon-Pont-d'Arc sous le regard de l'anthropologie. In: Geneste, Jean-Michel (ed.). *La grotte Chauvet à Vallon-Pont-d'Arc. Un bilan des recherches pluridisciplinaires. Actes de la séance de la Société préhistorique française, 11 et 12 octobre 2003, Lyon*. Travaux (Société préhistorique française) 6. Paris: Société préhistorique française, 199-210.
- Rozwadovski Andrzej, 2012. Shamanism, rock art and history: Implications from a Central Asian case study. In: Smith, Benjamin W., Helskog, Knut, and Morris, David (eds). *Working with rock art: recording, presenting and understanding rock art using indigenous knowledge*. RARI monographs 4. Johannesburg: Wits University Press, 192-204.
- Sagalaev, Andrej M. 1991. *Uralo-Altayskaya mifologija*. Novosibirsk: Nauka.
- Schulting, Rick 1988. Creativity's coffin. Innovation in the burial record of Mesolithic Europe. In: Mithen, Steven (ed.). *Creativity in human evolution and prehistory*. Theoretical Archaeological Group. London: Routledge. 203-226.
- Schulting, Rick 1996. Antlers, bone pins and flint blades: The Mesolithic cemeteries of Téviec and Hoedic, Brittany. *Antiquity*, 70, 335-350.
- Serikov, Jurij B. 2003. Shamanskiie pohrebeniia kamennoho veka. In: Ètnografo-arkheologicheskie komplekxy: Problemy kul'tury i sotsiuma 6. Novosibirsk: Nauka, 141-164.
- Sorokina, Sophiia A. 2005 *Gendernye aspekty traditsionnoy kultury narodov severa, sibiri i dalnego vostoka*. PhD-thesis, University St Peterburg. <cheloveknauka.com/gendernye-aspekty-traditsionnoy-kultury-narodov-severa-sibiri-i-dalnego-vostoka#ixzz5QQA2ZkGN>, retrieved 23 March 2019.
- Studzitskaya, Svetlana V. 2004. Izobrazheniie losia v melkoi plastike lesnoi Yevrazii (epoha neolita i rannei bronzy). In: Savinov, D.G. (ed.). *Izobrazitelnyie pamyatniki. Styl, epokha, kompozitsiya*. St Petersburg: Istoricheskii fakultet St Petersburg, 25-31.
- Torchinov, Evgeny A. 2005. *Religii mira: opyt zapredel'nogo: psikhotehnika i transpersonal'nye sostoiianiia*. St Peterburg: Centr Peterburgskoe Vostokovedenie.
- Tromnau, Gernot. 1991. Archäologische Funde und Befunde zum Schamanismus. In: Tromnau, Gernot, and Löffler, Ruth (eds). *Schamanen. Mittler zwischen Menschen und Geistern*. Duisburger Akzente 15. Duisburg: Kultur- und Stadthistorisches Museum.
- Utrilla Pilar Miranda, Maria del, and Martinez-Bea, Manuel. 2005. La captura del ciervo vivo en el arte prehistoric. *munibe Antropologia – Arkeologia*, 57, 161-178.
- Vanhaeren Marian, and D'Errico, Francesco 2000. Grave goods from the Saint-Germain-la Riviere burial. Evidence for social inequality in the Upper Palaeolithic. *Journal of Anthropological archaeology*, 24, 117-134.
- Varavina, Galina. N. 2008. Pogrebeniia shamanov u evenov Yakutii. In: *The way to Siberia*. <://archive.li/QmXB4>, retrieved 22 June 2015.
- Varela Gomes, Mario. 2007. Os períodos iniciais da arte do Vale do Tejo (Paleolítico e Epipaleolítico). *Cuadernos de arte rupestre. Revista digital de Arte Rupestre*, 4, 81-117. <www.cuadernosdearterupestre.es/arterupestre/4/81_116.pdf>, e-published 2007; retrieved 23 March 2019.
- Vasilevich, G. M. 1957. Drevnie ohotnichi I olenevodcheskie obryady evenkov. *Sbornik museya antropologii i etnografii*, 17, 151-185.
- Vdovin, I. S. 1981. Chukotskiie shamany i ih sotsialnyie funktsii. In: Vdovin, I. S. (ed.). *Problemy istorii obščestvennogo soznaniia aborigenov Sibiri (po materialam vtoroj poloviny XIX-načala XX v.)*. Leningrad: Nauka, 178-217.

- Vitebsky, Piers 2001. *Shamanism*. Norman: Oklahoma Press.
- Zagorska, Ilga 1988. The art from Zveinieki burial ground, Latvia. In: Butrinis, Adomas (ed.). *Prehistoric art in the Baltic region*. Acta Academiae Artium Vilnensis 20. Vilnius: Vilnius Academy of Fine Arts, 79-92.
- Zagorska, Ilga 2008. The Use of Ochre in Stone Age Burials of the East Baltic. In: Fahlander, Fredrik, and Oestigaard, Terje (eds). *The Materiality of Death: Bodies, Burials, Beliefs*. BAR International Series 1768. Oxford: Archaeopress, 115-124.

Part-time females and full-time specialists? Identifying gender roles in ritual behaviour and archaeological remains

Andy Reymann

Abstract

Gender research in archaeology involves analysing aspects of the social identity of a deceased person, normally seen as criteria¹ that have marked a person throughout their entire life. Change of social identity can appear as long process. Ritual moments, such as *'rites de passage'*, can transform a person much more quickly from one category to another. The person and its social identity are always seen as something whole, as an all-embracing stereotype. In this paper, the temporality of identity aspects is demonstrated by looking at the ritual behaviour of religious specialists, primarily those who are labelled shamans.

Keywords: *theory of archaeology, burial rites, social identity, shamanism*

Archaeology, gender, and identity

In recent years, archaeological observations of topics related to gender and identity have definitely increased in number and widened their once narrow scope². The topic is, as Nils Müller-Scheeßel and Stefan Burmeister wrote in 2006, *'eines der zentralen Themen'*³, one of the central topics, in social and cultural science of the past 10 to 20 years.

1 Social identity can be seen as a catalogue of different elements, which can be visible or invisible archaeologically, for example, sex: male/female; membership of an association: yes/no; age: old/young; economic status: poor/rich. All aspects together form a specific individual, but even if only some aspects are there, the individual can still be considered part of a specific community.

2 See, for example, Burmeister and Müller-Scheeßel 2006; Fries *et al.* 2017; Pohl and Mehofer 2010.

3 Müller-Scheeßel and Burmeister 2006, 10.

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Especially the way in which we see graves has changed and evolved in a much more thoughtful way; we now see them as representations of a constructed past, and not of a reconstructed past, as was the case prior to the New Archaeology. This can be seen, for example, in the attempts at reconstructing ‘regional modes of outfits’ of archaeological cultures, which often were seen as ethnical groups⁴. Although the voices advocating that we should consider graves as being the result of processes of social construction are getting louder, the presentation of burials as snapshots of prehistoric life rather than an intentional construction of past identity is nevertheless a commonly performed *habitus* among archaeologists.

Of course, the identity of a person is visible, especially in public space, where one’s own identity is getting in touch with those of one’s fellow human beings. Therefore, when Ulrike Rambuschek wrote in a recent publication that the ‘*social identity results from the identification of a person with their social collective as family, kinship, tribe, status or nation*,’⁵ the intertwining of identity is seen as only working if someone is there to remark upon it. It is a philosophical thought that alludes to the dramatic play *Huis Clos*, published in 1944 by the French existentialist Jean-Paul Sartre⁶. In this piece, in which a man and two women are imprisoned in a small room after their death, the protagonists find out that hell is not being in a special place being tortured, but that hell is losing the possibility to define one’s own identity. All that is left is to see yourself through the eyes of another person, the only reflective object in the entire place.

Like in this semantic picture, the investigation of prehistoric burial has been an attempt to catch a reflected picture, a snapshot of past society, in the hope that the material culture of ancient burials, as a medium of the symbolic connections of past social communities, could be decoded and read, like the letters on a mourning band at the flower decoration of a modern German burial. Archaeologists gathered information with an intent to see it as a result of a performative act – but an act that caught all aspects of the entire ‘social persona’⁷. In Lewis Binford’s usage of the word, all symbolic materialisations could therefore be directly interpreted as an intentional sign of social connections, making the grave itself a book of past community bonds.

Of course, prehistoric material culture carries aspects of identity, and, as we all know, that identity is expressed by clothes, symbolic objects, and other elements of appearance. A fine example of this is a recent investigation by Christine VanPool, Todd VanPool, and Lauren Downs on gender attributes in past Casa Grandes culture iconography:

*‘Cross-cultural analysis indicates that dress is socially meaningful in that it “calls out to others with the ‘same’ identifications of the wearer” (Stone 1981, 193). As such, it is fundamental to both creating and reflecting on an individual’s identity.’*⁸

Dress and other changes in appearance are seen here as a way of manipulating one’s identity – but also, of course, as a way of communicating. ‘*Individuals use dress to send visual clues about their identities and to make suppositions about other people’s identities*’.⁹ Although we have to be careful with the observation of symbolic meaning in people’s appearance – because every human behaviour is communica-

4 As a fine example of the new modes, compare, for example, Brather and Wotzka 2006.

5 Rambuschek 2018, 151.

6 Sartre 1988.

7 ‘*It is argued that the locus of mortuary rituals and the degree that the actual performance of the ritual will interfere with the normal activities of the community should vary directly with the number of duty status relationships obtaining between the deceased and other members of the community (scale of identity)*’ (Binford 1971, 21).

8 VanPool et al. 2017, 263.

9 VanPool et al. 2017, 263.

tion if more than one person attends to it, following Paul Watzlawick's theory of communication¹⁰ – the study on Casa Grandes identities shows an impressive number of interesting findings. In the article, small figurines of explicit male and female persons, and their decorations as representation of clothes and other body supplements, are analysed. It turns out that a connection of specific motifs to gender and also to religious activities can be observed, marked by male smoking effigies and body ornaments that can be connected to religious clothes reported from ethnographic studies. From the observation of these iconographic differences, the authors conclude that *'there was a distinction in masculine and feminine cosmological and religious associations'*¹¹.

Of course, this observation is not new. We know it from the classic discussion about the bipolar, gender-differentiated burial rite of the central European Chalcolithic Bell Beaker and the Corded Ware cultures, which was established in the works of Alexander Häusler¹². There, it seems that a gender-specific afterworld could have existed – or at least, given that the genders were lying in different positions but shared the same orientation of their visual field, that they had different ways of getting there.

Also, from different time periods, we have clear evidence that clothes can symbolise aspects of gender, that clothes are one of the core ways of identifying gender differentiation of burials before the invention of modern anthropological sexing.

However, the connection between clothes and a religious aspect of gender can be problematic. While it may be an easier and clearer connection in the wider field of religious connotation, explicit connections can be a pitfall, because in those cases, different conceptualisations of gender can appear – as we will see in the case of the phenomenon of shamanism.

Shamanism – a short introduction to a problematic topic

Shamanism as a distinct form of religious specialism has been the focus of many different scientific approaches, which even led to the establishment of the term shamanologist for those scientists focusing on the topic¹³. Shamanism has been an interest for different researchers for a long time: Mentioned for the first time in the lectures of the Russian orthodox priest Avvakuum¹⁴ and pictured for the first time in central European literature in Nicolaes Witsen's travel accounts¹⁵, the usage of the more stereotypical word shaman in the early ethnographic literature of romanticism or the enlightenment¹⁶ increased until finally, around 1900, the word became an international standard term for a specific subject because of its usage in the publications of the Jesup North Pacific Expedition, led by Franz Boas¹⁷. Archaeological investigations of shamanism mainly focussed on early rock art and special forms of material culture, as the expectation of early researchers was always to find the grave of a shaman by identifying its ritual paraphernalia – an approach that reminds us of the Schliemann era, when it was postulated that the grave of a king should contain his crown.

10 The first of Watzlawick's five axioms is: *'You cannot not communicate'* (Watzlawick *et al.* 1967).

11 VanPool *et al.* 2017, 284.

12 See, among others, Häusler 1966.

13 Ohlmarks 1939, XV.

14 Price 2001, 3.

15 Witsen 1692.

16 See, among others, Flaherty 1992; Kasten 2009; Znamenski 2007; 2009.

17 Znamenski 2009, 179-180.

When I use the term shaman in this article, I try to evade the discussion of how to define it¹⁸, the question of where ‘real’ shamans could be found, and all the questions that modern forms of neo-Shamanism bring in, pointing, instead, at other recent studies that have been done within this field¹⁹. I use the definition of Ernst Stigl-mayer (albeit with a nod to Michel Perrin’s differentiation of a wide and a narrow term²⁰), namely, a special sort of religious specialist, observed in Siberia, who used intentionally induced trances or at least altered states of consciousness, in which the shaman was able to communicate with the ghosts of humans and animals, and with nature:

*‘In addition to the fundamental characteristic, the technique of an ecstatic connection with spirits, the following points belong in the description of shamanism: the special qualifications of those who enter a state of ecstasy, their effect being primarily directed at the good of the community, and the justification of their power and ability by a particular Seelenideologie.’*²¹ (Translated by A.R.).

This interaction, which is normally not combined with prayers – or at least not dominated by them – is seen as direct. Shamans even use physical contact and therefore are open to all forms of human social communication. They work by protecting their society and serving the greater good of their fellow community members.

Although these types of definitions have been taken into account in several investigations of prehistoric shamanism, the known and famous shamanistic burials from all over the world, including those from Ust’Udinsk (now Ulan-Ude, Burjatia)²², Bats’ub (Belize)²³, Hilazon Tachtit (Israel)²⁴, Bad Dürrenberg (Saalekr., Germany)²⁵, or Siberia²⁶, are always interpreted in a manner of picturing shamans using the wide terminus²⁷, introduced by Mircea Eliade. His approach doesn’t differentiate between the very diverse forms of shamans, and even includes representatives who would normally be called ‘priest’²⁸. The authors of those accounts expect that shamans always occupied high social, political, and economic positions in their community and were buried with the full scale of material representations of their highly respected position. But that’s not true – at least not if you look at ethnographic examples of shamans and ignore the romantic, modern notions that followed the boost of New Age movements during the 1950s to 1970s.

18 How problematic this can be having been shown earlier; see Motzki 1997; Reymann 2015.

19 See, among others, Kasten 2009; Reymann 2015; Tromnau and Löffler 1991; Van Alphen 1997; Vitebsky 2001.

20 He summarises that there exist three kinds of ‘shamanisms’: *‘Selon les uns, le chamanisme serait une notion sans pertinence, une fausse catégorie que l’on devrait éliminer du vocabulaire de l’ethnologie. [...] La deuxième position consiste à se méfier de toute définition inutilement contraignante. [...] En revanche, les tenants de la troisième position – qui est celle de l’auteur de ces lignes – jugent indispensable de s’entendre, provisoirement au moins, sur une définition’* (Perrin 1997, 89-90). *‘According to some, shamanism is an irrelevant notion, a false category that should be removed from the vocabulary of ethnology. [...] The second position is to be wary of any unnecessarily constraining definition. [...] On the other hand, the proponents of the third position – which is that of the author of these sentences – consider it essential to agree, provisionally at least, on a single definition.’* (Translated by A.R.).

21 *‘Neben dem grundlegenden Wesensmerkmal, der Technik einer ekstatischen Verbindungssetzung mit Geistern, gehören zur Umschreibung des Schamanentums noch folgende Bestimmungspunkte: die besondere Qualifikation der in Ekstase tretenden Personen, deren grundsätzlich auf das Wohl der Gemeinschaft gerichtete Wirksamkeit und das Begründetsein derselben auf einer bestimmten Seelenideologie’* (Stiglmayr 1962, 40).

22 Okladnikov 1951.

23 Prufer and Dunham 2009.

24 Grosman et al. 2008.

25 See Reymann 2013.

26 See Devlet 2001.

27 Perrin 1997.

28 Eliade 1951.

One of the best cinematic studies of shamanism, which nevertheless accurately described the results of a long-lasting ethnographic field study, was executed by Michael Oppitz in the 1970s and published in 1981²⁹. In his research, he accompanied the Magar shaman Bal Bahadur for several years and tried to figure out the social mechanisms by which a shaman is embedded in this Asiatic society in Nepal. Although this case is not strictly a Siberian form of shamanism in the sense mentioned before, the social concept of shamanism here resembles that of other societies farther north on the Asian continent. Bal Bahadur, being well known among his community and having acquired more than a regional reputation for being a qualified healer, was nevertheless not portrayed as a full-time specialist. In fact, shamanism in wide parts of Siberia can be seen as a social institution that is really necessary for the survival of the community, but it is seldom a future people seek for themselves.

*'In tribal societies, people designated to join shamanic vocation usually undergo painful physical and spiritual experiences, which became known as the "shamanic illness"'*³⁰

The painful initiation process often was accompanied by a constant feeling of danger, as the office of the shaman was accompanied by the usual and constant contact with evil, illness-causing, revengeful spirits, which threatened not only the shaman's personal safety, but also the security of the shaman's family³¹. No wonder that shamans were half respected, half feared, and that people normally felt safer if shamans were not around. Lawrence Krader, for example, quoted tales about Buryat shamans, which were seen as the worst kind of human beings:

*'The Burjats think that the shamans among them are the worst kind of human beings. Their reputation is abnormal, their gift is terrible, the effect of shamans on others is sinister; the shamans are representatives of the unfit side of human life. They seem to be unnatural.'*³² (Translated by A.R.).

In addition, the job of a shaman was only on rare occasions and in unusual cultural contexts well paid. As the duty of protecting the community was most often a thing that could not be rejected, a successful shaman received gifts but had to carry out shamanistic rituals side by side with daily life³³. Bal Bahadur and his relative Beth Bahadur, for example, were normally farmers and hunters, and only on special occasions did they act as shamans, and then tried to do so while minimising the effort and the danger as much as possible:

'If not fed in the houses of his nightly sessions, Bal Bahadur cooks the daily meal for his mother-in-law, his wife, and his daughters at his own fire. The usual meal is composed of maize porridge, meat broth, and chili, which is crumbled into the mush. The shamans of the northern Magar by no means restrict their activity to their calling as healer and seer. Some of them are excellent hunters, many others go fishing or gather honey, and all of them till their fields themselves. The mundane activities are important for their subsistence, because the job of shaman alone does not bring in enough. This contradicts

29 Oppitz 1981.

30 Znamenski 2004, XIX.

31 *'The acquisition of such protecting spirits is usually not a result of the shaman of his own free will. The gift of shamanism is not acquired through the force of one's own desire; quite the contrary, it comes against one's desire, and the high gift is accepted as a heavy burden, which man takes up as the inevitable, submitting to it with a weary heart as of one doomed'* (Sternberg 2004, 125-126).

32 *'Die Burjaten sind der Auffassung, daß die Schamanen unter ihnen die schlimmste Art der Menschen seien. Der Ruf ist anormal, die Gabe schrecklich, die Wirkung der Schamanen auf die anderen unheilvoll; die Schamanen vertreten also die untaugliche Seite des Menschenlebens. Sie scheinen unnatürlich zu sein'* (Krader 1991, 51).

33 Kortt 1991, 28.

*the common opinion that the shamans would rip off the unaware populace with their quackery. In fact, the shaman's lot is much harder than that of others: doing the work of ordinary people by day and, in addition, performing the work of the chosen many a night.*³⁴ (Translated by A.R.).

Another problem for archaeological science, which is illustrated by the case of Bal Bahadur, is the fact that in many parts of Siberia and Asia shamans never received their ritual paraphernalia as grave goods. As the shaman's costume, meaning dress, shoes, belt, headdress, and the shaman's special objects, meaning drum, drum stick, portable shaman's tree, and other situational or cultural divisive things, were often materialisations of the shaman's power, those objects were seen as ensouling themselves³⁵. This means that the process of production brought the things to life and therefore became the resting place of supernatural beings. Additionally, they were dangerous tools if the dominating shaman died without a person to take care of those things³⁶. But giving supernatural objects to someone who has already mastered the ability of traversing the border between life and death during life would have been a dangerous deed – so dangerous that most often shamanistic paraphernalia received special treatment and never went directly into the grave context³⁷.

For this, the identification of shamans – or 'shamanism' – by means of the interpretation of grave goods seems to be a problematic. Therefore, I preferred to label unusual burials of persons who were perhaps connected to a cultic, religious, ritual, or magical sphere 'religious specialists'.

But even though shamanism is problematic to identify archaeologically, investigation of shamanism in the past still offers an interesting observation for the field of the material manifestation of ritual or religious gender roles on a temporary scale.

Gender in shamanism – a matter of time?

The observation of gender differences and gender as a topic already appeared as theme of interest in the early literature on shamanism. For example, Sergej Shirokogoroff, a member of the Jesup North Pacific Expedition (1897-1902), wrote the following about shamanism:

34 *'Wenn er nicht in den Häusern seiner nächtlichen Sitzungen verköstigt wird, kocht Beth Bahadur am eigenen Feuer das tägliche Mahl für Schwiegermutter, Frau und Töchter. Die übliche Mahlzeit setzt sich aus Maisbrei, Fleischbrühe und Chili zusammen, den man in die Pampe bröseln. Die Schamanen der nördlichen Magar beschränken sich keineswegs nur auf die Tätigkeiten ihrer Berufung als Heiler und Seher. Einige von ihnen sind ausgezeichnete Jäger, viele gehen fischen und Honig sammeln und sie alle bestellen ihre Felder selbst. Die profanen Tätigkeiten sind wichtig für ihren Lebensunterhalt, denn der Schamanenberuf bringt selbst nicht genug ein. Dies widerspricht einer verbreiteten Ansicht, die Schamanen beuteten mit Quacksalbereien nur die unwissende Bevölkerung aus. In der Tat ist ihr Los schwerer als das der Anderen: tags die Arbeit des Laien und in vielen Nächten zusätzlich die des Erwählten'* (Oppitz 1981, 174).

35 Compare Reymann 2015.

36 *'The dress represents the mysteries and powers which the shaman learned during his first experiences and initiations. In many cases it is the dwelling place of spirits and therefore for his supernatural power. Thus, the dress itself is thought to possess supernormal power. In the areas of clan shamanism, the dress could not be sold outside the clan, because the shaman's spirits belonging to the clan were attached to it. A worn-out shaman's dress might be hung on a tree in the forest, so that the spirits could leave it gradually and enter a new dress'* (Siikala and Hoppál 1992, 10). Compare, in addition, other examples for the handling of shamanistic paraphernalia of a shaman after his death in Reymann 2015.

37 To give here examples and more detailed explanations would go much too far. Because of this, we are just pointing at the publication dealing with this topic; therefore, see Reymann 2015.

*‘In all Tungus languages this term refers to persons of both sexes who have mastered spirits, who at their will can introduce these spirits themselves and use their power over the spirits in their own interest, particularly helping other people, who suffer from spirits [...]’*³⁸

The mention of both sexes in relation to practicing shamans is nothing unusual and has been described in many instances throughout Siberia³⁹. Actually, the only excavated burial of a probable Siberian shaman in Yakutia in the modern era contained the remains of the 18- to 23-year-old Kyss⁴⁰, a female. She died from tuberculosis and was buried following the typical burial custom that was reserved for Yakutian shamans during the 18th century⁴¹.

A phenomenon even more interesting than this may be the often-cited mechanism of gender transformation, which occurs in Siberian shamanism but also in several similar religious or cultic systems from all over the world⁴².

Of course, the change of specific gender roles, which is always connected to socially default, gender-restricted activities, can appear in a lot of circumstances, not only in religious ones, and is often hard to trace⁴³. However, in the sociological literature, gender transformation processes are differentiated – and, especially in Western science, dichotomously differentiated – into ‘cultic sacral’ and ‘profane-social’⁴⁴. The sociologist Wolfgang Lipp subdivides the first category into a ‘passage type’ and a ‘shamanistic type’⁴⁵. The former contains all appearances of gender on a more permanent scale, such as, for example, rites of initiation, but also temporary fertility cults, when gender changes occurs as a short-lived, more or less a serious part of cultic gender mimicry⁴⁶. The shamanistic type, on the other hand, although it can also be either permanent or temporary, follows a wider usage of the term and focusses on the permanent changes that take place in the phenomenon of the North American *two-spirits* (so called *berdache*) – a dangerous word-usage, as *two-spirits* don’t need to be spiritual or religious specialists. Moreover, Lipp connects his understanding of shamanism to a very functionalist methodology, in which the change of gender appears only to become attractive for supernatural beings of both sexes:

*‘They fit their gender to theirs [meaning females], they transform into a female in their mind, mediator with the demons – which they understand to be male – essentially they become this by having “intercourse”, sexual intercourse.’*⁴⁷ (Translation by A.R.).

So, he assumes that the only purpose of changing gender in shamanism would be to attract the male spirits by sexual acts, thereby overtaking their supernatural power and making it usable for the community.

Both types can, as Lipp formulates it, appear in a temporary or permanent way. If temporary, then gender changes are applied only during a single ritual and only for this ritual, and the acting person is seen as someone of the opposite gender. As a result of a permanent transformation, this process can, of course, include the possible appearance of several in-between stages. Although Lipp’s model, following a fine differentiation, is based on a vaguer usage of North American empirical data, the change of gender roles in Siberian shamanism also follows both layers of tempo-

38 Shirokogoroff 2004, 63.

39 Compare, for example, Solov’Eva 2009.

40 Crubézy and Alexéev 2007.

41 Compare Crubézy and Alexéev 2007, 36-44.

42 See DuBois 2009, 77-81.

43 Lipp 1986, 530.

44 Lipp 1986, 534.

45 Lipp 1986, 534.

46 Lipp 1986, 534.

47 *‘Sie wandeln sich an sie an, sie werden zum Weibe im Glauben, Mittler zu den Dämonen – die sie als männlich begreifen – erst wesentlich dadurch zu werden, daß sie mit ihnen “verkehren”, geschlechtlich verkehren [...]’* (Lipp 1986, 537).

rality. It can appear in a temporary way or occur as a permanent, institutionalised aspect of the religious system of a community.

Marjorie Mandelstam-Balzer states that many shaman costumes in museum collections in Russia and outside have a basic cutaway that resembles the cutaway of Tungusk or Evenkian female dress⁴⁸. She traces this custom back to the border-crossing ability of shamans, which is manifested in their ability not only to traverse between the realism of humans and the spirits during shamanistic rituals, but also to switch between the sexes in almost the same manner. In addition, the ability to use bodily functions that are said to be typical for the opposite sex, such as the ability to give birth, to spirits, is repeatedly mentioned in accounts of initiation ceremonies for Siberian male shamans, when they give birth to their own guiding spirits, as is the nearly universal topic of dying and being reborn during the initiation⁴⁹.

The postulated imbalance of power between the sexes, and because of this the need to take over the abilities of the opposite sex, seems to be a specific source for shamans with higher powers. These differences sometimes manifest themselves in the specific attributes of shamans, male as well as female:

*'Differences between female and male shamanic activity also appeared in the ritual practice and the nature of their attributes. In the cosmology of the Altaians and the Tuvins, a female shaman, being an "impure" being, could only conduct a kamlanie for the spirits of the earth and the mountains (Er-Su) and for Erlik-Chan, the ruler of the underworld.'*⁵⁰ (Translation by A.R.).

In her account on the Siberian shamanistic ceremony, called *kamlanie*⁵¹, Karina Solo'Eva remarks in the quote above that male and female shamans did, indeed, differentiate themselves in practice, abilities, and ritual paraphernalia. For example, Altaian female shamans were specialists who performed rituals connected to Erlik, the emperor of the underworld. This is especially interesting because shamans connected to heavenly realms normally more closely resemble 'priestly' types of shamans, acting with prayers, sacrifices, and healing-spells. Shamans connected to the underworld and to gods or spirits, as Erlik in the Altaian case – for example, the so-called 'black shamans' of Mongolia and Buryatia⁵² – were more specialised to guide the death into the afterworld, to bring back lost souls from there, and to send curses and diseases upon enemy tribes and opposing shamans⁵³.

The connection of a shaman to the realms of the supernatural world regarding ghosts and to specific concepts of gender makes shamanism an appropriate topic for further investigation – but also a problem for archaeology. Solo'Eva describes certain customs among the Evenki, in this case especially the Manegrin people, where the dress of a shaman was draped with iron pendants. These pendants, supplemented by

48 Mandelstam-Balzer and Ivanov-Unarova 2009, 63.

49 Compare, for example, Mandelstam-Balzer and Ivanov-Unarova 2009, 64.

50 *'Unterschiede zwischen weiblicher und männlicher schamanischer Ausübung zeigten sich auch in der rituellen Praxis und an der Art der Attribute. In der Vorstellung der Altaier und Tuviner konnte eine Schamanin als "unreins" Wesen eine kamlanie nur für die Geister der Erde und der Berge (Er-Su) und Erlik-Chan, dem Herrscher der Unterwelt abhalten'* (Solo'Eva 2009, 82-83).

51 For a more precise translation and description, compare the article by Nataliia Myhkailova in this book.

52 For the distinction, see, among others, Hesse 1986.

53 It has been mentioned several times that the ability to send death to others was very important in Siberia and that in older times this topic was more often requested by the members of communities as their universal healing ability. However, as the black shamans and their skills were severely attacked by the missionary works of several religions of Christianity, Buddhism, and Islam, the oral sources on this phenomenon are meagre and hard to retrace. Nevertheless, the compulsion of this could be interesting not only for the history of ethnology and the science of religion, but also for a widening of social concepts and its application in archaeological investigations.

small iron bells and mirrors, symbolised the three worlds of the Evenkian cosmos, with the mirrors functioning as signs for the souls of the different members of the community, men, women, and children. The female shamans of this community had small bags with grain attached to their dresses, while male shamans wore a symbol for the main guiding spirit, the thunder-ghost, on their back, together with very big mirrors⁵⁴. A lot of other tribal and also gender-specific modifications could appear on the shaman's dress of other Siberian tribes, so that gender, but also an explicitly demonstrated and performed transformation of gender, were crucial elements in the concept of shamanistic power, all represented by the ritual paraphernalia⁵⁵.

The crucial point is that those descriptions of shamanistic paraphernalia mostly point to shamans in action – shamans during their ritual – and shamans still alive.

As mentioned in a critical PhD thesis on the concept of 'shamanism' and its operational application for the interpretation of deviant burials of the third to second millennia BCE in archaeology⁵⁶, shamans in Siberian cultures of the past were not buried in the way reserved for the rest of the society. Instead, these specialists received burial rites in an old-fashioned way. For example, the burial was performed on high platforms. These wooden platforms, often termed *arangas* in the Yakut context⁵⁷, were also used by several other tribes as part of a once widespread tradition in Siberia. The rite was passed down through time, but its use was restricted to shamans and retained as a tradition even while the rest of the community had adopted Christian, orthodox, or Muslim burial rites. Moreover, the burial rite did not end with the deposition of the dead on this platform. Hans Findeisen describes that very often especially shamans had to be 'uplifted', meaning that when the wooden parts of the platform had rotted away and the dead had fallen to the ground, the burial was repeated, with the rest of the shaman's remains being placed onto a new platform. This was repeated a specific number of times, whereby the number of repetitions was connected to a belief in specific cosmological concepts:

*'A famous shaman is not buried in the ground, but he is laid in the open on a framework called an arangas. Once the arangas has decayed and tumbled down, the bones of the shaman, over time, are "uplifted" three times by three, six, or nine shamans.'*⁵⁸
(Translation by A.R.).

Following a similar concept, shamans were often not buried in communal burial grounds. They received burials outside, in the steppe⁵⁹, in specialised shaman groves, as in the case of Buryatian cremation rites⁶⁰, or in specialist graveyards, as in the case of the Nepalese shamans of the Magar⁶¹.

54 Solo'Eva 2009, 83.

55 Here I add that, of course, all these observations always go together with the critical reflection of the spirit of a time. For example, Basilow (1995, 61 f.) mentions that the disappearance of male shamans in some regions, as among the Turkmenian tribes of Siberia, was influenced by the spread of Islam during the 18th century in these regions – the male shamans converted to a more Islamic-inspired worldview, while the position of shaman, still valuable and necessary for the society, was overtaken more and more by female healers and actors. In a similar way, other approaches to the phenomenon always have to be analysed critically – but that, of course, is a normal way to look at any source of historic or even prehistoric time periods.

56 Reymann 2015.

57 See Findeisen 1957, 98-102; see also Nachtigall 1953.

58 *'Einen berühmten Schamanen bestattet man nicht in der Erde, sondern legt ihn unter freiem Himmel auf ein besonderes Gerüst namens Arangas. Wenn dann der Arangas verfault und umgestürzt ist, werden die Knochen des Schamanen im Laufe der Zeit drei Mal durch drei, sechs oder neun Schamanen "erhoben"'* (Findeisen 1957, 98).

59 Findeisen 1957, 98.

60 Findeisen 1957, 100.

61 Oppitz 1981, 112-115.

But beside from those deviant burial rites, which are often described for shamans⁶², the most important thing was that shamans never received their ritual paraphernalia after their death. Because the shaman's ability to traverse the border between life and death didn't end with the shaman's own physical death, a shaman remained a potential threat to all members of the community – especially to those who had, intentionally or unintentionally, shamed or angered the dead during life. To deal with this threat, burials of shamans were conducted as complex rites, showing a high amount of respect and reverence for the deceased, but at the same time precise safety precautions were taken.

The Yakut burial of Kyss, mentioned above, is a fine example: Here, the young woman, interpreted as a Yakut female shaman, was buried in a fine dress, with two wooden vessels filled with a milky liquid, and an uprooted birch tree – a mighty sign of power in jakutian shamanism – had been planted on her coffin, within the burial pit but under the surface. In contrast to this sign of respect, the body of the deceased was bound with two leather ropes, and the arms of her jacket were sewn together above her fingers⁶³. As Eric Crubézy and Andrej Alexéev state, this was a typical custom for people who had died by suicide and for shamans – in the case of Kyss, due to an anthropologically attested tuberculosis, it was concluded that she fell in the latter category.

The ritual paraphernalia of a Siberian shaman were seldom placed in the burial pit or in the proximity of the deceased. Drums were either destroyed immediately after death or passed to the next shaman in line so that they remained in the possession of the clan⁶⁴. If the object(s) of the deceased were buried in the ground or were deposited near the corpse, then a safe distance between shaman and object(s) was maintained. All efforts were made to prevent the still mighty shaman from taking revenge on anything or anyone the shaman might have wronged during life and therefore protect the surviving members of the community. These efforts were undertaken whether the deceased was male or female.

According to the ethnographic sources, the world of shamanistic societies seems to be full of evil and revengeful spirits, full of a constant threat by the supernatural powers surrounding human beings. The possibility that spirits could steal a soul was always present – a danger for normal people, but also for the shaman. Spirits and ghosts were embedded in a lot of objects, especially the ensouled shamanistic paraphernalia, and they also roamed the surrounding landscape, protected crossroads, fords, and passages. The supernatural world was always near. Of course, a cosmological model that was based on a constant danger saw the shaman as an object for all supernatural assaults. The ghosts, which the shaman had enslaved or against whom the shaman had started campaigns in the otherworld, were mighty enemies, able to strike back if the concentration of the shaman slipped for only one moment. After a successful return from an altered state of consciousness, the spirits still roamed the land, and they were always eager to take revenge. Therefore, shamans normally did not wear or use their objects unless absolutely necessarily. Rituals were kept to a minimum, and if not needed, the deep state of trance and the highly exhaustive use of the full dress was avoided. In the case of Magar shamanism, Oppitz describes the healing ceremony of Kathka, a colleague of Bal Bahadur, for a

62 Just compare the description for the Magar: 'This difference can be seen in the burial custom: the normal Magar lies straight in his grave, oriented in east-west direction – belowground; the shaman, in contrast, is sitting upright, aboveground, under a burial mound, the face directed to the north, the home of the first shamans.' (Translated by A.R.). In the original German: '*Dieser Unterschied zeigt sich auch in der Bestattung: der einfache Magar liegt flach in seinem Grab, in ost-westlicher Richtung, – unter der Erde; Der Schamane dagegen sitzt aufrecht, über der Erde, unter einem Grabhügel, mit dem Gesicht nach Norden gewandt, der Heimat der Ersten Schamanen*' (Oppitz 1981, 112).

63 See Crubézy and Alexéev 2007, 30.

64 See further Reymann 2015, 229-237.

small child⁶⁵. In this ceremony, the shaman used only a small metal plate and not his full ritual ornamentation, consisting of a feather crown, a dress that weighed more than 10 kg, and his special drum. Drumming on this plate, the shaman said that, for a small soul, a small effort is enough: *'Because of the insignificance of this occasion, Kathka accompanies his song with a rhythmically beaten plate of brass'*.⁶⁶ (Translated by A.R.). The dangers of a deep trance and of the confrontation with the dangers of the otherworld are best avoided – if possible.

Among the finest examples of the fear of ghosts are, of course, the objects of the shamans themselves. The drums, being designed to look like a shield, were used as weapons of protection and of attack, and the drum stick was sometimes supplemented by real weapons, such as a sword⁶⁷. The antler headdress was used as an attack weapon in the fight against the imaginary but not unreal spirit enemies, and the coat was not only his armour, but also a way to hide himself⁶⁸. For example, Soyot shamans wore a fringed veil, so that the face of the wearer was not visible. Of course, the people of their community knew the identity of the shaman. But this symbolic disguise opened the possibility for the shaman to hide from the evil spirits during the ritual. By this, he could evade the attacks and the prosecution of revengeful spirits.

The dangers of the shamanistic ritual, the usage of temporal ways of disguising themselves, and the great efforts that were connected to shamanising lead us to another aspect, which is normally not considered in scientific approaches to shamanism: the aspect of temporality. Although shamans are of course supernatural persons and therefore treated in a special way by their community and by other people, some aspects, especially the materialised components, only appear during the shamanistic ritual and are therefore only a temporary aspect of their social role. Since the ritual paraphernalia never reach the burial ground and therefore would stay outside of the archaeological record, and since the shaman would normally be buried as a usual member of society, only perhaps marked in a deviant way, shamans themselves remain invisible in the archaeological record.

Gender, time, and snapshot archaeology

Even aside from the often-mentioned phenomenon of complete and chronologically permanent gender change, as described, for example, by Lipp and others in the context of the North American *two-spirits*⁶⁹, the ritual performance of a shaman seems problematic in many ways.

First, the act of 'shamanising' – which means putting on the dress, preparing the place where the ritual will take place; conducting the performance; and, afterwards, when the patient or the customers of the shaman have left, cleaning up all material results of the *kamlanie*⁷⁰. Shamanising is a non-standard situation, which takes place in a non-normal context⁷¹. And although a priest also relies on heavily standardised

65 See Oppitz 1981, 134.

66 *'Wegen der Geringfügigkeit des Anlasses begleitet Kathka sein Lied auf einem rhythmisch angeschlagenen Messingteller'* (Oppitz 1981, 134).

67 For the different aspects of the shaman's paraphernalia and their possible symbolic and functional usages, compare Reymann 2015, 150-237

68 Reymann 2015, 141.

69 See, for example, Bleibtreu-Ehrenberg 1984; Lipp 1986, 534; Margreth 1993, 141.

70 Here I use again the term that derived from the Turkic languages, for in the past it was very often used to summarise all ritual aspects of Siberian shamanism. It is nevertheless to be remarked that there are several other terms for this ritual process.

71 Here it should be added that most ritual performances of shamans follow specific rules, but they are nevertheless in most cases unique and creative acts. No *kamlanie* is like another. Only the frames of acting are the same.

immolations, as Christina VanPool states, an important difference between shamans and priests is that the shaman is supernatural⁷². While priests are mediators between an ever present supernatural force and daily life, and their mission is to establish a connection to a deity, shamans connect themselves to the supernatural because the establishment of a presence of supernatural forces has already taken place. It is their mission to cancel this connection and to resolve the problems that resulted from it. They are supernatural, indeed, but they have to – and want to – return to the normal world after their job is done. This means that shamanising is actually a true ‘*rite de passage*’ in the sense of Arnold Van Gennep⁷³.

Second, this temporary entering into a non-standard status, which fits with the nomenclature of the trance as an ‘altered state of consciousness’⁷⁴, can include aspects of gender as well, although they would never reappear outside this type of situation. Some material components can symbolically represent the ability to switch between these situations, but they would not necessarily be represented in a specific archaeological context.

If we turn back to the burial of Kyss, her altered state of consciousness is manifested in the belt that she wore as part of her dress. Crubézy and Alexéev mention that this belt was called the ‘belt of engagement’, based on a comparison with contemporary pictures from Yakutia⁷⁵. This belt originally had five mixed-material pendants, which were attached to the belt and hung down from it – but one was missing in the grave. However, already during the first part of the excavation, another pendant had been found in the layers above, still inside the burial pit⁷⁶. It could be reattached to the belt; the part could be refitted to a loose end with clear signs of cutmarks, demonstrating that it had been intentionally cut off and then had been deposited inside the pit. The excavators thus identified an old burial custom of the Yakuts, which is nowadays only known through oral history. The specific number of something was correlated to different realms: even numbers of items were for the dead, odd numbers for the living⁷⁷. By adjusting the number of pendants, so it was told in yakut oral history, the burial community prepared the deceased for entering the afterlife.

Returning to the topic of temporality, we are facing a big problem. If the afterlife – reflected by the material components of a burial – is separated from normal, everyday reality and is marked by a different material culture, can we ever catch a glimpse of ancient reality and of ancient identity?

In the case of the burial of Kyss, we have a pretty good chance to catch at least a good glimpse, because the permafrost helps us to ignore wide parts of the natural transformation processes, which, under other circumstances, would have changed the burial into a normal one. Nevertheless, the intentional preparation of the deceased and her transformation into a dead person – materialised by a change in her outfit and the correction of the number of pendants – resulted in a burial identity that was different than her living identity, and that survives archaeologically outside of permafrost settings as well. In cases where the natural transformations are not as well suited to preservation, more problems could arise.

For example, in his publication about the Corded Ware culture in Bohemia⁷⁸, Roland Wiermann analysed some necropolises to draw conclusions about the typical

72 For the problematic differentiation of priests and shamans, see VanPool 2009; furthermore, see Grim 1983, 185-191.

73 Van Gennep 2004.

74 For the discussion of ecstatic and altered states in shamanism and the conceptualization of shamanism, see Reymann 2015, 47-89

75 Crubézy and Alexéev 2007, 31.

76 Crubézy and Alexéev 2007, 20.

77 See Crubézy and Alexéev 2007, 31 and also 33-36.

78 Wiermann 1997; 2001.

bipolar gender-differentiated burial custom of that time. He found several exceptions, especially seven cases in which biological males had been buried following the burial rite usually restricted to females⁷⁹. Wiermann interpreted those deviant burials by referring to the phenomenon of permanent ritual gender change, seeing the individuals therefore as gender-transformed shamans. He stated that the ritual context of the Corded Ware culture was comparable to Siberian shamanism.

Although no material components of shamans' dress nor any paraphernalia were mentioned by Wiermann – which would normally form the basis for a verification of this assumption – the idea of transgender shamans in the third millennium BCE was picked up by several other authors. For the necropolis of Bergheinfeld (Lkr. Schweinfurt) in Bavaria, a Corded Ware culture burial ground with 31 individuals in 29 graves, the excavator, Kerstin Nausch, proposed the existence of Neolithic shamans⁸⁰. Inside grave 13, three individuals had been deposited: an early adult male person, oriented south-west-west to north-east-east, lying on the right side and looking north. Beside him was an early adult female person, oriented east to west in a crouched position, lying on the left side and looking south. Her arms were bent and held an infant 0-6 months of age. The male had a smoothed stone axe, a silex knife, a bone bodkin, and the fragment of a boar's tusk as grave goods beside him; the female had a beaker with a flint arrowhead inside it and a shell, perhaps the rest of her necklace⁸¹.

Referring to the work of Günter Behm-Blancke on shamans in the Corded Ware culture⁸², an important source of inspiration for Wiermann too, Nausch postulated that the individual who was looking in a different direction than usual and had a boar's tusk as a headdress could have been a shaman – not a gender-transferred person, but a shaman – whose family had perhaps followed him into the afterlife⁸³. Here, a potential temporality was ignored, as was the entire context of the burial: burials with multiple individuals are not unusual in Corded Ware culture. Nausch, referring to the possible killing of a widow, similar to the Indian Sati practice, also saw the multiple burial as the possible result of simultaneous death through accident or illness. But for her, the burial is a reflection of a real past social situation, not the mirroring of a potential social construction of a specific connection by the burial community. This is even more of a problem because her assumptions are based on an incorrect interpretation of the ethnographic record, at least as it relates to cultures from Siberia: there, shamans were normally not buried together with their relatives, nor with any other person⁸⁴.

The hope of catching a snapshot of the past is realized, instead, when we look at burial 8 from the same burial ground. Here, again, two people were buried together, a man in the usual orientation and position of males of the Corded Ware culture and a female, oriented east-west and lying in the typical crouched position, but on the right side and therefore looking north. While in the case of burial 13 shamanism was posited as a possible explanation, this interpretation was not considered for the woman in burial 8:

But the female burial from grave 8, which lacks any sign of grave goods, has no signs for such a positioning. Another explanation for this “deviant burial” from grave 8 is that she could have been an outcast, for example, an adulteress. There are many possibilities for

79 Wiermann 1997, 523 f.

80 Nausch 1996.

81 Reymann 2015, 337.

82 Behm-Blancke 1989.

83 Nausch 1996, 36.

84 Reymann 2015, 328-340. It has to be added here that, of course, the burial customs could have changed over the several thousand years between prehistoric times and the ethnographically recorded shamans. But this is true for all aspects of their ritual behaviour – so if we use the term *shaman* in its definition as is done today, we have to use all aspects.

*interpreting this burial that does not conform to the rules (shamanism, homosexuality, social ostracism, deviant burial of old people), but in the end, all of this remains hypothetical, as none of the options can be proven – although I think that ostracism is the most probable option.*⁸⁵ (Translated by A.R.).

Because there had not been any grave goods, Nausch prefers an interpretation of the dead as a socially sanctioned person, being excluded from society and the usual afterlife, perhaps because of adultery. Here, the burial itself becomes a reflection of the thoughts of the community: No matter how or why both persons died at the same time, they were buried together. While the man was placed in the usual orientation for his gender, the female was not. Could it be that she was placed in the orientation of an honoured shaman?

Summary and discussion

The last two examples, from Berggrheinfeld, were meant to show a problematic intermixture of the social connotations that archaeologists hope to see in prehistoric burials. Although older models have been criticised several times, we still hope to find the ancient ‘social persona’. Material objects are often forced into stereotypical interpretation categories, just to make sense of the findings. That some of the ancient social roles and identities can never be reconstructed, because they were not meant to be portrayed at the burial site, is often of no interest. Because social, ethnological, religious, and other theories are often transferred into archaeology without checking them for their ‘operational’ potential – meaning that they can be defined and used outside of the technical terminology of a specific science – concepts in prehistory tend to become decontextualised and therefore change their inner meaning or take on unintentional connotations.

The ethnological concept of shamanism is an exceptional example of this, especially because the concept of temporality is often ignored in its application. However, many archaeological interpretations are based on an axiom: that the archaeological find, assuming it is in a closed context, could be quite well understood, if only all natural filters could be identified and their influence explained.

In the case of the two potential shamans of Berggrheinfeld, one male, one female, this doesn’t work very well. If the male in grave 13 was a male shaman, we would expect to see gender differentiation. But while the normal orientation of west to east had changed slightly, to south-west-west to north-east-east, he was still lying on the right side. The only reason for making a shaman out of this individual is the direction of view, which was north, rather than the normal south, and the fact that the deceased had received a boar tusk. Nausch, in this case, ignores that many examples exist that correlate a separate afterlife for high-status individuals with a separate cardinal direction of view, and she ignores that boar tusks are not rare in Corded Ware culture male burials.

On the other hand, the person in grave 8 was oriented in the manner of females, but on the right side and looking north, as was the person in grave 13. In this case, we could ask whether a change of gender took place, so that the female was appointed to the ‘male’ side. One could also ask: Was she denied the normal afterlife, but was allowed to reach the same afterlife as the male from grave 13?

85 *‘Doch die weibliche Bestattung aus Grab 8, der jegliche Beigaben fehlen, hat keinerlei Hinweise auf eine solche Stellung. Eine andere Erklärungsmöglichkeit für diese “Sonderbestattung” aus Grab 8 ist, daß es sich um eine aus der Gesellschaft ausgestoßene Person handelt, etwa um eine Ehebrecherin. Es bieten sich viele Möglichkeiten an, diese entgegen der allgemeinen Regeln niedergelegte Bestattung zu deuten (Schamanismus, Homosexualität, soziale Ächtung, Sonderbestattung von Alten), aber letztendlich bleibt doch alles Hypothese, da man keine der Möglichkeiten beweisen kann – wenn mir auch soziale Ächtung am wahrscheinlichsten erscheint’* (Nausch 1996, 35).

Of course, these speculations don't help us to draw any firmer conclusions – but this was not the aim of this paper. Rather, its aim was to point out the problematic visibility of specific roles that can change in special situations for a shorter or longer period of time. Meaning that gender in those cases was of enormous importance – and in other cases it was not. This can be seen from the shamans in Siberia, mentioned earlier, who, unlike the *two-spirits*, did not change their gender, did not try to act in the specific social role of individuals of the opposite gender. Shamans in Siberia tried to adopt specific attributes of the opposite sex – such as the ability of birthing, in order to be able to give birth to ghost children. Which means that those shamans were viewed as sex-transformed persons rather than gender-transformed persons. Gender in the sense that we understand it today was of no matter, nor was the existence of a 'third gender' even in question.

The aim of this paper was to point at specific categories of burial interpretation and social organisations that are normal for us today, to examine the difference between what we think of as important, what may have been considered important as part of ancient burial customs. However, the question remains: Were such categories as gender, job, age, and status really that important? Or were kinship, religion, and place of birth of more interest – specially when the dead faced their ancestors?

References

- Basilow, Wladimir N. 1995. *Das Schamanentum bei den Völkern Mittelasiens und Kasachstans*. Mittelasiatische Studien 1. Berlin: Schletzer.
- Behm-Blancke, Günter 1989. Zum Weltbild und zur Gesellschaftsstruktur der Schnurkeramiker. *Alt-Thüringen*, 24, 117-150.
- Binford, Lewis 1971. Mortuary: Their Study and Their Potential. *Memoirs of the Society for American Archaeology*, 25, 6-29.
- Bleibtreu-Ehrenberg, Gisela 1984. *Der Weibmann. Kultischer Geschlechtswechsel im Schamanismus. Eine Studie der Transvestition und Transsexualität bei Naturvölkern*. Frankfurt a. M: Fischer.
- Brather, Sebastian, and Wotzka, Hans-Peter 2006. Alemannen und Franken? Bestattungsmodi, ethnische Identitäten und wirtschaftliche Verhältnisse zur Merowingerzeit. In: Burmeister, Stefan, and Müller-Scheeßel, Nils (eds). *Soziale Gruppen – kulturelle Grenzen: Die Interpretation sozialer Identitäten in der prähistorischen Archäologie*. Tübinger archäologische Taschenbücher 5. Münster, New York: Waxmann, 139-224.
- Burmeister, Stefan, and Müller-Scheeßel, Nils 2006 (eds). *Soziale Gruppen – kulturelle Grenzen: Die Interpretation sozialer Identitäten in der prähistorischen Archäologie*. Tübinger archäologische Taschenbücher 5. Münster, New York: Waxmann.
- Crubézy, Eric, and Alexéev, Andrej 2007 (eds). *Chamane. Kyss, jeune fille des glaces*. Paris: Editions Errance.
- Devlet, Ekaterina 2001. Rock art and the material culture of Siberian and Central Asian shamanism. In: Price, Neil S. (ed.). *The Archaeology of Shamanism*. New York: Routledge, 43-55.
- DuBois, Thomas A. 2009. *An Introduction to shamanism*. Cambridge: University Press.
- Eliade, Mircea 1951. *Le Chamanisme et les techniques archaïques de l'extase. Chamanisme et psychopathologie*. Paris: Payot.
- Findeisen, Hans 1957. 'Schamanentum' dargestellt am Beispiel der Besessenheitspriester nordeurasischer Völker. Stuttgart: Urban.
- Flaherty, Gloria 1992. *Shamanism and the eighteenth century*. Princeton/Oxford: University Press.
- Fries, Jana Ester, Gutmiedl-Schumann, Doris, Matias, Jo Zalea, and Rambuschek, Ulrike 2017 (eds). *Images of the Past. Gender and its Representations*. EAA annual

- meeting Istanbul 2014. Frauen – Forschung – Archäologie 12. Münster, New York: Waxmann.
- Grim, John A. 1983. *The Shaman. Patterns of Siberian and Ojibway Healing*. Norman: University of Oklahoma Press.
- Grosman, Leore, Munro, Natalie D., and Belfer-Cohen, Anna 2008. A 12,000-year-old Shaman burial from the southern Levant (Israel). *Proceedings of the National Academy of Sciences of the United States of America*, 105, 17665-17669.
- Häusler, Alexander 1966. Zum Verhältnis von Männern, Frauen und Kindern in den Gräbern der Steinzeit. *Arbeits- und Forschungsberichte der Sächsischen Bodendenkmalpflege*, 14/15, 25-72.
- Hesse, Klaus 1986. Zur Transformation des weißen, schwarzen und gelben Schamanismus in der Geschichte der Mongolei. In: Zinser, Hartmut (ed.). *Der Untergang von Religionen*. Berlin: Reimer, 171-182.
- Kasten, Erich 2009. Schamanen: Sibirische Weltbilder – Westliche Gegenwelten. In: Kasten, Erich 2009 (ed.). *Schamanen Sibiriens. Magier, Mittler, Heiler*. Stuttgart: Reimer, 24-31.
- Kortt, Ivan 1991. Die soziale Bindung des sibirischen Schamanen. In: Kuper, Michael (ed.). *Hungrige Geister und rastlose Seelen. Texte zur Schamanismusforschung*. Berlin: Reimer, 27-44.
- Krader, Lawrence 1991. Ostsibirischer Schamanismus. In: Kuper, Michael (ed.). *Hungrige Geister und rastlose Seelen. Texte zur Schamanismusforschung*. Berlin: Reimer, 45-55.
- Lipp, Wolfgang 1986. Geschlechtsrollenwechsel. Formen und Funktionen am Beispiel ethnographischer Materialien. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 38, 529-559.
- Mandelstam-Balzer, Marjorie, and Ivanov-Unarova, Zinaida 2009. Schamanenattribute, Gender und sich wandelnde Definitionen des Heiligen. In: Kasten, Erich 2009 (ed.). *Schamanen Sibiriens. Magier, Mittler, Heiler*. Stuttgart: Reimer, 62-69.
- Margreth, Donat 1993. *Skythische Schamanen? Die Nachrichten über Enaress-Anarieis bei Herodot und Hippokrates*. Schaffhausen: Universitätsdissertationen.
- Motzki, Harald 1977. *Schamanismus als Problem religions-wissenschaftlicher Terminologie*. Arbeitsmaterialien zur Religionsgeschichte 2. Bonn: Universitätsverlag.
- Müller-Scheeßel, Nils, and Burmeister, Stefan 2006. Einleitung: Die Identifizierung sozialer Gruppen. Die Erkenntnismöglichkeiten der Prähistorischen Archäologie auf dem Prüfstand. In: Burmeister, Stefan, and Müller-Scheeßel, Nils (eds). *Soziale Gruppen – kulturelle Grenzen: Die Interpretation sozialer Identitäten in der prähistorischen Archäologie*. Tübinger archäologische Taschenbücher 5. Münster, New York: Waxmann, 9-38.
- Nachtigall, Hans 1953. Die erhöhte Bestattung in Nord- und Hochasien. *Anthropos*, 48, 44-70.
- Nausch, Kerstin 1996. Bergheinfeld und Wolkshausen, zwei endneolithische Gräberfelder aus Unterfranken. *Bayerische Vorgeschichtsblätter*, 61, 23-94.
- Ohlmarks, Ake 1939. *Studien zum Problem des Schamanismus*. Lund: Gleerup.
- Okladnikov, Alexei Pawlowitsch 1951. Zum Studium der Anfangsetappen der Völkerbildung in Sibirien. *Sowjetwissenschaft*, 442-461.
- Oppitz, Michael 1981. *Schamanen im Blinden Land. Ein Bilderbuch aus dem Himalaya*. Frankfurt a. M.: Syndikat.
- Perrin, Michel 1997. Chamanes, chamanisme et chamanologues. *L'Homme*, 37, 142, 89-92.
- Pohl, Walter, and Mehofer, Mathias 2010 (eds). *Archaeology of Identity – Archäologie der Identitäten*. Denkschriften. Philosophisch-historische Klasse 17. Wien: Verlag Österreichische Akademie der Wissenschaften.

- Price, Neil S. 2001. An Archaeology of altered states: Shamanism and material culture studies. In: Price, Neil S. (ed.). *The Archaeology of Shamanism*. New York: Routledge, 3-16.
- Prufer, Keith M., and Dunham, Peter S. 2009. A shaman's burial from Early Classic cave in the Maya Mountains of Belize, Central America. *World Archaeology*, 41, 295-320.
- Rambuschek, Ulrike 2018. Die Vielfalt der Geschlechter: komplexe Identitäten statt binäre Konzepte. Einleitung ins Thema. *Archäologische Informationen*, 41, 151-154.
- Reymann, Andy 2013. 'Schamane' oder nicht 'Schamane'? Zur Problematik der Nutzung eines ethnologischen Terminus bei der Analyse vorgeschichtlicher Bestattungen. In: Müller-Scheeßel, Nils (ed.). *'Irreguläre' Bestattungen in der Urgeschichte: Norm, Ritual, Strafe...? Akten der Internationalen Tagung in Frankfurt a.M., 3.-5. Februar 2012*. Kolloquien zur Vor- und Frühgeschichte 19. Bonn: Habelt, 65-74.
- Reymann, Andy 2015. *Das religions-archäologische Konzept des Schamanen in der prähistorischen Archäologie*. Frankfurter Archäologische Schriften 28. Bonn: Habelt.
- Sartre, Jean-Paul 1988. *Geschlossene Gesellschaft*. München: RoRoRo.
- Shirokogoroff, Sergej Michailowitsch 2004. Shamanism in General. In: Znamenski, Andrei A. (ed.). *Shamanism. Critical Concepts in Sociology 1*. London: Routledge, 61-82. [First published as: Shirokogoroff, Sergej Michailowitsch 1935. *Psychomental Complex of the Tungus*. London: Kegan/Trench/Trubner and Co, 268-276.285-287].
- Siikala, Anna-Leena, and Hoppál, Michael 1992. *Studies on Shamanism*. Ethnologica uralica 2. Budapest: Akadémiai Kiado.
- Solov'eva, Karina J. 2009. Die Schamanenwerdung. In: Kasten, Erich (ed.). *Schamanen Sibiriens. Magier, Mittler, Heiler*. Stuttgart: Reimer, 42-49.
- Sternberg, Leo 2004. Extracts from 'Divine Election in Primitive Religion'. In: Znamenski, Andrei A., *Shamanism. Critical Concepts in Sociology 1*. London: Routledge, 124-148. [First published: Sternberg, Leo 1925. Divine Election in primitive Religion. In: *Proceedings of the Twenty-First International Congress of Americanists II* (Göteborg 1924), 472-489.505-512].
- Stiglmayr, Ernst 1962. Schamanismus, eine spiritistische Religion? *Ethnos*, 27, 40-48.
- Tromnau, Gernot and Löffler, Ruth 1991 (eds). *Schamanen – Mittler zwischen Menschen und Geistern. Begleitband zur Ausstellung im Kultur- und Stadthistorischen Museum Duisburg, 14. April bis 30. Juni 1991*. Duisburg: Kultur- und Stadt-historisches Museum.
- Van Alphen, Jan 1997 (ed.). *Spellbound by the shaman. Shamanism in Tuva*. Antwerp: Ethnographic Museum.
- Van Gennep, Arnold 2004. *The Rites of Passage*. London: Routledge.
- VanPool, Christine S. 2009. The signs of the sacred: Identifying shamans using archaeological evidence. *Journal of Anthropological Archaeology*, 28, 177-190.
- VanPool, Christine S., VanPool, Todd, and Downs, Lauren W. 2017. Dressing the person: Clothing and identity in the Casa Grandes World. *American Antiquity*, 82, 2, 262-287.
- Vitebsky, Piers 2001. *Schamanismus. Reisen der Seele, magische Kräfte, Ekstase und Heilung*. Köln: Taschen.
- Watzlawick, Paul, Beavin, Janet B., and Jackson, Don D. 1967. *Pragmatics of Human Communication: A Study of Interactional Patterns, Pathologies and Paradoxes*. New York: Ww Norton & Co.
- Wiermann, Roland R. 1997. Keine Regel ohne Ausnahme: die geschlechtsspezifische Bestattungssitte der Kultur mit Schnurkeramik. *Ethnographisch-Archäologische Zeitschrift*, 38, 521-529.

- Wiermann, Roland R. 2001. *Untersuchungen zur geschlechts- und altersspezifischen Bestattungssitte der Kultur mit Schnurkeramik in Böhmen*. Archäologie Digital 1. Freiburg: Archäomedia.
- Witsen, Nicolaas 1692. *Noord en Oost Tartarye, Ofte Bondig Ontwerp Van eenig dier Landen en Volken Welke voormaels bekend zijn geweest. Beneffens verscheide tot noch toe onbekende, en meest nooit voorheen beschreve Tartersche en Nabuurige Gewesten, Landstreeken, Steden, Rivieren, en Plaetzen, in de Noorder en Oosterlykste Gedeelten Van Asia En Europa Verdeelt in twee Stukken, Met der zelviger Landkaarten: mitsgaders, onderscheide Afbeeldingen van Steden, Drachten, enz. Zedert naeuwkeurig onderzoek van veele Jaren, door eigen ondervondinge ontworpen, beschreven, geteekent, en in 't licht gegeven*. Amsterdam: Halma.
- Znamenski, Andrei A. 2004. *Shamanism. Critical Concepts in Sociology 1-3*. London: Routledge.
- Znamenski, Andrei A. 2007. *The Beauty of the Primitive. Shamanism and Western Imagination*. Oxford: University Press.
- Znamenski, Andrei A. 2009. *Jenseits von Sibirien: Schamanismus in der Wissenschaft und in zeitgenössischen Bewegungen des Westens*. In: Kasten, Erich 2009 (ed.). *Schamanen Sibiriens. Magier, Mittler, Heiler*. Stuttgart: Reimer, 172-187.

Beyond gender. Approaches to anthropomorphic imagery in prehistoric central Anatolia

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Abstract

Prehistoric anthropomorphic figurines are probably one of the most widely discussed and possibly the most poorly understood archaeological objects of all. The engendering of Anatolian prehistory using figurines and visual representations of people has not progressed much beyond defining which figure is male or female or, in most cases, which figure represents a god or goddess. This article aims to take apart the Mother Goddess theory and discuss how it was created and why it is problematic for feminist scholarship. Many interpretations of figurines have been proposed in previous decades; they incorporate such concepts as embodiment, materiality, and gender. As a case study, this paper concentrates on Köşk Höyük, a central Anatolian Late Neolithic and Chalcolithic site, with the aim to have a broader look at the visual imagery. The anthropomorphic representations on relief-decorated pottery and the figurines found at Köşk Höyük have typically been interpreted as representations of gods and goddesses, despite ongoing critiques of the Mother Goddess theory. This paper analyses representations of gendered identities, based on visual media, in order to gain a better understanding of the function and use of such representations.

Keywords: *Neolithic, Chalcolithic, Anatolia, figurines, Mother Goddess, performativity, gender*

Introduction

When they were first found at Palaeolithic and Neolithic archaeological sites throughout Europe in the 19th century, anthropomorphic representations became the centre of attention, not only by prehistorians but also by those who believed they may hold the key to understanding Palaeolithic religions. Each scholar proposed a

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different interpretation for what they were and why they had been made, but the catchiest proposition was probably the idea that they were representations of a prehistoric goddess, most notably a specific prehistoric goddess – the Mother Goddess.

This paper concentrates on the Mother Goddess theory, which is still popular among many prehistorians in Turkey, and discusses why it became so popular and why it is problematic for feminist scholarship. I will explore alternative meanings for these prehistoric figurines if they are not goddesses. After that, I will explore the anthropomorphic representations from Köşk Höyük (Niğde, Turkey), a Late Neolithic/Early Chalcolithic site in central Anatolia, as a case study.

Emergence of the Goddess

By the time the first anthropomorphic figurines were found in the 19th century, scientific theories about sexual inequality had already been established (Laqueur 1990). As Hamilton says, men had proven to other men that men were physically stronger, had bigger brains, and were intellectually superior to women (Hamilton *et al.* 1996, 282). Men were considered to be the leaders of their society, while women were labelled too ‘emotional’ and ‘irrational’ for such power. At the same time, post-Enlightenment theories of evolution and socialism were on the rise.

The theory of linear social evolution developed within this atmosphere. Linear social evolution proposes that there are three stages to the evolutionary development of human societies, and that Western civilisation was at the apex of cultures (Morgan 1877). Lewis Morgan, in his book *Ancient Society* (1877), divided the cultural evolution of humans into three phases: savagery, barbarism, and civilisation. The idea of a prehistoric matriarchy was first advanced by Johann Bachofen, in his book *Das Mutterrecht* (1861). Bachofen suggested that matriarchy was both a step up from unregulated sexuality and the beginning of established religion and morality. However, this stage of human development was followed by patriarchy, which eradicated matriarchy and led to the emergence of civilisation. Although patriarchy eventually overthrew matriarchy, matriarchy had already been established within religion, and the Mother Goddess was an important part (Bachofen 1861).

Influenced by Morgan’s and Bachofen’s theories about cultural evolution, Friedrich Engels published his work *The Origin of the Family, Private Property, and the State* (1884). In this book, he defined the development of the concept of family: while at the beginning (the savagery phase), there were group marriages, these evolved into paired marriages¹ in the barbarism phase. With the emergence of civilisation, monogamous marriage became important. He underlined that during our savagery phase, societies were matriarchal and matrilineal, because it was impossible to know the father of the children with certainty. However, this matriarchal society was overthrown by patriarchy at the beginning of barbarism phase. Engels states that ‘*the overthrow of mother right was the world historic defeat of the female sex*’ (Engels [1884] 1978, 14 [emphasis in the original]). His theories helped spread the idea of a matriarchal prehistory in Europe.

During the time period when the anthropomorphic figurines were being found by Victorian male researchers, the concept of a matriarchal prehistory was increasing in popularity. Since the anthropomorphic figurines found in Europe from the Palaeolithic period were mostly female, corpulent, and naked, they were easily associated with this supposed matriarchal past and the female Goddess (Hamilton *et al.* 1996). Theories about why they were made ranged from erotic objects for pleasuring men to womanhood, symbols of fertility, birth and reproduction. Once the initial

1 Paired marriages are different from the monogamous marriages that followed in that the family was not a distinct economic unit. Therefore, the married couple could easily split up and the children still belonged to the mother.

excitement had passed and new figurines kept being found in archaeological excavations, the impact of the Mother Goddess concept slowly declined. Now, other interpretations also started to be mentioned. Palaeolithic figurines were frequently seen as erotic or sexual objects, while the Neolithic ones were regarded as fertility symbols and servants for the dead (Hamilton *et al.* 1996, 283).

Bachofen's model of a matriarchal society and a female goddess in the past was taken up by some influential first-wave feminists², such as Matilda Joslyn Gage (*Woman, church and state*, 1893), Mary Esther Harding (*Woman's mysteries: Ancient and modern*, 1935), and Elizabeth Cady Stanton (*The woman's bible*, 1895/1898). However, not until the second-wave feminism³ did matriarchy and prehistoric goddesses become popular among feminists. With the rise of the feminist movement in the 1960s, the androcentric, patriarchal vision of the past and the diminished importance of women in prehistoric societies were heavily criticised, and many sought for an alternative. This led to the popularisation of the prehistoric figurines once again (e.g. Eisler 1987; Orenstein 1990; Spretnak 1978; Stone 1976; 1984).

When James Mellaart examined Near Eastern mythologies, he concluded that the religion at Çatalhöyük (Konya, Turkey), a Neolithic site in central Anatolia, was centred around the Mother Goddess, the creator of life and the mother of everything. He also concluded that the bull imagery represented the son and/or lover of the Mother Goddess (Mellaart 1967, 49). The richly decorated houses at Çatalhöyük were interpreted as shrines of the Goddess, and those buried in the buildings as her priests and priestesses (Mellaart 1967, 77-89). Although current research interprets anthropomorphic figurines from Çatalhöyük very differently (Hamilton 1996; Meskell *et al.* 2008; Nakamura and Meskell 2009; Pearson and Meskell 2013), the Mother Goddess interpretation of Çatalhöyük generated so much attention and became so widely accepted that most of the general public and some archaeologists still believe in it. After Mellaart's publications, Çatalhöyük suddenly became one of the main centres of the Upper Palaeolithic Mother Goddess worship, and Mellaart showed that the Goddess worship continued in the Neolithic period as well (Mellaart 1967).

Perhaps the most influential person in the Mother Goddess movement was Marija Gimbutas. She (co-)authored numerous books on the concept (Gimbutas 1982; 1989; Gimbutas and Dexter 2001; Gimbutas and Kearns 1992) and left a legacy. As an experienced archaeologist who was well known for her theories about the Indo-Europeans (Gimbutas 1952) at that time, Gimbutas published her first book on the Mother Goddess in 1974, *The gods and goddesses of old Europe*⁴. In this book, she argued that in the Palaeolithic and the Neolithic periods in Europe there existed female-oriented, peaceful, non-violent, egalitarian, sedentary cultures who made artworks, such as wall paintings and figurines, related to earth and sea and who believed in a goddess who created everything (Gimbutas 1982, 17-18). According to Gimbutas, this matrifocal culture was overthrown by the warlike, patriarchal, stratified, pastoral culture of Indo-Europeans, coming from the Russian steppes in three migratory waves between 4500 and 2500 BCE (Gimbutas 1982, 9).

Gimbutas evaluated female and male figurines from a wide region – including the Balkans, the Aegean, Ukraine, and the Adriatic – from the Neolithic and Chalcolithic periods (until 3500 BCE) in terms of style, clothing, and facial expressions,

2 The first wave is usually associated with the suffrage movement in the late 19th and early 20th centuries. This movement focused on legal issues, such as women's right to vote and own property (Chamberlain 2017, 21).

3 The second wave refers to the liberation movement in the 1960s (Chamberlain 2017, 33). Second-wave feminists linked the oppression of women in contemporary society with women's invisibility in the historical record, which led them to look for alternative historical narratives (Cowman and Jackson 2003, 39).

4 In the 1982 edition of the book, the name was changed to *The goddesses and gods of old Europe* presumably in order to emphasize the goddess (Gimbutas 1982, 9).

and concluded that these were representations of the Goddess (Gimbutas 1982). The Goddess was seen in the anthropomorphic imagery of animal figures (such as snakes, bears, birds, turtles, bees, dogs, and hedgehogs). Abstract symbols (such as meanders and dots) could also be interpreted as symbolic expressions of various functions of the Mother Goddess. The male figurines or phallic images were identified as the companion of the great Goddess or as her child (Gimbutas 1982, 216-235). Gimbutas argued that even the male symbols and phallic images should be interpreted as female because the divine Goddess is inherently bisexual (Gimbutas 1989, 196). Basically, she associated any artistic or symbolic expression of the region in this period with the Goddess.

Later criticisms and current viewpoints

The inclusion of women of colour, transgendered individuals, and intersectional identities into the discussion, with the third wave⁵ in feminism, led to multivocality in the feminist movement. While some accepted the fact that the women's movement became a part of the general gender theory, others were more reluctant. Gimbutas's ideas of a peaceful, egalitarian society of 'Old Europe' was readily accepted by early ecofeminists who wished to combine the concepts of woman and nature, as they are both oppressed by a male-dominant force. Until recently, groups of ecofeminists and Goddess worshippers organised spiritual tours to Çatalhöyük every year and engaged in ritual activities in order to connect with the Goddess or to tap in to her positive energy (Bartu Candan 2005, 29).

Although many archaeologists before Gimbutas already supported and promoted the Mother Goddess theory (Childe [1958] 2009, 38; Mellaart 1967, 180-203), Gimbutas became the face of the concept. Her interpretations of the existence of a Mother Goddess-worshipping, matriarchal society being overthrown by a patriarchal society became very widely known and accepted by the general public thanks to the second-wave feminist movement. Meanwhile, many scholarly publications reviewing and critiquing her approach were being published. These criticisms peaked after her death in 1994, and many archaeologists started doing contextual analysis in order to disprove the Goddess interpretations (Goodison and Morris 1999; Hamilton *et al.* 1996; Meskell 1995; Talalay 1994; Tringham and Conkey 1999). They did so for two reasons.

The first reason was that the paradigm shifts in archaeological theory towards postprocessualism called for a more contextual analysis and the introduction of agency (Brumfiel 1992; Dobres and Hoffman 1994; Hodder 1982), while Gimbutas's interpretations turned the whole of Europe into one stagnant culture. What Gimbutas actually created was a gynocentric version of the same androcentric world (Conkey and Tringham 1995, 221). In other words, Gimbutas's 'Old Europe' is no different from the male-oriented world, except for the gender swap. It sees all of Europe as a block, with uniform copies of the same lifestyles and same societies living side by side. The agency or gender roles of individuals are not really taken into account (Tringham and Conkey 1999, 23). Individual identities, roles, and practices are homogenised, and the people living in these societies continue to be seen as 'faceless blobs' (Tringham 1991, 94). The theory is very processualist, in that 'Old Europe' is seen as a system functioning like a proper machine; the roles and symbolic position of men and women within the society are seen as static and unchanging until a de-

5 Third-wave feminism emerged in the 1990s as an opposition to the exclusion of intersectional identities and 'dogmatism' in the second wave. *Intersectionality* is the key term for the third wave; this movement rejects essentialized notions of identity and embraces women of colour and the LGBTI community by concentrating on issues of ethnicity, social class, and sexuality. For a more detailed discussion, see Evans 2016.

structive force forces change to happen. People could not have been the main cause of change in this system, because it was already functioning perfectly. This static depiction of gender and individuals is exactly what contemporary gender archaeology is trying to avoid. Furthermore, using anthropomorphic figurines to support this theory ignores the fact that there is great variability in form, decoration, and degree of abstraction among them (Tringham and Conkey 1999, 27).

The second reason is that many scholars assumed that female figurines were made and used by men as an indication of male dominance and desire, and that females in these societies were marginal to males, as males were the artistic creators and had political, ritual, and social control (Dobres 1992, 4). In contrast, the Goddess followers believed that linking female figurines with fertility naturally emphasises the supremacy of females in the Upper Palaeolithic and Neolithic periods (Tringham and Conkey 1999, 25). However, neither of these approaches really question whether these figurines were actually linked with fertility. Dobres questioned all of these male-oriented assumptions because they are extremely heterocentric and because they help to recreate the modern Western gender constructions in prehistory (Dobres 1992, 16).

Various alternative interpretations were put forth for these anthropomorphic representations. For example, Douglass Bailey interpreted figurines from Golyamo Delchevo (Oblast Varna, Bulgaria), a Chalcolithic settlement, as objects through which people represented themselves in the society (Bailey 1994a; 1994b). He saw gender as being represented in three main forms at the site: While femininity or females in the domestic sphere were represented by the anthropomorphic figurines, masculinity or males were represented in the public sphere by rich grave goods. However, there was a category of 'sexless' figurines and burials at the site that do not conform to either of these two categories. Based on the fact that the majority of the anthropomorphic figurines are female, followed in frequency by asexual ones, he suggests that there was a gender-based distinction of domestic and public spheres, and that these spheres were restricted to either males or females (Bailey 1994a, 220). The existence of asexual burials and figurines could mean that there was a third gender that could move between male and female and between sexually restricted spaces. This may have been a mechanism to relieve the tension created by a society tightly organised by gender symbolism. Bailey argued that the existence of engendered imagery at the site may have been used as a weapon for negotiating the social structure and ideology of the settlement (Bailey 1994a, 224).

Catherine Hodge McCoid and Leroy D. McDermott suggested that anthropomorphic figurines, such as the so-called Venus⁶ of Willendorf (Bez. Krems-Land, Austria), were made by women in order to record their bodily changes (McCoid and McDermott 1996, 323; McDermott 1996, 245). They argued that these figurines were distorted because they were looking down on themselves, and their breasts, buttocks, and the belly would seem much bigger than their lower legs from that vantage point. They compared overhead photographs of the Willendorf figurine with those of a pregnant woman and pointed out the similarities. Their comparison and claims are convincing in relation to some of the Palaeolithic anthro-

6 While some see the origins of the term Venus in Roman mythology as the goddess of fertility (Ehrenberg 1989, 66), the mentality behind naming the Palaeolithic anthropomorphic imagery as Venuses probably had a more racist and sexist background (Conkey 1997, 185; White 2006, 277). The first female representation from the Upper Palaeolithic was found in 1864 by Marquis de Vibraye and named '*La Vénus impudique*' (the immodest Venus) by the discoverer based on the similarities with female imagery in classical antiquity, its nudity, and the clear indication of the vulva with an incision (White 2006, 253). Both Conkey (1997, 185) and White (2006, 282-283) see the so-called Hottentot Venus, the South African woman Saartjie Baartman (c. 1789-1815), who was brought to London in 1810 to be displayed for her steatopygia, as the predecessor of the Venus label. For a more detailed discussion on the subject, see Brantlinger 1985; Conkey 1997; Wiss 1994; White 2006.

pomorphic figurines. Nonetheless, suggesting that all Palaeolithic anthropomorphic figurines were made for this purpose is problematic, in part because they show great stylistic variety.

The assumption that the female figurines were prevalent and male and sexless figurines were much rarer led scholars to conclude that these prehistoric societies were, indeed, matriarchal. However, data from most of the publications are actually biased, because scholars chose figurines that fit into their theory and left out those that did not (Beck 2000, 208). This assumption that there were more female figurines is clearly false; current interpretations show that most of the figurines, in fact, are sexless (Bailey 2017, 831; Meskell *et al.* 2008, 155; Kuijt and Chesson 2005, 156; Nakamura and Meskell 2009, 221).

Several contemporary scholars have analysed sexless figurines. They have largely concluded that sexless figurines do not necessarily represent genderless individuals. Rather, they interpret these sexless figurines as a third, intermediary gender (Bailey 1994a; Hamilton 2000; Mina 2007). While Bailey suggests that sexless figurines could have moved between sexually restricted spaces as intermediaries (Bailey 1994a, 221), Naomi Hamilton proposes that sexlessness may have been a structuring principle of the society (Hamilton 2000, 22, 28). Maria Mina suggests that the asexual figurines do not represent a genderless social class but, rather, an alternative expression of the female gender category (Mina 2007, 280-281). These figurines may be representations of prepubescent or post-menopausal, elderly women, who were expected to be or used to be a part of a certain gender (female), and that status is marked by the motifs or colour of the figurines. Alternatively, the asexual figurines may represent people wearing clothes with motifs that show the symbolic marker of gender without the necessity for clear sexual features (Mina 2007, 278).

Regardless of whether sex is indicated, figurines are always lacking some human characteristics; the most notable omissions are the lack of facial expression and/or the entire head (Bailey 2007). It becomes important to question, then, why some body features are purposely indicated while others are omitted. Bailey suggests that when the viewer looks at an image with absent features, the viewer is automatically drawn to the absent features and reflects on them (Bailey 2007, 123). Bailey also underlines the importance of touching the anthropomorphic figurines; he believes that touching and holding a miniature human body would have had a significant impact on how these people conceptualized their world and how they negotiated with their society about their roles (Bailey 2014, 39).

In the past few decades, scholars have also focused on the use-life of these figurines. Many figurines, whether animal or human in form, elaborate or plain, have been found broken and discarded in ordinary rubbish pits located in the external areas at Çatalhöyük (Meskell *et al.* 2008). Of course, there are very rare cases of intentional caching of figurines at the site. Most notable is the famous 'Mother Goddess' seated on a chair in between two feline figures that was found in a grain bin (Mellaart 1967, 67-68). Another exceptional recent find, in 2016, was the two figurines that were found under a platform that was also associated with two burials (Meskell *et al.* 2016). These figurines may suggest that anthropomorphic figurines were used in various contexts and for multiple reasons. They probably had multiple meanings as well.

Another concept that has been addressed in prehistoric figurine studies is materiality. Researchers have examined figurines in relation to agency, embodiment, and representation, concepts that became inextricably linked to one another after the introduction of materiality (Belcher 2016; Clark 2009; Joyce 2003; Looper 2003; Meskell and Joyce 2003; Nanoglou 2009; 2010; Vella Gregory 2006). Materiality researchers do not really look for the one true meaning of these figurines. Instead, they believe that the figurines had multiple meanings, depending on the context.

Judith Butler's theory of performance is an important concept for us to understand embodiment and materiality. Butler underlined that gender is a social construct and that genders are different ways of culturally interpreting the sexed body (Butler 1990, 24-25). To Butler, gender should be seen as something that can change and that is fluid and contextual. Therefore, gender identity is '*always a doing*' and '[t]here is no gender identity behind the expressions of gender; that identity is performatively constituted by the very "expressions" that are said to be its results' (Butler 1990, 33). Gender identity is not who you are but, rather, what you do – in other words, your performance. People create their gender identity through their actions/behaviours, and these performances recreate the concept of that specific gender identity.

It is not surprising that Butler's concept of performativity finds a place in archaeology, because archaeologists are always looking for patterns and things that do not follow the patterns in order to understand past societies⁷. Performativity suggests the same for understanding gender identities. Repeated actions of an individual can leave archaeologically detectable traces, through which archaeologists could interpret the gender of a specific individual or how certain genders were conceptualized within specific societies. From this point of view, the anthropomorphic figurines can be viewed as the embodiment of gendered social identities (Joyce 2003, 256-257).

Although a large number of figurine studies concentrates on sex and gender in relation to representation and identity, Stratos Nanoglou underlines that figurines do not represent only sex and gender, as sex and gender are not the only or primary structuring principles of a person's identity (Nanoglou 2005, 142); the figures could also represent age, social status, or class. His analysis of the Neolithic figurines from Greece from a diachronic perspective showed that the earlier Neolithic figurines showed various postures and gestures, suggesting that each one of these meant something significant. Also, the figures were not static but, rather, in movement, possibly in order to negotiate body politics through motion (Nanoglou 2005, 145). However, in the later Neolithic period, figurine traditions changed drastically; arms and legs were not depicted in detail, as there was no longer any interest in depicting their movement. Instead, figurines became static images, with an emphasis on the head (Nanoglou 2005, 150). To Nanoglou, this change is linked with changes in architecture in the later Neolithic, when new and old architectural features can be seen throughout the settlement. While the old architecture continued to regulate the possibility of agency at the site, it was no longer imposing itself through building models of the earlier Neolithic. This made it possible for the emergence of new identities and identity markers based not on motion but on representing the head (Nanoglou 2005, 151-152).

Çiğdem Atakuman's work on Early Bronze Age (EBA) figurines from Koçumbeli (Ankara, Turkey) (Fig. 1) underlines that gender was one of the themes that was emphasised (Atakuman 2017). However, her argument is not centred on sexing the figurines; rather, it is a way of combining gender and other aspects of social life. The Koçumbeli figurines should not be viewed as static representations but as the embodiment of constant negotiations between individuals and the society in which they lived. Therefore, these figurines could be used as an aid to understand how social identities were constructed. Among the five figurine stylistic types, Atakuman underlines that only the first two seem to represent sex, while the rest are either abstract representations or contain both male and female features (Atakuman 2017, 97). She interprets the Koçumbeli figurine corpus as representations of intersectional identities encompassing age, social status, sex, gender, and class.

7 Butler's performativity concept is very similar to Pierre Bourdieu's *habitus* (See Bourdieu 1977 for the concept of *habitus*; for its application in archaeology, see Dietler and Herbich 1998; Knapp and Van Dommelen 2008).

Maciej Makowski's work on the anthropomorphic figurines from Early Bronze Age Anatolia is another important contribution to figurine analyses in Turkey. He examines EBA figurines from western and central Anatolia in terms of typology, function, and meaning. He divides the figurines into two main groups – natural and schematic – based on certain features and concludes that while the naturalistic figurines were intended for being displayed in the settlement, the schematic ones were used as grave goods (Makowski 2005, 23-24). He rejects the idea that these were representations of a god or fertility symbols, based on the lack of conclusive evidence (Makowski 2005, 22); instead, he proposes that gender, especially female gender, was depicted.

Recent work on the Çatalhöyük figurines suggest that these convey meaning beyond mere representations of gendered bodies. When combined with the evidence from isotope analyses on Çatalhöyük skeletons, these anthropomorphic representations seem to point to corpulence through maturity and old age rather than fertility, abundance, or the Mother Goddess (Nakamura and Meskell 2009, 219; Pearson *et al.* 2015, 81; Pearson and Meskell 2013, 475). While examining the differences in the lifestyles of people at Çatalhöyük, researchers found that there were no discernible differences in terms of health or nutrition between the sexes, but significant changes with biological age (Agarwal *et al.* 2015; Larsen *et al.* 2015; Nakamura and Meskell 2013; Pearson and Meskell 2013). Young adults (between 20 and 30 years old) consumed less carbohydrates and more wild animals, while older adults consumed carbohydrate-rich plants and domestic animals (Pearson and Meskell 2013, 471-472). The re-interpretation of the anthropomorphic representations at Çatalhöyük suggests that the emphasis on breasts, hips, and stomach indicates maturity rather than pregnancy or fertility (Nakamura and Meskell 2009, 222; Pearson and Meskell 2013, 475). These researchers came to this conclusion because the stomach is usually not shown rounded, as one expects in a pregnant body, but rather droopy and flattened, as in old age, and because, furthermore, most of these figurines do not belong to a specific sex (Nakamura and Meskell 2009, 222). They also object to the notion that these figurines represent fertility, based on the absence of any clear representations of pregnancy, birth, or children (Pearson and Meskell 2013, 476).

Feminism, theory, and Mother Goddess in Turkey

The feminist movements in Turkey followed a more or less a similar path to those in the West. The first wave was at the beginning of the 20th century, when a small number of women's organizations demanded equal rights, which were in accordance with the agenda of the newly emerging Turkish state (Diner and Toktaş 2010, 44). The right to vote and get elected to parliament was given to women in Turkey in 1934, but the women's rights organizations were seen as a threat to the national interests and shut down in 1935 (Arat 2000, 111). The second feminist wave in Turkey took place in the 1980s, during which feminists brought up issues (such as violence against women; physical, sexual, or verbal abuse; and the oppression they encounter in the family) and protested against virginity tests (performed on women before marriage or after sexual assault) and the representations of women in the media (Diner and Toktaş 2010, 41). In the 1990s, a new era of multivocality in feminist discourse began. This is the time when identity politics (such as issues of sexuality; LGBTI problems; and ethnicity, especially of the Kurdish women)

became more prominent, and criticisms of religion (Islam) and nationalism gained momentum (Diner and Toktaş 2010, 42)⁸.

The Goddess movement does not seem to have had a large impact on the historical and religious narratives, apart from being seen as reminiscent of the long-lost ideal among mainstream feminists in Turkey. On the other hand, Fatmagül Berktaş's book *Tek Tanrılı Dinler Karşısında Kadın*⁹ (1996) is considered among the important feminist scholarly works that explores the position of women within Christianity and Islam. Among the topics she explores is the Mother Goddess as the primordial religion (Berktaş 1996, 35). Throughout the book, she explores the position of women within the three patriarchal monotheistic religions of the Middle East, questions the body-soul dichotomy, and analyses fundamentalism in Christianity and Islam in relation to women.

Ayşe Tekin's article on the Mother Goddess concept within the feminist movement in the West can be seen as being among the few comprehensive discussions in Turkish (Tekin 2010). Tekin criticizes the earlier interpretations of prehistoric figurines as sexual or erotic material and embraces Gimbutas's interpretations (discussed above). She connects ancient mythologies, Jungian psychoanalytical interpretations of a 'Great Mother', and various ethnographic records that point towards a prehistoric female deity and a matriarchal society (Tekin 2010, 118). However, rather than questioning the existence of a matriarchal society in the past, she believes that it is important to conceptualize the kind of future women want to have, and that the prehistoric figurines help us stimulate these discussions (Tekin 2010, 133).

While academia worldwide seems to have moved beyond interpreting prehistoric anthropomorphic images as the Mother Goddess or a female deity, the Turkish archaeological discourse still does not really accept any interpretations other than divinities or fertility symbols. In a way, James Mellaart's reconstruction of Çatalhöyük and Jacques Cauvin's theories on the origins of agriculture (Cauvin 1985; 1999) had a greater impact on Turkish archaeology than the current reinterpretations of anthropomorphic imagery. Many archaeologists in Turkey, some of whom are specialized in prehistory, still support the idea that Neolithic figurines from Anatolia are representations of either the Mother Goddess or gods and goddesses (e.g. Aydıngün 2013, 45; Bıçakçı 2001, 29; Duru 2010, 29; Oral 2014; Özmen 2016; Umurtak 2008a), yet some critiques are well respected (Arslan 2016; Atakuman 2017).

Understanding the reasons for this problem requires a more in-depth analysis of the current state of Turkish academia in general and within archaeology specifically. The absence of recent theoretical approaches in most academic research in Turkey shows that Turkish archaeology has not really gone beyond culture history. Mehmet Özdoğan states that Turkey is not among the countries that contribute to archaeological theory, because Turkish society does not produce philosophical thoughts or knowledge (Özdoğan 2011, 211). Despite several critiques and attempts to invigorate theoretical discussions via the Theoretical Archaeology Group in Turkey (TAG-Turkey) and the Thematic Archaeology Series (TAS) conferences, theory is still largely absent in publications. In fact, there are only a handful of academics who actually participate in such conferences, but even the discussions and papers in these conferences lack a political stance¹⁰. Archaeologists in Turkey do not seem to have grasped the political potential of archaeology, as many see archaeology as a way to detach themselves from the current political environment (Koparal 2014, 101). This makes

8 For a more detailed discussion on the development of feminist waves in Turkey, see Diner and Toktaş 2010; Arat 2000.

9 Published in English as *Women and religion* in 1998 by Black Rose Books.

10 Except for the papers presented at the TAG-Turkey conferences organized in 2013, 2015, and 2016, for example, Aksoy 2014; Çilingiroğlu 2014; 2017; Koparal 2014; Yelözer 2017. The TAG-Turkey conferences are no longer being organized due to lack of interest.



Figure 1. Map of Turkey, with sites mentioned in the text.

it even more difficult to concentrate on subjects of feminism and gender, because they are regarded as highly political topics.

Unfortunately, many Turkish universities have a tradition of ‘academic inbreeding’ as they discourage their students to pursue an academic career in other universities (Dinç 2014, 42). This results in academics who are working in the same university where they studied for their bachelor’s, master’s, and PhD without having the opportunity to learn other schools of thought. This results in inferior academic productivity, as these former students do not offer any new analytical or interpretive methods to the department (Horta *et al.* 2010, 426). Many younger academics in archaeology closely follow the footsteps and ideas of their predecessors, and thus the Mother Goddess narrative continues in the archaeological discourse even today.

Anthropomorphic imagery at Köşk Höyük

In this section, I will discuss the case of prehistoric Köşk Höyük, where anthropomorphic representations have usually been interpreted as deities. I will concentrate on the anthropomorphic figurines and relief-decorated pottery from a different perspective, discuss the concept of gender at the site, and then elaborate on how these visual representations impacted the construction of intersectional identities.

Köşk Höyük (Fig. 1) is a Late Neolithic to Early and Middle Chalcolithic site (c. 6300-5400 and 5300-4700 cal BCE) in Niğde, on the Central Anatolian Plateau. It was first excavated by Uğur Silistreli between 1980 and 1990 (Silistreli 1986; 1989a; 1990; 1991), and since 1995, Aliye Öztan has been directing the excavations (Öztan 2002; 2010; 2012). The earliest occupation at the site began at the end of the Late Neolithic, around 6300 BCE, and it continued through the Early Chalcolithic, until it was abandoned in the Middle Chalcolithic period, after the entire settlement burnt down during a conflagration (Arbuckle 2006, 86; Öztan 2002, 56).

Köşk Höyük shows a gradual change in social complexity through Levels V to II, with elaborate prestige items, ritual items, and grave goods (Öztan 2010). Throughout the occupation, the architecture shows consistency (Öztan 2012), in that building walls were built in single or double rows with mud mortar and plastered with a thick layer of clay. Buildings in Levels IV to II are rectangular, with multiple rooms,



Figure 2. Köşk Höyük (Niğde, Turkey). Clay anthropomorphic figurine from Level III with an elaborate hairdo, height 4.2 cm, width 3 cm (Öztan 2012, 67 Fig. 43).

and built adjacent to each other. At least one bench, stone platforms, and at least one hearth are present in each building. Typically, some storage facilities and equipment, such as grinding stones or pestles, are also found in each building (Öztan 2012).

Anthropomorphic figurines

More than 30 anthropomorphic figurines have been found at Köşk Höyük to date (Öztan 2012, 40; Silistreli 1989b). These are usually shaped out of clay (Fig. 2), but eight stone figurines are known from Levels IV and III. Although no in-depth analysis has been published on the production of Köşk Höyük figurines, the variation among them suggests the inclusion of many people in their production. The mainstream interpretation of these figurines usually revolves around the Mother Goddess and deities (except for that of Baltacıoğlu 2011).

Although some of the figurines at Köşk Höyük are highly stylized, and therefore sex-determination is difficult, all but two anthropomorphic figurines were labelled female in publications. The schematic figurines include examples with heads with abbreviated, conical features and examples that do not clearly show any sexual features but only remind one of the human form (e.g. Özkan *et al.* 2004, 203 Fig. 6; Öztan *et al.* 2006, 388 Fig. 4). Apart from these schematic figurines, many human representations do not seem to be as explicitly females as suggested in the literature. For example, the figurine in Fig. 2 is shown with an elaborate hairdo, sitting with arms crossed. There is no indication of breasts, and the pubic triangle is concealed by the belly and the legs. As noted above, recent research on the Çatalhöyük figurines stress that pronounced hips, belly, and breasts do not necessarily make these female representations (Nakamura and Meskell 2009, 221). This figure may be related to identity and power, concepts that go beyond mere gender.

Even though the Köşk figurines have been found in various contexts, they seem to be related to domestic activities, as they are mostly encountered within or in relation to buildings (Öztan 2012, 40). Although we should be cautious with such claims, some of these contexts can link anthropomorphic figurines with possible ritualistic activities. For example, among the Level I buildings from the Middle Chalcolithic period, House II is exceptionally big compared with the rest of the buildings (Arbuckle 2006, 94-96; Özkan *et al.* 2004). It conforms to the same standard plan as the rest of the Level I houses, except for a second entrance in the storage area, which

also has a much larger storage capacity and more grinding stones than the other houses (Arbuckle 2006, 94-96). Very few artefacts were found in House II, indicating that the building was emptied either before or after the fire destroyed it (Özkan *et al.* 2004). But, an anthropomorphic figurine labelled as a 'Mother Goddess' was found in the middle of the main room and a collection of animal figurines was found on the threshold of the rear door (Özkan *et al.* 2004, 199). Both the animal and the anthropomorphic figurines seem to have been intentionally left there, perhaps as part of an abandonment ritual (*e.g.* Chapman and Gaydarska 2006, 70).

A subfloor burial from Level III (Silistireli 1986, 132, Fig. 13) and a child burial from Level II (Silistireli 1990, 92) yielded anthropomorphic figurines as grave goods. Although it has been noted that numerous burials had been excavated from Levels III and II (Baltacıoğlu 2011, 55 fn. 94), the existence of only two figurines from burial contexts suggests that leaving anthropomorphic figurines as grave goods was not a widespread activity. Another figurine fragment painted with red ochre was recovered in a box-like area below the bench of a Level II building, together with five human skulls, two plastered and three unplastered; some pottery sherds; and a bone object (Özkan *et al.* 2008, 121). This location seems to have been specifically chosen for this cache, as five additional plastered skulls were found approximately 30 cm below. These examples suggest a possible relationship between anthropomorphic figurines and liminal contexts. Since Köşk Höyük lacks a communal building, the discovery of figurines in burials, in liminal contexts, or as part of abandonment rituals may be an indication that ritual activities took place in domestic contexts at this site.

The removal of the head/headlessness is a recurring theme in the Köşk Höyük figurines, as all but two of the stone figurines found in Levels V to III are missing their head. In terms of this breakage pattern, the Köşk Höyük figurines show resemblance with those from Anatolian and Levantine Neolithic sites (Umurtak 2008b, Figs. 17 and 18; Kuijt 2002, 150; Nakamura and Meskell 2009, 213). One figurine has a hole through which a detachable head could be inserted (Özkan *et al.* 2002, 338), but such detachable heads do not seem to be very common in the figurine corpus. Removable heads have been linked with representations of different identities, ages, emotions, or rites (Hamilton 1996, 226), and they were changed according to the context of use. Several scholars (Silistireli 1989b, 501; Hamilton 1996, 220; Hodder and Meskell 2011, 241; Talalay 2004, 145) suggest that the removal of figurine heads may be linked to the removal of the skull from burials.

The Köşk Höyük burial assemblage shows that skull removal, remodelling, and manipulation is practised at the site, especially in levels III and II¹¹. Remodelled skulls have been found in various Early Neolithic sites in the Levant and Çatalhöyük in central Anatolia (Butler 1989; Hodder and Meskell 2011, 246; Kenyon 1981; Silistireli 1991, 97-98; Rollefson and Simmons 1984; Özkan *et al.* 2002). The site yielded a rich collection of plastered skulls, with 13 plastered and 6 unplastered skulls from levels III and II so far (Özbek 2009a, 380). These have been studied extensively and in comparison with the burial data (Bonogofsky 2005; Özbek 2009a; 2009b). The analyses suggest that both male and female skulls were removed, modified, and preserved in special locations within households, either in groups or individually. Also, the age of the individuals who were chosen for this treatment seems to vary; as well as the young, the middle-aged, and older adults, one child was subjected to skull manipulation (Özbek 2009a, 381 Table 1)¹². Plaster did not cover the entire skull; only the face was emphasised, with a detailed and naturalistic rendering of the ears, eyes,

11 This tradition seems to have been completely abandoned in Level I (Özbek 2009a, 385). No burials have been found in Level V and only one burial in Level IV to date (Özkan 2012, 37).

12 Among the sub-floor burials at Köşk Höyük, four burials from levels III and IV show evidence for skull removal (Özbek 2009b, 155-157). While three of these are adults (two female and one of unknown sex), one is a child approximately 15-16 years old (Özbek 2009b, 155).

nose, mouth, and other facial features. After the face was modelled, the plastered skulls were painted red with ochre (Özbek 2009a, 381). Additional organic material, such as hair, may have been added to the skulls to create a more life-like expression.

The similarities between the treatment of human bodies and anthropomorphic figurines at Köşk Höyük are striking. It has been proposed that the figurines from various Neolithic sites may have been treated as individuals and that, at the end of their use-life, the heads could have been removed before discard (Kuijt 2002, 150). However, evidence from the Köşk Höyük plastered and unplastered skulls calls for a slightly different interpretation. The remodelled skulls at Köşk Höyük were not out of use; they were probably assigned a new meaning, wrapped with textiles, and kept in clay boxes or jars specifically facing east (Özbek 2009a, 380). The figurine heads may also have been intentionally severed from the torso as a part of their natural use-life without necessarily indicating their termination. They may have been continued to be used in relation to skull removal practices. The headless figurine placed inside the clay box together with the plastered and unplastered skulls may be interpreted in this way.

Relief-decorated pottery

Köşk Höyük is also known for large jars with relief decorations of animals, humans, and plants (Silistreli 1989c). These relief decorations mostly come from levels III and II, and they have been found in burials and together with other types of decorated vessels (Öztan 2012, 39). The decorations are mostly applied below the neck and on the shoulder, and sometimes on the rim of the jar (Öztan 2012, 39). For the most part, two different types of anthropomorphic figures are depicted on Köşk Höyük relief-decorated pottery. Depictions of Group A (Fig. 3) are shown naked, usually with breasts and a visible pubic triangle, and they usually have fleshy buttocks and a large stomach (Öztan 2012, 65 Figs. 37; 38; Silistreli 1989c). They are mainly shown either standing still and alone, with one hand on their hips, or together with other naked figures, holding hands or dancing (Silistreli 1989c, 363). Just like the anthropomorphic figurines, Group A on the relief-decorated pottery has been identified as the ‘Mother Goddess’ or ‘goddess’, and sometimes as a female (Öztan 2012, 39; Silistreli 1989c).

Group B (Fig. 4), the second group of anthropomorphic figures, which are depicted clothed, slimmer, and devoid of sexual characteristics, such as breasts or genitalia, have been identified as males and sometimes as gods (Öztan 2012; Silistreli 1989c; Baltacıoğlu 2011). They always wear a skirt that extends down to their knees, sometimes with a belt, and occasionally with headgear (Öztan 2012, 61 Fig. 29; 64 Fig. 35; Silistreli 1989c pl. III Figs. 3; 4, pl. IV). These figures are generally alone, active, and doing various kinds of tasks, such as hunting or herding animals (Öztan 2012, 61 Fig. 29) and harvesting crops (Öztan 2012, 64 Fig. 35). These figures may be masculine bodies, as suggested, especially if we consider the fact that neither figurines nor anthropomorphic bodies depicted with a phallus have been published



Figure 3. Köşk Höyük (Niğde, Turkey). Relief-decorated pottery showing Group A anthropomorphic representations. No scale available (Öztan 2012, 65 Fig. 37).



Figure 4. Köşk Höyük (Niğde, Turkey). Relief-decorated pottery depicting Group B anthropomorphic representations. No scale available (Öztan 2012, 65 Fig. 35).



Figure 5. Köşk Höyük (Niğde, Turkey). Anthropomorphic figurines with similar clothing and colour arrangements as in Group B relief-decorated pottery. Left: height 3.5 cm, width 1.4 cm; right: no scale available (Öztan 2012, 67 Figs. 41; 42).

or mentioned in the publications since the beginning of the excavations. On the other hand, masculinity/femininity may not necessarily be hinted at through the presence or absence of a phallus, as maybe the people who made these ceramics intended to express concepts beyond gender. These images could easily be representations of different age groups, such as adolescents or young adults, perhaps such as those at Çatalhöyük (Nakamura and Meskell 2009), or depictions of a completely different category without a direct link with masculinity.

Two anthropomorphic figurines (Fig. 5) from Silistrelı's excavations in the 1980s are very similar to Group B (Silistrelı 1989b, pls. I; IV). Both of these headless figurines wear a similar white apron on a red-painted body (Öztan 2012, 67 Fig. 42; Silistrelı 1989b, pl. IV). To summarize, it seems like similar groups have been represented in two different visual media, and we come across them in both anthropomorphic figurines and relief-decorated pottery.

Discussion

'Reading' gender directly from the sexually specific or absent body parts, such as breasts, genitalia, or hips, has been largely abandoned in contemporary scholarly work as the concept of gender is being closely related to material, social, and political worldviews. Therefore, seeing the Köşk Höyük figurines only as representations of

males and females would only tell us about how we see them today, not what the Köşk Höyük inhabitants understood of gender. It seems as if images of Groups A and B were meant to express certain social messages and narratives through the movements of the naked figurines holding hands and clothed figurines performing various actions. The distinction of these naked (Group A) and clothed (Group B) bodies may come from a juxtaposition of different types of activities, suggesting that certain activities required clothing, while others required nudity. In other words, some daily activities, such as harvesting crops or herding animals, required clothing, while others, such as dancing during certain occasions, had to be done naked.

Could we approach these corpulent and slim figures from a different perspective? They could, indeed, be depictions of activities or lives of specific age groups, as has been suggested for Çatalhöyük (Nakamura and Meskell 2009). However, further bioarchaeological research is necessary in order to make these claims. Such research would also be useful for understanding whether a gender- and age-based differentiation existed at the site. Similar research at Çatalhöyük shows that, while gender-based differentiation was virtually non-existent, age was an important factor in social difference (Pearson and Meskell 2013, 479; Larsen *et al.* 2015).

Representations of people dancing are common in South-west Asia starting with the Pre-Pottery Neolithic B (Garfinkel 2003, 9). For example, Stuart Campbell links females with dance at the 6th millennium BCE site of Domuztepe (Kahramanmaraş, Turkey). Campbell (2008, 61) mentions that dancing could be an engendered activity and that in certain instances it was significant to show that dancing was a gendered act at Domuztepe. Even if dancing is really an activity that falls under the feminine domain at Köşk Höyük, it is probably an intersectional act in which women of specific ages – maybe excluding prepubescent girls and the elderly – social status and ethnicity participated.

When Mireille Lee (2000, 114-115) examines the representation of masculine and feminine bodies in Minoan depictions, she notes that clothes were the primary method for non-verbal communication. Those wearing specific clothes in the depictions sent certain complex social messages, and these messages were received by the people who saw the depictions. For the people of Köşk Höyük, the gestures, clothing, hairdos, and postures of the anthropomorphic representations may have been used as important keys for non-verbal communication. Those who made these depictions probably knew which intersectional identities of age, sex, gender, social status, and ethnicities they suggest, and the Köşk Höyük inhabitants probably easily understood the message(s) conveyed when they looked at them.

If these representations are actual depictions of different roles and identities, they can be considered as the ideal depictions of performative behavioural patterns for the construction of individual sexual or social identities within the society. According to Nanoglou (2008, 2), anthropomorphic representations can be considered as the embodiment of standardised performances. In other words, these could be the archetypes of idealized bodies or postures for certain groups within the society. Hatçe Baltacıoğlu's study of the sitting positions of anthropomorphic figurines from a wide region – including Anatolia, the Levant, and Greece – shows that a Buddha-like posture was a very widespread way to depict sitting individuals in the Neolithic period (Baltacıoğlu 2011, 59). Since it is almost impossible to pinpoint such standardised behavioural patterns or sitting postures in mortuary evidence¹³,

13 Theya Molleson and her colleagues studied the Çatalhöyük skeletons in order to find evidence for differences in sitting positions. Their analysis shows that males usually squat, either on their toes or with their entire feet on the ground, while females sit in various positions, as they were probably choosing the best position for their convention or task (Molleson *et al.* 2005, 289). Although the difference in sitting positions between males and females might indicate gender-based job distribution, the anthropological analysis suggests that there is no distinct bone morphology that might suggest specific tasks or role specialization in the Çatalhöyük community (Molleson *et al.* 2005, 289).

it is very difficult to understand whether these indicate certain age groups or social status. Nonetheless, together with the bodies of actual people they encountered in their everyday lives, these idealized bodies/identities must have been an important influence in the construction of children's self-identification at Köşk Höyük. As the concept and method of how to represent human bodies were passed on from one generation to the next for a very long time, this may have helped the continuation of bodily practices through generations over several hundreds of years.

Conclusion

Figurines are one of the most difficult archaeological artefact groups to interpret, which results in many scholars offering many different opinions about them, varying from erotic images to representations of the great Goddess. Modern interpretations, however, reject these androcentric and gynocentric interpretations and suggest that they could have been interpreted in other ways in the past.

Although the Mother Goddess concept has been strongly challenged in academia, there is still a contingent that believes that corpulent female figurines are representations of goddesses or, more specifically, the Mother Goddess, in Turkey; the anthropomorphic representations at Köşk Höyük are no exception. Figurines can be regarded as intermediaries that help the narrator to convey different identities and messages to the audience. Figurines and other types of depictions probably meant different things in different contexts, so their interpretations need to be, as much as possible, devoid of cultural stereotypes and assumptions.

The interpretations here are based on the Köşk Höyük publications and therefore are very limited. However, further and more detailed contextual analyses, as well as studies of breakage patterns and use marks in conjunction with their cultural context, would yield more complex interpretations. These could help us understand how and why the figurines were made, how they were used, and why they were eventually discarded at Köşk Höyük.

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References

- Agarwal, Sabrina C., Beauchesne, Patrick, Glencross, Bonnie, Larsen, Clark Spencer, Meskell, Lynn, Nakamura, Carolyn, Pearson, Jessica, *et al.* 2015. Roles for the Sexes. The (Bio)archaeology of Women and Men at Çatalhöyük. In: Hodder, Ian, and Marciniak, Arkadiusz (eds). *Assembling Çatalhöyük*. Themes in contemporary archaeology 1. Leeds: Maney, 87-95.
- Aksoy, Belgin 2014. Semptom ve Hastalığı Birbirinden Ayırabilmek – ya da Türk Arkeolojisinin Suni Bir Sorunu Olarak – “Alman Ekolü”. In: Çilingiroğlu, Çiler, and Özgüner, N. Pınar (eds). *Değişen Arkeoloji: Teorik Arkeoloji Grubu Türkiye Toplantısı Bildirileri, 9-10 Mayıs 2013, İzmir*. TAG-Türkiye Serisi 1. İstanbul: Ege Yayınları, 1-12.

- Arat, Yeşim 2000. From Emancipation to Liberation: The Changing Role of Women in Turkey's Public Realm. *Journal of International Affairs*, 54, 1, 107-123.
- Arbuckle, Benjamin S. 2006. *The Evolution of Sheep and Goat Pastoralism and Social Complexity in Central Anatolia* [PhD thesis Harvard University].
- Arslan, Aysel 2016. Look Beyond What You See: Engendering Central Anatolian Prehistory. In: *Proceedings of Papers of International Conference on Knowledge and Politics in Gender and Women's Studies, Ankara 2015*. Ankara: Gender and Women's Studies, GSSS, ODTÜ, 77-86.
- Atakuman, Çiğdem 2017. Figurines of the Anatolian Early Bronze Age: the assemblage from Koçumbeli-Ankara. *Anatolian Studies*, 67, 85-108.
- Aydingün, Şengül 2013. Tarih Öncesi Çağlarda Anadolu'da Kadın: Mucizenin Kaynağı, Bereketli ve Her Şeye Hakim. In: Darga, Muhibbe (ed.). *Anadolu'da Kadın On Bin Yıldır Eş, Anne, Tüccar, Kraliçe* [2nd edition]. Istanbul: Yapı Kredi Yayınları, 43-67.
- Bachofen, Johann Jakob 1861. *Das Mutterrecht*. Stuttgart: Kraus & Hoffmann.
- Bailey, Douglass 1994a. The Representation of Gender Homology or Propaganda. *Journal of European Archaeology*, 2, 2, 215-228.
- Bailey, Douglass 1994b. Reading Prehistoric Figurines as Individuals. *World Archaeology*, 25, 3, 321-331.
- Bailey, Douglass 2007. The anti-rhetorical power of representational absence: incomplete figurines from the Balkan Neolithic. In: Renfrew, Colin, and Morley, Ian (eds). *Material Beginnings: A Global Prehistory of Figurative Representation*. McDonald Institute monographs. Cambridge: McDonald Institute, 117-126.
- Bailey, Douglass 2014. Touch and the cheirotic apprehension of prehistoric figurines. In: Dent, Peter (ed.). *Sculpture and Touch*. Subject/object: new studies in sculpture. Surrey, England: Ashgate Publishing, 27-44.
- Bailey, Douglass 2017. Southeast European Neolithic Figurines Beyond Context, Interpretation, and Meaning. In: Insoll, Timothy (ed.). *The Oxford Handbook of Prehistoric Figurines*. Oxford handbooks in archaeology. Oxford: Oxford University Press, 823-850.
- Baltacıoğlu, Hatçe 2011. Buda Oturuşunda Betimlenmiş Geç Neolitik Çağ Köşk Höyük Heykelticikleri. In: Öztan, Aliye, and Dönmez, Şevket (eds). *Karadeniz'den Fırat'a Bilgi Üretimleri Önder Bilgi'ye Armağan Yazılar*. Ankara: Bilgin Kültür Sanat Yayınları, 49-80.
- Bartu Candan, Ayfer 2005. Entanglements/encounters/engagements with prehistory: Çatalhöyük and its publics. In: Hodder, Ian. (ed.). *Çatalhöyük Perspectives: Reports from the 1995-99 Seasons*. Çatalhöyük Project 6. Cambridge, London: McDonald Institute, British Institute at Ankara, 27-38.
- Beck, Margaret 2000. Female Figurines in the European Upper Paleolithic: Politics and Bias in Archaeological Interpretation. In: Rautman, Alison E. (ed.). *Reading the Body: Representations and Remains in the Archaeological Record*. Regendering the Past. Philadelphia: University of Pennsylvania Press, 202-214.
- Belcher, Ellen H. 2016. Identifying Female in the Halaf: Prehistoric Agency and Modern Interpretations. *Journal of Archaeological Method and Theory*, 23, 921-948.
- Berktaş, Fatmagül 1996. *Tek Tanrılı Dinler Karşısında Kadın: Hristiyanlıkta ve İslamiyette Kadının Statüsü Üzerine Karşılaştırmalı bir Yaklaşım*. Istanbul: Metis Yayınları.
- Bıçakçı, Erhan 2001. Tepecik-Çiftlik Höyüğü (Niğde) Kazısı Işığında Orta Anadolu Tarihöncesi Kültürleri ile İlgili Yeni bir Değerlendirme. *Tüba-Ar*, 4, 25-41.
- Bourdieu, Pierre 1977. *Outline of a Theory of Practice*. Cambridge studies in social and cultural anthropology 16. Cambridge: Cambridge University Press.
- Brantlinger, Patrick 1985. Victorians and Africans: The Genealogy of the Myth of the Dark Continent. *Critical Inquiry*, 12, 166-203.

- Brumfiel, Elizabeth M. 1992. Distinguished Lecture in Archeology: Breaking and Entering the Ecosystem – Gender, Class, and Faction Steal the Show. *American Anthropologist*, 94, 551-567.
- Butler, Carol 1989. The plastered skulls of Ain Ghazal: preliminary findings. In: Hershkovitz, Israel (ed.). *People and Culture in Change. Proceedings of the Second Symposium on Upper Palaeolithic, Mesolithic, and Neolithic Populations of Europe and the Mediterranean Basin*. BAR International Series 508. Oxford: B.A.R., 141-145.
- Butler, Judith 1990. *Gender Trouble: Feminism and the Subversion of Identity*. New York, London: Routledge.
- Campbell, Stuart 2008. Feasting and dancing, gendered representation and pottery in later Mesopotamian prehistory. In: Bolger, Diane (ed.). *Gender through Time in the Ancient Near East*. Gender and archaeology series. Lanham: AltaMira Press, 53-76.
- Cauvin, Jacques 1985. La Question du “Matriarcat Préhistorique” et le Rôle de la Femme dans la Préhistoire. In: Vérilhac, Anne-Marie (ed.). *La femme dans le monde méditerranéen 1. Antiquité*. Travaux de la Maison de l’Orient 10. Lyon: Maison de l’Orient et de la Méditerranée, 7-18.
- Cauvin, Jacques 1999. *The Birth of the Gods and the Origins of Agriculture*. Trans. Trevor Watkins. New studies in archaeology. Cambridge: Cambridge University Press.
- Chamberlain, Prudence 2017. *The Feminist Fourth Wave: Affective Temporality*. Cham: Springer.
- Chapman, John C., and Gaydarska, Bisserka I. 2006. *Parts and Wholes: Fragmentation in Prehistoric Context*. Oxford: Oxbow Books.
- Childe, Vere Gordon 2009. *The Prehistory of European Society*. [Reprint 1st edition 1958]. Nottingham: Spokesman.
- Çilingiroğlu, Çiler 2014. Kültür Tarihçiliği Kısacasında Türkiye Arkeolojisi: Arkeolojiye Kanatlarını Verebilir Miyiz? In: Çilingiroğlu, Çiler, and Özgüner, N. Pınar (eds). *Değişen Arkeoloji: Teorik Arkeoloji Grubu Türkiye Toplantısı Bildirileri, 9-10 Mayıs 2013, İzmir*. TAG-Türkiye Serisi 1. İstanbul: Ege Yayınları, 13-23.
- Çilingiroğlu, Çiler 2017. Arkeolojide İlişkisel ve Simetrik Yönelimler: Bir Giriş. In: Duru, Güneş, Eren, Kenan, and Koparal, Elif (eds). *Arkeolojik Şeyler [Archaeological Things]*. TAG-Türkiye Toplantısı Bildirileri 2. TAG-Türkiye Serisi 2. İstanbul: Ege Yayınları, 51-66.
- Clark, Sharri R. 2009. Material matters: Representation and materiality of the Harappan body. *Journal of Archaeological Method and Theory*, 16, 231-261.
- Conkey, Margaret W. 1997. Mobilizing ideologies Paleolithic ‘art,’ gender trouble, and thinking about alternatives. In: Hager, Lori D. (ed.). *Women in human evolution*. London, New York: Routledge, 172-207.
- Conkey, Margaret W., and Tringham, Ruth, E. 1995. Archaeology and the Goddess: Exploring the Contours of Feminist Archaeology. In: Stanton, Domna C., and Stewart, Abigail J. (eds). *Feminisms in the Academy*. Women and culture series. Ann Arbor: University of Michigan Press, 199-247.
- Cowman, Krista, and Jackson, Louise A. 2003. Time. In: Eagleton, Mary (ed.). *A Concise Companion to Feminist Theory*. Concise Companions to Literature and Culture. Oxford: Blackwell, 32-51.
- Dietler, Michael, and Herbich, Ingrid 1998. Habitus, techniques, style: an integrated approach to the social understanding of material culture and boundaries. In: Stark, Miriam T. (ed.). *The Archaeology of Social Boundaries*. Smithsonian series in archaeological inquiry. Washington: Smithsonian, 232-263.
- Diñç, Bartu 2014. Arkeoloji Eğitiminin Temel Bir Sorunu Olarak Akademik Kendileşme ve Arkeolojideki Yansımaları. In: Çilingiroğlu, Çiler, and Özgüner,

- N. Pinar (eds). *Değişen Arkeoloji: Teorik Arkeoloji Grubu Türkiye Toplantısı Bildirileri, 9-10 Mayıs 2013, İzmir*. TAG-Türkiye Serisi 1. İstanbul: Ege Yayınları, 41-45.
- Diner, Çağla and Toktaş, Şule 2010. Waves of feminism in Turkey: Kemalist, Islamist and Kurdish women's movements in an era of globalization. *Journal of Balkan and Near Eastern Studies*, 12, 41-57.
- Dobres, Marcia-Anne 1992. Re-Presentations of Paleolithic Visual Imagery: Simulacra and their Alternatives. *Kroeber Anthropological Society Papers*, 73-74, 1-25.
- Dobres, Marcia-Anne, and Hoffman, Christopher R. 1994. Social agency and the dynamics of prehistoric technology. *Journal of Archaeological Method and Theory*, 1, 211-258.
- Duru, Refik 2010. *Elli Yıllık Bir Arkeoloji Öyküsü: Hacılar*. Monografi dizisi 6. Antalya: Suna-İnan Kiraç Research Institute on Mediterranean Civilizations.
- Ehrenberg, Margret R. 1989. *Women in prehistory*. London: British Museum Publications.
- Eisler, Riane 1987. *The Chalice and the Blade: Our History, Our Future*. San Francisco: Harper & Row.
- Engels, Friedrich 1978 [1884]. The Origin of the Family, Private Property, and the State. In: Tucker, Robert C. (ed.). *The Marx-Engels Reader* [2nd Edition]. New York: Norton and Company, 734-759.
- Evans, Elizabeth 2016. What Makes a (Third) Wave? *International Feminist Journal of Politics*, 18, 409-428.
- Gage, Matilda Joslyn 1893. *Woman, Church and State. a historical account of the status of woman through the christian ages*. [Reprint in 1980]. Waterton: Persephone.
- Garfinkel, Yosef 2003. *Dancing at the Dawn of Agriculture*. Austin: University of Texas Press.
- Gimbutas, Marija 1952. On the Origin of North Indo-Europeans. *American Anthropologist*, 54, 602-611.
- Gimbutas, Marija 1982. *The Goddesses and Gods of Old Europe, 6500-3500 BC, Myths and Cult Images*. Berkeley: University of California Press.
- Gimbutas, Marija 1989. *The Language of the Goddess: Unearthing the Hidden Symbols of Western Civilization*. London: Thames and Hudson.
- Gimbutas, Marija, and Dexter, Miriam Robbins 2001. *The Living Goddesses*. Berkeley: University of California Press.
- Gimbutas, Marija, and Kearns, Kell 1992. *The Age of the Great Goddess: Ancient Roots of the Emerging Feminine Consciousness*. Boulder: Sounds True Recordings.
- Goodison, Lucy, and Morris, Christine 1999. Introduction. Exploring female divinity: From modern myths to ancient evidence. In: Goodison, Lucy, and Morris, Christine (eds). *Ancient Goddesses: The Myths and the Evidence*. Madison: The University of Wisconsin Press, 6-21.
- Hamilton, Naomi 1996. Figurines, Clay Balls, Small Finds and Burials. In: Hodder, Ian (ed.). *On the Surface: Çatalhöyük 1993-95. Çatalhöyük research project 1*. Cambridge: McDonald Institute, 215-263.
- Hamilton, Naomi 2000. Ungendering Archaeology: Concepts of Sex and Gender in Figurine Studies in Prehistory. In: Donald, Moira, and Hurcombe, Linda (eds). *Representations of Gender from Prehistory to the Present*. London: Macmillan, 17-30.
- Hamilton, Naomi, Marcus, Joyce, Bailey, Douglass, Haaland, Gunnar, Haaland, Randi, and Ucko, Peter J. 1996. Can We Interpret Figurines? *Cambridge Archaeological Journal*, 6, 281-307.
- Harding, M. Esther 1935. *Woman's Mysteries Ancient and Modern*. London, New York, Toronto: Longmans, Green and Co.
- Hodder, Ian 1982. Theoretical Archaeology: A Reactionary View. In: Hodder, Ian (ed.). *Symbolic and Structural Archaeology*. Cambridge: Cambridge University Press, 1-16.

- Hodder, Ian, and Meskell, Lynn 2011. A “Curious and Sometimes a Trifle Macabre Artistry”. *Current Anthropology*, 52, 235-263.
- Horta, Hugo, Veloso, Francisco M., and Grediaga, Rócio 2010. Navel Gazing: Academic Inbreeding and Scientific Productivity. *Management Science*, 56, 414-429.
- Joyce, Rosemary A. 2003. Making Something of Herself: Embodiment in Life and Death at Playa de los Muertos, Honduras. *Cambridge Archaeological Journal*, 13, 248-261.
- Kenyon, Kathleen M. 1981. *Excavations at Jericho 3. The architecture and stratigraphy of the tell*. London: British School of Archaeology in Jerusalem.
- Knapp, A. Bernard, and Van Dommelen, Peter 2008. Past Practices: Rethinking Individuals and Agents in Archaeology. *Cambridge Archaeological Journal*, 18, 15-34.
- Koparal, Elif 2014. Türkiye Arkeolojisinde İktidar, Mikro-İktidar ve Biyo-İktidar Odakları. In: Çilingiroğlu, Çiler, and Özgüner, N. Pınar (eds). *Değişen Arkeoloji: Teorik Arkeoloji Grubu Türkiye Toplantısı Bildirileri, 9-10 Mayıs 2013, İzmir*. TAG-Türkiye Serisi 1. Istanbul: Ege Yayınları. 95-104.
- Kuijt, Ian 2002. Keeping the Peace: Ritual, Skull Caching, and Community Integration in the Levantine Neolithic. In: Kuijt, Ian (ed.). *Life in Neolithic Farming Communities: Social Organization, Identity, and Differentiation*. Fundamental issues in archaeology. New York: Kluwer Academic Publishers, 137-164.
- Kuijt, Ian, and Chesson, Meredith S. 2005. Lumps of Clay and Pieces of Stone: Ambiguity, Bodies, and Identity as Portrayed in Neolithic Figurines. In: Pollock, Susan, and Bernbeck, Reinhard (eds). *Archaeologies of the Middle East: critical perspectives*. Blackwell studies in global archaeology. Malden: Blackwell, 152-183.
- Laqueur, Thomas Walter 1990. *Making Sex: Body and Gender from the Greeks to Freud*. [10th edition]. Cambridge: Harvard University Press.
- Larsen, Clark Spencer, Hillson, Simon W., Boz, Başak, Pilloud, Marin A., Sadvari, Joshua W., Agarwal, Sabrina C., Glencross, Bonnie, et al. 2015. Bioarchaeology of Neolithic Çatalhöyük: Lives and Lifestyles of an Early Farming Society in Transition. *Journal of World Prehistory*, 28, 27-68.
- Lee, Mireille M. 2000. Deciphering Gender in Minoan Dress. In: Rautman, Alison E. (ed.). *Reading the Body: Representations and Remains in the Archaeological Record*. Regendering the past. Philadelphia: University of Pennsylvania Press, 111-123.
- Looper, Matthew G. 2003. From Inscribed Bodies to Distributed Persons: Contextualizing Tairona Figural Images in Performance. *Cambridge Archaeological Journal*, 13, 25-40.
- McCoid, Catherine Hodge, and McDermott, Leroy D. 1996. Toward Decolonizing Gender: Female Vision in the Upper Paleolithic. *American Anthropologist*, 98, 319-326.
- McDermott, Leroy D. 1996. Self-Representation in Upper Paleolithic Female Figurines. *Current Anthropology*, 37, 227-275.
- Mellaart, James 1967. *Çatal Hüyük. A Neolithic Town in Anatolia*. New aspects of Antiquity. New York: McGraw-Hill.
- Meskell, Lynn 1995. Goddesses, Gimbutas and new age archaeology. *Antiquity*, 69, 74-86.
- Meskell, Lynn, and Joyce, Rosemary A. 2003. *Embodied Lives: Figuring Ancient Maya and Egyptian Experience*. New York: Routledge.
- Meskell, Lynn, Nakamura, Carolyn, Der, Lindsey, Tsoraki, Christina, and Arntz, Monique 2016. *Figurines. Çatalhöyük 2016 Archive Report*, 137-163. <www.catalhoyuk.com/archive_reports/2016/>, retrieved 7 January 2019.
- Meskell, Lynn, Nakamura, Carolyn, King, Rachel, and Farid, Shahina 2008. Figured Lifeworlds and Depositional Practices at Çatalhöyük. *Cambridge Archaeological Journal*, 18, 139-161.

- Mina, Maria 2007. Figurines Without Sex; People without Gender? In: Hamilton, Sue, Whitehouse, Ruth, and Wright, Katherine (eds). *Archaeology and Women. Ancient and Modern Issues*. Publications of the Institute of Archaeology, University College London. Walnut Creek: Left Coast, 263-282.
- Molleson, Theya, Andrews, Peter, and Boz, Başak 2005. Reconstruction of the Neolithic People of Çatalhöyük. In: Hodder, Ian (ed.). *Inhabiting Çatalhöyük. Reports from the 1995-99 Seasons by Members of the Çatalhöyük Teams*. Çatalhöyük project 4. Cambridge: McDonald Institute for Archaeological Research, 279-300.
- Morgan, Lewis H. 1877. *Ancient Society or Researches in the Lines of Human Progress from Savagery through Barbarism to Civilization*. Chicago: Charles H. Kerr & Company.
- Nakamura, Carolyn, and Meskell, Lynn 2009. Articulate bodies: Forms and figures at Çatalhöyük. *Journal of Archaeological Method and Theory*, 16, 205-230.
- Nakamura, Carolyn, and Meskell, Lynn 2013. The Çatalhöyük burial assemblage. In: Hodder, Ian (ed.). *Humans and Landscapes: Reports from the 2000-2008 Seasons*. Çatalhöyük Project 8. Los Angeles: Cotsen Institute of Archaeology Press, 435-459.
- Nanoglou, Stratos 2005. Subjectivity and Material Culture in Thessaly, Greece: the Case of Neolithic Anthropomorphic Imagery. *Cambridge Archaeological Journal*, 15, 141-156.
- Nanoglou, Stratos 2008. Representation of Humans and Animals in Greece and the Balkans during the Earlier Neolithic. *Cambridge Archaeological Journal*, 18, 1-13.
- Nanoglou, Stratos 2009. The materiality of representation: A preface. *Journal of Archaeological Method and Theory*, 16, 157-161.
- Nanoglou, Stratos 2010. The representation of phalli in Neolithic Thessaly, Greece. *Documenta Praehistorica*, 37, 215-225.
- Oral, Ebru 2014. Anadolu'da Ana Tanrıça Kültü. *ASOS Journal*, 2, 154-164.
- Orenstein, Gloria Feman 1990. *The Reflowering of the Goddess*. The Athene series. New York: Pergamon.
- Özbek, Metin 2009a. Remodeled Human Skulls in Köşk Höyük (Neolithic Age, Anatolia): a New Appraisal in View of Recent Discoveries. *Journal of Archaeological Science*, 36, 379-386.
- Özbek, Metin 2009b. Köşk Höyük (Niğde) Neolitik Köyünde Kil Sıvalı İnsan Başları. *Edebiyat Fakültesi Dergisi* [Journal of Faculty of Letters], 26, 145-162.
- Özdoğan, Mehmet 2011. *50 Soruda Arkeoloji*. Istanbul: Bilim ve Gelecek Kitaplığı.
- Özkan, Süleyman, Faydalı, Erol, and Öztan, Aliye 2002. Köşk Höyük 2000 Yılı Kazıları. *Kazı Sonuçları Toplantısı*, 23, 2, 335-342.
- Özkan, Süleyman, Faydalı, Erol, Öztan, Aliye, and Erek, Merih 2004. 2002 yılı Köşk Höyük kazıları. *Kazı Sonuçları Toplantısı*, 25, 2, 195-204.
- Özmen, Seher Selin 2016. Anadolu'da Ana Tanrıça Kybele Kültü. *Humanitas*, 4, 381-397.
- Öztan, Aliye 2002. Köşk Höyük: Anadolu Arkeolojisine Yeni Katkılar. *Tüba-Ar*, 5, 55-69.
- Öztan, Aliye 2010. Archaeological Investigations at Köşk Höyük, Niğde. In: D'Alfonso, Lorenzo, Balza, Maria Elena, and Mora, Clelia (eds). *Geo-Archaeological Activities in Southern Cappadocia – Turkey Proceedings of the Meeting Held at Pavia, 20.11.2008*. Pavia: Italian University Press, 83-95.
- Öztan, Aliye 2012. Köşk Höyük: A Neolithic Settlement in Niğde-Bor Plateau. In: Özdoğan, Mehmet, Başgelen, Nezh, and Kuniholm, Peter (eds). *The Neolithic in Turkey. New excavations & new research 3. Central Turkey*. Istanbul: Archaeology and Art Publications, 31-70.
- Öztan, Aliye, Özkan, Süleyman, Açıkgöz, Fazlı, and Arbuckle, Benjamin S. 2006. 2006 Yılı Köşk Höyük Kazıları Raporu. *Kazı Sonuçları Toplantısı*, 29, 2, 117-136.

- Öztan, Aliye, Özkan, Süleyman, Erek, Merih C., and Faydalı, Erol 2006. 2004 Yılı Köşk Höyük Kazıları. *Kazı Sonuçları Toplantısı*, 27, 1, 379-392.
- Pearson, Jessica, and Meskell, Lynn 2013. Isotopes and Images: Fleshing out Bodies at Çatalhöyük. *Journal of Archaeological Method and Theory*, 22, 461-482.
- Pearson, Jessica, Meskell, Lynn, Nakamura, Carolyn, and Larsen, Clark Spencer 2015. Reconciling the Body: Signifying Flesh, Maturity, and Age at Çatalhöyük. In: Hodder, Ian, and Marciniak, Arkadiusz (eds). *Assembling Çatalhöyük*. Themes in contemporary archaeology 1. Leeds: Maney, 75-86.
- Rollefson, Gary O, and Simmons, Alan H. 1984. The 1983 season at Ain Ghazal: Preliminary report. *Annual of the Department of Antiquities of Jordan*, 28, 13-30.
- Silistreli, Uğur 1986. 1984 Köşk Höyüğü. *Kazı Sonuçları Toplantısı*, 7, 129-141.
- Silistreli, Uğur 1989a. 1987 Köşk Höyüğü. *Kazı Sonuçları Toplantısı*, 10, 1, 61-66.
- Silistreli, Uğur 1989b. Köşk Höyük Figürin ve Heykelcikleri. *Belleten*, 53, 207-208, 497-504.
- Silistreli, Uğur 1989c. Köşk Höyük'te bulunan kabartma insan ve hayvan figürleriyle bezeli vazolar Les vases ornés de figures humaines et animales en relief mis au jour à Kosk Hüyük. *Belleten*, 53, 206, 361-374.
- Silistreli, Uğur 1990. 1988 Köşk Höyük Kazısı. *Kazı Sonuçları Toplantısı*, 11,1, 91-97.
- Silistreli, Uğur 1991. 1989 Köşk Höyük Kazısı. *Kazı Sonuçları Toplantısı*, 12, 1, 95-104.
- Spretnak, Charlene 1978. *Lost Goddesses of Early Greece: A Collection of Pre-Hellenic Myths*. Beacon paperback 617. Boston: Beacon.
- Stanton, Elizabeth Cady 1895/1898. *The Woman's Bible. Part 1 and 2*. Online available at: eCommons. Cornell's digital repository: <ecommons.cornell.edu/handle/1813/2585>, retrieved 10 January 2019.
- Stone, Merlin 1976. *When God Was a Woman*. Harvest book. New York: Harcourt Brave Jovanovich.
- Stone, Merlin 1984. *Ancient Mirrors of Womanhood: A Treasury of Goddess and Heroine Lore from Around the World*. Boston: Beacon.
- Talalay, Lauren E. 1994. A Feminist Boomerang: The Great Goddess of Greek Prehistory. *Gender & History*, 6, 165-183.
- Talalay, Lauren E. 2004. Heady business: skulls, heads and decapitation in Neolithic Anatolia and Greece. *Journal of Mediterranean Archaeology*, 17, 139-163.
- Tekin, Ayşe 2010. Tanrıçalar ve Kadın Belleği. *Women's Studies Review*, 111-138.
- Tringham, Ruth 1991. Household with Faces: the Challenge of Gender in Prehistoric Architectural Remains. In: Gero, Joan M., and Conkey, Margaret W. (eds). *Engendering Archaeology: Women and Prehistory*. Oxford: Blackwell, 93-131.
- Tringham, Ruth, and Conkey, Margaret 1999. Rethinking figurines. A critical view from archaeology of Gimbutas, the 'Goddess' and popular culture. In: Goodison, Lucy, and Morris, Christine (eds). *Ancient Goddesses. The Myths and the Evidence*. Madison: The University of Wisconsin Press, 22-45.
- Umurtak, Gülsüm 2008a. Yalvaç Müzesi'ndeki İki Ana Tanrıça Figürinin Düşündürdükleri. In: Tarhan, Taner, Tibet, Aksel, and Konyar, Erkan (eds). *Muhibbe Darga Armağanı*. İstanbul: Sadberk Hanım Müzesi, 511-516.
- Umurtak, Gülsüm 2008b. Some Observations on a Group of Buildings and their finds from the Early Neolithic II/2 Settlement at Bademağacı. *Adalya*, 11, 1-23.
- Vella Gregory, Isabelle 2006. Embodied materiality: The human form in pre-Nuragic Sardinia. *Archaeological Review from Cambridge*, 21, 9-31.
- White, Randall 2006. The women of Brassempouy: A century of research and interpretation. *Journal of Archaeological Method and Theory*, 13, 250-303.
- Wiss, Rosemary 1994. Lipreading: Remembering Saartjie Baartman. *The Australian Journal of Anthropology*, 5, 11-40.
- Yelözer, Sera 2017. Şey-Özne-Arkeolog: Geçmişin Cinsiyetlendirilmesi ve Eril Önyargılar. In: Duru, Güneş, Eren, Kenan, and Koparal, Elif (eds). *Arkeolojik Şeyler [Archaeological Things]*. TAG-Türkiye Toplantısı Bildirileri 2. TAG-Türkiye Serisi 2. İstanbul: Ege Yayınları, 83-96.

Art and gender. The case study of enamelling in continental Europe (4th-3rd century BCE)

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Abstract

Fourth century BCE works of art from south-western Germany and the Swiss Plateau are characterised by the Waldalgesheim style and the art of enamelling. Special classes of jewels and weapons indicate that the art of enamelling was a symbol of excellence at that time. The spatial distribution of early enamelled objects shows a high concentration in the middle and upper Rhine valley. Anthropological data and DNA analysis available from a few cemeteries – such as Gäufelden-Nebringen, Baden-Württemberg, Germany – provide information about the relationships between types of enamelled objects, as well as the people and family groups to whom these objects were dedicated. These data offer an opportunity to investigate issues of gender during the 4th century and the early 3rd century BCE in continental Europe.

Keywords: *Iron Age, Gäufelden-Nebringen, burials, enamelling, gender archaeology*

Introduction

In this study, gender transformation in past societies will be examined through works of art. If objects created by ancient societies offer some possibilities to approach issues of gender, the question of how an object, especially a funerary object, became a gendered object remains open (Stig Sørensen 2000; 2004). We must understand that identifying that an object belongs firmly to a female or a male is difficult without various sources of information. In this study, gender will be strictly linked to anthropological determination in order to analyse whether art could be a vehicle to trace questions of gender. For this purpose, the art of enamelling has been chosen as a case study. Emerging in continental Europe during the 4th century BCE, early enamelled objects were most often found in graves (Challet 1997). Combining

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Figure 1. Gäufelden-Nebringen (Kr. Böblingen, Germany). Grave 17. 1 Bronze disc torc; 2 Detail of enamelled S-shaped design between two riveted red glass discs (photograph: P. Frankenstein/H. Zwietasch, Landesmuseum Württemberg, Stuttgart).



valuable excavations, as well as the archaeological and anthropological analysis recently complemented with DNA research, the cemetery of Gäufelden-Nebringen (Kr. Böblingen, Germany) offers an opportunity to study the art of enamelling from the perspective of gender (Krämer 1964; Scholtz *et al.* 1999). First, technical enamelling characteristics will be introduced, followed by the archaeological, anthropological, and genetic data from the cemetery of Gäufelden-Nebringen. Finally, the results about the art of enamelling will be discussed in relation to female as well as male gender aspects.

The art of enamelling

Early enamels were identified on the continent starting in the second half of the 19th century. In 1872, Jacques-Gabriel Bulliot published the first study about red enamelled studs, following his excavations on the Mont-Beuvray (Dép. Saône-et-Loire, France), a 2nd-1st century BCE settlement (Bulliot 1872; 1875). More than

10 years later, Otto Tischler published a general study about enamelling (Tischler 1887). In the 1930s, with work on the collections of the Musée d'archéologie nationale, Saint-Germain-en-Laye, France, an interest in continental enamels developed, especially those dated to the 4th-1st century BCE (Henry 1933). The various categories of these early enamels on the continent – jewellery and, more rarely, weapons, chariot fittings, horse harnesses, or tableware – were then identified, complemented with glass analysis (Challet 1992).

The word *enamel* comes from the Old High German word *smelza* (to smelt) via the Old French *esmail*, or from the Latin word *smaltum* (Gauthier 1972, 17; Haseloff 1990, 11). 'An enamel' is usually a small decorative object coated with glass. Enamelling is generally described as a vitreous substance fused onto metals and fixed by heating (Bateson 1981, 1). Enamel can also be fixed onto glass, ceramics, stone, or any material that will withstand the high temperature required for fusing. The term *enamel* is most often restricted to work on metal. The present state of knowledge shows that early continental enamels appear in the middle and upper Rhine valley to the Swiss Plateau in the beginning of the 4th century BCE. Very surprisingly, these enamels, executed mainly on bronze but also on iron, were all red. This kind of red glass belongs to the soda-lead oxide-silica variety (Henderson 1985, 238). Its average composition proved to be 5-10 per cent cuprous and 20-50 per cent lead oxide (Hughes 1972). The red colour is due to numerous feathery crystals of cuprous oxide floating in the glass matrix. This form of copper is only obtained by heating in reduction conditions. Lead may be added for various reasons. First, it reduces glass viscosity. Second, it improves the expansion coefficient of the glass matrix, which tends to contract when cooling down, and it reduces the tension between the glass and its metal support. In contrast to blue, yellow, and white glass, red glass was never enamelled onto other types of glass, but only onto metals such as bronze and iron. It has to be noted that red glass was worked in hot as well as cold conditions: red glass was enamelled hot, as described above, but was also worked as inlay, in a cold state. Among the jewels, the disc torc illustrates such a technical combination. The cast decorations of the disc torcs are not always enamelled, but the S-shaped designs between the three red glass discs of these torcs are systematically enamelled (Fig. 1).

Data from the cemetery of Gäufelden-Nebringen

The Gäufelden-Nebringen cemetery offers a valuable opportunity to study enamelling in context (Fig. 2). Around 30 km south-west of Stuttgart, the Gäufelden-Nebringen cemetery was excavated between August and September 1959 by the Staatlichen Amt für Denkmalpflege Stuttgart due to roadworks near the railway station. Twenty-five graves were excavated. Two additional graves that were, unfortunately, already damaged, can be added to this total, one containing an iron sword fragment. The number of graves that were destroyed before the intervention of the Staatliche Amt für Denkmalpflege Stuttgart remains uncertain. But during new archaeological investigations in 1994 and 1995, no further graves were discovered (Scholz *et al.* 1999, 223). Among the excavated graves, 21 are inhumations and four are cremations. The anthropological analysis shows almost the same number of men, women, and children (Preuschoft 1964). The DNA program clarifies the family relationships that had already been anticipated due to the spatial positioning of the tombs (Scholz *et al.* 1999). Thanks to the enamelled objects – especially four disc torcs (graves 4, 14, 17, 23), a shield (grave 5), a bronze fibula (grave 18), and a bronze belt hook (grave 3), complemented with archaeological, anthropological, and genetic data – it is possible to clarify characteristics related to gender.



Figure 2. Map with the location of the cemetery of Gäufelden-Nebringen (Kr. Böblingen, Germany).

In tomb 3, an 18- to 20-year-old female was buried with two thin bronze Dux type fibulae, one large iron fibula, one iron fibula, a thin fragment possibly of a bronze torc, a fragment of a sheet bronze armring, a bronze belt hook with red glass (probably enamelled), one small blue glass bead, two amber beads, a jet pendant, and a deer antler disc (Krämer 1964, pl. 1B).

In tomb 4, a probably 50- to 60-year-old female was buried with a disc torc and two bronze Münsingen type fibulae with red glass inlay, two bronze Dux type fibulae, an iron fibula with a cast bronze bow, an iron fibula, a bent gold ring, a sheet bronze armring, an iron armring, an iron belt fastener, and two sheet bronze ankle rings (Krämer 1964, pl. 2).

In tomb 5, a 25- to 35-year-old male was buried with two iron fibulae, an iron ring fragment, an iron sword in its scabbard, three hollow bronze rings, an iron spear, as well as five iron studs (one of which is enamelled) and iron fragments from a shield¹ (Krämer 1964, pl. 9A).








In tomb 14, a 35- to 50-year-old female was buried with a set including a disc torc and a Münsingen type fibula with coral inlay, a bronze serpentine form armring, a bent ringed bronze armring, and a fragment of a sheet bronze ankle ring (Krämer 1964, pl. 4).

In tomb 17, a five- to six-year-old child was buried in a pit originally prepared for an adult (Krämer 1964, 13) with a disc torc and two bronze Münsingen type fibulae with coral inlay on the bow and red glass on the foot², two bronze Marzabotto type fibulae, a bronze fibula with rolling bow, a bronze fibula, four sheet bronze rings, a bronze ring, two little stone pendants, and a yellow glass bead with blue and white spots (Krämer 1964, pl. 6).

In tomb 18, a 30- to 50-year-old female was buried with a bronze fibula with enamelled bow, a bronze Münsingen type fibula with red glass inlay, a small iron

Table 1 (opposite page).
Gäufelden-Nebringen (Kr.
Böblingen, Germany). Type of
enamelling, anthropological
data, and DNA data by grave
(object types after Krämer
1964; age and sex data after
Preuschoft 1964; DNA data after
Scholz et al. 1999).

- 1 It has to be noted that Holger Preuschoft initially suggested that this individual was a female. But as he pointed out, this diagnosis, being based only on the slender form of the bones, was insecure, with the weapon equipment pleading for a male individual. See Preuschoft 1964, 32.
- 2 Within the framework of a research program devoted to coral finds of the 6th-3rd centuries BCE, the coral inlay already suspected on the bow of the two Münsingen bronze fibulae of grave 17 (Krämer 1964, 28) was confirmed. See Fürst 2014, 43.

Grave	Burial ritual	Age [years]	Sex	DNA analysis	Enamelling	Object type
1	inhumation	40-55	male			
2	inhumation	25-35	male?			
3	inhumation	18-20	female		bronze enamelling	
4	inhumation	50-60	female		bronze enamelling	
5	inhumation	25-35	male		iron enamelling	
6	inhumation	30-50	male			
7	cremation					
8	inhumation	over 60	female			
9	inhumation	30-40	male			
10	cremation					
11	inhumation	40-60	male?	father of woman grave 14		
12	inhumation	50-60	female	mother of woman grave 14		
13	inhumation	infant				
14	inhumation	35-50	female	child from woman grave 12 and man grave 11	bronze enamelling	
15	cremation					
16	inhumation	infant				
17	inhumation	5-6 year		child from woman grave 18	bronze enamelling	
18	inhumation	30-50	female	mother of children grave 17 and 20	bronze enamelling	
19	inhumation	55-65	male?	father of children grave 17 and 20		
20	inhumation	14-15		child from woman grave 18		
21	cremation					
22	inhumation	under 10		child from woman grave 23		
23	inhumation	30-40	undetermined/ female?	mother of children grave 22, 24 and 25	bronze enamelling	
24	inhumation	14-15		child from woman grave 23		
25	inhumation	16-18		child from woman grave 23		

fibula, a bent ringed bronze armring, a knot bronze armring, and two knot bronze ankle rings (Krämer 1964, pl. 5A).

In tomb 23, a 30- to 40-year-old individual, whose sex could not be determined, was buried with a disc torc and a bronze Münsingen type fibula with red glass inlay, an iron fibula, two iron Dux type fibulae, two ringed bronze armrings, two sheet bronze ankle rings, a bronze bead, two jet beads, and an amber bead (Table 1; Krämer 1964, pl. 8).

The enamelled decorations of the disc torcs can be subdivided into two groups: those in the one group have rectilinear motives referring mostly to a previous period; those in the other group, which are more numerous, have curvilinear motifs belonging to the major 4th century BCE Waldalgesheim style. Among the 90 disc torcs already listed (Müller 1989), 24 are enamelled, four coming from the Gäufelden-Nebringen cemetery. These new curvilinear enamelled motifs are clearly based on the circle. Various motifs were created, such as the basic S-shaped design composed of two superimposed circles. Among other motifs are the lyre, tendrils, and a ‘comb motif’ (Müller 1989, 45). Among these enamelled disc torcs, three were decorated with curvilinear motifs of the Waldalgesheim style (graves 4, 14, 23), whereas the fourth was decorated with rectilinear motifs of the previous period, of the Early Iron Age (grave 17)³.

Results

In the cemetery of Gäufelden-Nebringen, of the 25 excavated graves, seven are associated with an enamelled object – four disc torcs, one fibula, one belt hook, and one iron stud from a shield. Belonging to the Waldalgesheim style, which flourished mainly in central Europe during the 4th century BCE, these early continental enamels are all red. Semi-precious materials, such as amber and coral, that was adhered with vegetal glue and riveted onto metal objects, gradually went out of fashion during the 4th century BCE, as red enamels rose in prominence. The cemetery of Gäufelden-Nebringen is a good example of this transition. The four enamelled disc torcs (graves 4, 14, 17, 23) brilliantly illustrate this technical transformation, as they are partly enamelled and partly decorated with red glass inlay. Furthermore, the red enamelled bronze fibula (grave 18) had quite a new motif for the 4th century BCE⁴. The bronze belt hook with red glass, probably enamelled (grave 3), and the red glass enamelled iron stud from a shield (grave 5) also demonstrate the concomitant skills of bronze and iron enamelling (Defente-Challet 2012, 221).

Combining artefact analysis with anthropological data and the spatial distribution of graves from the cemetery of Gäufelden-Nebringen, Werner Krämer distinguished four groups including a man, a woman, and children, suggesting family groups (Krämer 1964, 11-12).

Group I comprises a cremation (grave 10) and five inhumations. Among the inhumations are two males, one with a shield with a red enamelled iron stud, among other objects (cf. *supra*) (grave 5, 25-35 years old), the other with an iron sword, three iron rings, an iron spear, an iron helmet, a gold ring (grave 11, 40-60 years old); two females, one with a sheet bronze belt, an old model matching the age of this older woman (grave 12, 50-60 years old), the other with an enamelled disc torc,

3 It is possible that these particular motifs had a symbolic status, as a similar motif also decorates the gold torc from grave 1, tumulus I of the Glauberg (Wetteraukr., Germany). See Herrmann 2002, 246-247, Figs. 237; 238.

4 As recently noticed, this type of bronze fibula has parallels in the middle Danube area and the Carpathian basin; in addition, strontium isotope analysis has shown that the woman in grave 18 grew up locally, possibly in the Nebringen area, whereas she consumed food from another area (the Keuper area) during her late childhood. See Hauschild *et al.* 2013, 348; Scheeres *et al.* 2013, 3623.

among other objects (cf. *supra*) (grave 14, 35-50 years old); and an infant without any objects (grave 13).

Group II is adjacent to group I and comprises a cremation with a bent iron sword, an iron spear (grave 7), and two inhumations: one contains a man with an iron sword, an iron spear, and an iron fibula with ringed bow (grave 6, 30-50 years old), the other contains a woman with a bent gold finger ring, a bronze fibula, a small iron fibula, four bronze armrings, two sheet bronze ankle rings, one bronze belt hook, one small blue glass bead, and one sheet bronze torc belonging to earlier times, matching the age of this older woman (grave 8, over 60 years old).

Group III comprises four inhumations. Among them are one child with a bronze armring, a small bronze chain, and a small pottery dish (grave 22, under 10-years old); an individual with an enamelled disc torc, among other objects (cf. *supra*) (grave 23, 30-40 years old), the disc torc suggesting possibly a female, as in graves 4 and 14; another child with two iron fibulae and the shinbone of a young ruminant, with trace of a sword blow on the child's skullcap (grave 24, 14-17 years old); and a young man with an iron fibula and a gold finger ring (grave 25, 16-18 years old).

Group IV comprises five inhumations: a man, a woman, two children, and an infant. The infant was buried with traces of an iron fibula, a small pottery dish, and a river shell (*Unio crassus batavus*) (grave 16). One child was buried with an enamelled bronze disc torc, among other objects (cf. *supra*) (grave 17, five-six years old). The other child was buried with a bronze fibula that had inlay on the bow that is now lost, an iron Münsingen type fibula, and one horse tooth (grave 20, 14-15 years old). The woman was buried with a bronze fibula with enamelled bow, among other objects (cf. *supra*) (grave 18, 30-50 years old). The man was buried with a small bronze fibula and a small pottery dish (grave 19, 55-65 years old).

Group V comprises three inhumations: two men and one woman. One man was buried with an iron fibula (grave 1, 40-55 years old), the other with fragments of an iron sword (grave 2, 25-35 years old). The woman was buried with an enamelled bronze belt hook, among other objects (cf. *supra*) (grave 3, 18-20 years old).

Group VI comprises two inhumations. One was a woman with an enamelled disc torc, among other objects (cf. *supra*) (grave 4, 50-60 years old). The other was a man with an iron sword, an iron fibula with ringed bow, and a fragment of sheet bronze armring⁵ (grave 9, 30-40 years old).

The identification of family groups in the cemetery of Gäufelden-Nebringen was first based on the archaeological and anthropological analysis and has subsequently been confirmed by the results of the DNA program (Scholz *et al.* 1999, 228). A direct parent-child type genetic link was successfully validated for group I and confirmed by the anthropological analysis: the man from grave 11, who was around 40-60 years old and the woman from grave 12, who was around 50-60 years old, could be the parents of the 35- to 50-year-old woman in grave 14. The genetic affiliation between the individual (grave 23) – possibly a female (based on her disc torc, as seen above) – and the three children (graves 22, 24 and 25) has been established for group III. Whether the man in grave 1 (group V) could have been the children's father remains unresolved based on the genetic results. In group IV, the woman in grave 18 and the man in grave 19 were not genetically related, and they could be the parents of the children in graves 17 and 20 (Fig. 3).

The chronological uniformity of the Gäufelden-Nebringen cemetery during the 4th century BCE suggests three or, at most, four generations, based on the age gap between the infants from graves 13 and 16 and the woman over 60 years old from

5 This sheet bronze armring type usually belonged to women; Werner Krämer suspected an additional female body because bones of another body were found in this grave, which had been disturbed before the beginning of the excavations in summer 1959. See Krämer 1964, 27.



Figure 3. Gäufelden-Nebringen (Kr. Böblingen, Germany). Family groups map that shows enamelled objects. Grave 3, enamelled belt hook; grave 4, disc torc; grave 5, iron enamelled stud; grave 14, disc torc; grave 17, disc torc; grave 18, bronze enamelled fibula; grave 23, disc torc. Not to scale (diagram V. Defente, redrawn after Krämer 1964, pl. 2; 13; 14; 16).

grave 8⁶. As we have seen, among the four disc torcs, two are worn by females – one mature female (grave 14) and one older one (grave 4); one by an individual suspected to be a female (grave 23); and one by a child (grave 17). Interestingly enough, this case is not unique. In grave 10 from the cemetery of Andelfingen (Kt. Zurich, Switzerland), the disc torc was adapted for a child's body: only two of the original three discs decorate the torc, leading to a strange asymmetry. Due to the spatial distribution of the graves, the cemetery of Andelfingen was suspected to be devoted to family groups (Viollier 1916). These two examples – Gäufelden-Nebringen grave 17 and Andelfingen grave 10 – highlight a predestined role assigned to some people since childhood.

In the cemetery of Gäufelden-Nebringen, the DNA results show that one mature woman with disc torc (grave 14) was the mother of family group I, whereas the child in grave 17 was the child of the woman in grave 18 and the man in grave 19. In addition, the individual in grave 23, suspected to be a woman (thanks to her disc torc, as already mentioned), could have been the mother of

6 That the cemetery of Gäufelden-Nebringen was used during a century and a half (c. 400-250 BCE), more or less during five to six generations, has been previously suggested. See Scheeres *et al.* 2013, 3615.

family group III. Interestingly, the woman with enamelled disc torc from grave 14 and the individual with enamelled disc torc from grave 23, as well as the woman in grave 18 with a bronze fibula with enamelled bow are all three genetically linked to children buried close to them. This situation confirms that these women with enamelled jewels, such as disc torcs or fibulae with enamelled bow, were particularly honoured at the time of their death.

Gender issues concerning people wearing a torc in ancient continental Europe – male or female – have been a subject of controversy since the second half of the 19th century, when early finds of torcs in the cemeteries of the Champagne region (France), came under discussion (Nicaise 1885; Baye 1885; 1886). Greek and Latin sources traditionally note that Gallic warriors wore a torc as military insignia (Baye 1886, 175). Partly because of preserved monuments, such as ‘The Dead Gallic Warrior’ (Capitoline Museum, Rome; Müller 2002, 183-184), and partly because of historiography, the torc became basically a male artefact (Adler 2003). But in 1885, taking into account his own excavations in the cemetery of Marson (Dép. Marne, France) supplemented by an investigation among other archaeologists, Auguste Nicaise noticed that graves with torcs belonging to the 4th century BCE excavated in the Champagne region have no associated weapons. He deduced that the torc was exclusively female (Nicaise 1885). The idea that females could have worn the torc was initially rejected, based on the Greek and Latin sources. Joseph de Baye voiced strong criticism and gave an overview of the acquired data, reminding the reader how Titus Manlius, in 361 BCE, fought against a Gallic warrior, killed him, and took off his torc (earning him the surname *Torquatus*), and claiming that all torcs were worn by males (Baye 1885, 209-210; 1886, 187-189). Nonetheless, some researchers followed Nicaise’s idea (Bertrand 1885; Fourdrignier 1886; Déchelette 1913). This controversy concerning who wore the torc, male or female, points out chronological variations and highlights historical phenomena that have little in common. For example, the gold torc from grave 1, tumulus I of the Glauberg (Wetteraukr., Germany), datable to the 5th century BCE, was worn by a 28- to 32-year-old man (Kunter *et al.* 2002, 114). Objects that can be dated to the end of the 6th century BCE, such as the gold torc from the grave of Eberdingen-Hochdorf (Lkr. Ludwigsburg, Germany), was worn by a 40- to 50-year-old man (Czarnetzki 1985, 44), but the gold torc from the grave of Vix (Dép. Côte d’Or, France) was worn by a 35-year-old woman (Langlois 1987, 215). During the 3rd century BCE, almost no torcs are found in graves. Those that can be dated to the 2nd-1st centuries BCE are primarily part of hoards (Adler 2003; Hautenaue 2005).

Returning to the cemetery of Gäufelden-Nebringen, in addition to enamelled disc torcs, an enamelled bronze fibula, an enamelled bronze belt hook, and an enamelled iron stud were found. Among the six groups buried in the cemetery, five were family groups, as confirmed by the DNA analysis: group I, with the enamelled disc torc from grave 14 and the enamelled iron shield stud from grave 5; group III, with the enamelled disc torc from grave 23; group IV, with the enamelled bronze fibula from grave 18; group V, with the enamelled bronze belt hook from grave 3; and group VI, with the enamelled disc torc from grave 4. Group II did not show any within-group genetic ties, but we can note that the female over 60 years old in grave 8 was buried with, among other objects, a bronze torc type belonging to earlier times. Thanks to these enamelled objects, which all date to the 4th century BCE, the cemetery of Gäufelden-Nebringen provides an opportunity to discuss about gender in a more precise chronological framework.

Discussion

We have seen that among seven enamelled objects, six were associated with women and only one with a man. Any assumption that enamelled objects were only devoted to women in the cemetery of Gäufelden-Nebringen is contradicted by the shield with enamelled iron stud buried with the man in grave 5. While this enamelled iron shield stud is unique within the cemetery of Gäufelden-Nebringen, similar finds are known from other sites. For example, enamelled iron studs were riveted on shields in graves 36 and 40 of the cemetery of Manching-Steinbichel (Lkr. Ingolstadt, Germany), from archaeological contexts mainly dated to the 3rd century BCE (Krämer 1989, 86-89). The enamelled iron stud from the male grave 5 of the cemetery of Gäufelden-Nebringen offers an exception in the present state of knowledge.

The DNA results confirm that family groups were buried in the cemetery of Gäufelden-Nebringen⁷. The woman connected with each family group wore an enamelled jewel, whereas only one man wore an iron weapon decorated with enamel. Because of their symbolic status, some objects afford specific information about gender, the clearest sign being the six-year-old child in grave 17, who was related to one of the women wearing enamelled jewels, who wore an enamelled disc torc originally made for an adult⁸.

Conclusion

The cemetery of Gäufelden-Nebringen yielded objects decorated with a new technique, which was emerging during the 4th century BCE in the Rhine region – namely, the art of enamelling. As we have seen with the case study of the cemetery of Gäufelden-Nebringen, the distribution of enamelled objects is highly significant, as among seven graves concerned, four were definitely associated with women and only one with a man. The women's enamelled objects were jewels (torcs, fibulae, belt hooks), whereas the man's enamelled object was a weapon (shield). Archaeological and anthropological data, confirmed by DNA results, show that there were five family groups among the six groups buried in this cemetery. These results show that the woman of each respective family group was buried with an enamelled jewel, except for the older woman in group II, who had an older style of jewel. The art of enamelling was strongly, although not exclusively, associated with women. Thanks to the cemetery of Gäufelden-Nebringen, we can thus consider that the art of enamelling offers an opportunity to distinguish gender characteristics in the Rhine region during the 4th century BCE.

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7 The cemetery of Münsingen-Rain (Canton Berne, Switzerland) was occupied from the end of the 5th century BCE to the beginning of the 2nd century BCE, and yielded jewels and weapons of high quality, some of them enamelled. DNA results identify two different families and a long practice of endogamy (for at least eight generations); exogamy was also practised, leading to the emergence of nobility in a sense of social class (Alt *et al.* 2005; Müller *et al.* 2008).

8 Within the framework of new anthropological analyses, the reinterpretation of child burials has to be mentioned, for example, the cemetery of Mitterkirchen (Bez. Perg, Austria). See Leskovar 2000; Schumann *et al.* 2015.

References

- Adler, Wolfgang 2003. *Der Halsring von Männern und Göttern. Schriftquellen, bildliche Darstellungen und Halsringfunde aus West-, Mittel- und Nordeuropa zwischen Hallstatt- und Völkerwanderungszeit*. Saarbrücken Beiträge zur Altertumskunde 78. Bonn: Habelt.
- Alt, Kurt W., Jud, Peter, Müller, Felix, Nicklisch, Nicole, Uerpmann, Adelina, and Vach, Werner 2005. Biologische Verwandtschaft und soziale Struktur im latènezeitlichen Gräberfeld von Münsingen-Rain. *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz*, 52, 157-210.
- Bateson, J. Donald 1981. *Enamel-working in Iron Age, Roman and Sub-Roman Britain. The Products and Techniques*. BAR British Series 93. Oxford: BAR Publishing.
- Baye, Joseph de 1885. L'usage du torques chez les Gaulois. *Bulletin archéologique des travaux historiques et scientifiques*, 2, 208-213.
- Baye, Joseph de 1886. Le torques était porté par les hommes chez les Gaulois. *Bulletin monumental*, 52, 175-196.
- Bertrand, Alexandre 1885. Sur des objets provenant de fouilles exécutées à Marson (Marne) par M. Auguste Nicaise. *Comptes-rendus des séances de l'Académie des Inscriptions et Belles-Lettres*, 29, 3, 233-235.
- Bulliot, Jacques-Gabriel 1872. Mémoire sur l'émaillerie gauloise à l'oppidum du Mont-Beuvray. *Mémoires de la Société des Antiquaires de France*, 33, 71-103.
- Bulliot, Jacques-Gabriel 1875. L'art de l'émaillerie chez les Eduens avant l'ère chrétienne d'après les découvertes faites au Mont-Beuvray. *Mémoires de la Société éduenne*, 4, 439-480.
- Czarnetzki, Alfred 1985. Der Keltenfürst von Hochdorf – Rekonstruktion eines Lebensbildes. In: Planck, Dieter *et al.* (eds). *Der Keltenfürst von Hochdorf. Methoden und Ergebnisse der Landesarchäologie. Katalog zur Ausstellung Stuttgart, Kunstgebäude vom 14. August bis 13. Oktober 1985, Landesdenkmalamt Baden-Württemberg*. Stuttgart: Theiss, 43-45.
- Challet, Virginie 1992. *Les Celtes et l'émail*. Documents préhistoriques 3. Paris: Comité des Travaux historiques et scientifiques.
- Challet, Virginie 1997. Les techniques ornementales des bijoutiers celtes de la haute vallée du Rhin aux 4^e et 3^e siècles av. J.-C. Etude des bijoux provenant des nécropoles de Gäufelden-Nebringen (Baden-Württemberg) et d'Andelfingen ZH. *Annuaire de la Société Suisse de Préhistoire et d'Archéologie*, 80, 111-130.
- Déchelette, Joseph 1913. Observations sur le torque. *Revue Archéologique, IVe Série*, 11, 232-233.
- Defente-Challet, Virginie 2012. Red glass in Iron Age Continental Europe: technical innovation and technological transfer. In: Kern, Anton *et al.* (eds). *Technologieentwicklung und -transfer in der Hallstatt- und Latènezeit*. Beiträge zur Internationalen Tagung der AG Eisenzeit und des Naturhistorischen Museums Wien, Prähistorische Abteilung, Hallstatt 2009. Beiträge zur Ur- und Frühgeschichte Mitteleuropas 35. Langenweißbach: Beier & Beran, 219-225.
- Fourdrignier, Edouard 1886. Le port féminin du torques chez certaines tribus de l'est de la Gaule, par Auguste Nicaise. *Revue Archéologique, IIIe Série*, 8, juillet-décembre, 254-256.
- Fürst, Sebastian 2014. Korallen am Übergang zur Frühlatènezeit – Zum wissenschaftlichen Potenzial eines problematischen Schmuckmaterials. In: Hornung, Sabine (ed.). *Production – Distribution – Ökonomie. Siedlungs- und Wirtschaftsmuster der Latènezeit*. Akten des internationalen Kolloquiums in Otzenhausen, 28.-30. Oktober 2011. Universitätsforschungen zur prähistorischen Archäologie 258. Bonn: Habelt, 41-66.
- Gauthier, Marie-Madeleine 1972. *Emaux du Moyen Age occidental*. Fribourg: Office du Livre.

- Haseloff, Günther 1990. *Email im frühen Mittelalter. Frühchristliche Kunst von der Spätantike bis zu den Karolingern*. Marburger Studien zur Vor- und Frühgeschichte, Sonderband 1. Marburg: Hitzeroth.
- Hauschild, Maya, Schönfelder, Martin, Scheeres, Mirjam, Knipper, Corina, Alt, Kurt W., and Pare, Christopher 2013. Nebringen, Münsingen und Monte Bibele. Zum archäologischen und bioarchäometrischen Nachweis von Mobilität im 4/3. Jahrhundert v. Chr. *Archäologisches Korrespondenzblatt*, 43, 345-364.
- Hautenaue, Hélène 2005. *Les torques en or du second Age du Fer en Europe. Techniques, typologies et symbolique*. Association des Travaux du Laboratoire d'Anthropologie de l'Université de Rennes 1, 44.
- Henderson, Julian 1985. The raw materials of early glass production. *Oxford Journal of Archaeology*, 4, 267-290.
- Henry, Françoise 1933. Emailliers d'Occident. *Préhistoire*, 2, 65-143.
- Hughes, Michael J. 1972. A technical study of opaque red glass of the Iron Age in Britain. *Proceedings of the Prehistoric Society*, 38, 98-107.
- Krämer, Werner 1964. *Das keltische Gräberfeld von Nebringen (Kreis Böblingen)*. Veröffentlichungen des Staatlichen Amtes für Denkmalpflege Stuttgart A 8. Stuttgart: Silberburg.
- Krämer, Werner 1989. *Die Grabfunde von Manching und die latènezeitlichen Flachgräber in Südbayern*. Die Ausgrabungen in Manching 9. Stuttgart: Steiner.
- Kunter, Manfred, Lier, Simone, and Hantsch, Nora 2002. Die Skelettreste aus den frühkeltischen Fürstengräbern. In: Baitinger, Holger, and Pinsker, Bernhard (eds). *Das Rätsel der Kelten vom Glauberg. Glaube – Mythos – Wirklichkeit. Eine Ausstellung des Landes Hessen in der Schirn Kunsthalle Frankfurt, 24. Mai bis 1. September 2002*. Stuttgart: Theiss, 114-118.
- Langlois, René 1987. Le visage de la Dame de Vix. In: Mohen, Jean-Pierre, Duval, Alain, and Eluère, Christiane (eds). *Trésors des princes celtes. Catalogue de l'exposition tenue aux galeries nationales du Grand Palais, Paris, 20 octobre 1987-15 février 1988*. Paris: Réunion des musées nationaux, 212-217.
- Leskovar, Jutta 2000. Die Kindergräber von Mitterkirchen, OÖ. *Archäologie Österreichs*, 11, 2, 54-59.
- Müller, Felix 1989. *Die frühlatènezeitlichen Scheibenhalsringe*. Römisch-Germanische Forschungen 46. Mainz: von Zabern.
- Müller, Felix, Jud, Peter, and Alt, Kurt W. 2008. Artefacts, skulls and written sources: the social ranking of a Celtic family buried at Münsingen-Rain. *Antiquity*, 82, 462-469.
- Müller, Hans-Peter 2002. Die Kelten aus Sicht der Anderen, Kat.-Nr.145. Sog. Sterbender Gallier Ludovisi. In: Cain, Hans-Ulrich, and Rieckhoff, Sabine (eds). *fromm – fremd – barbarisch. Die Religion der Kelten*. Mainz: von Zabern, 183-184.
- Nicaise, Auguste 1885. Le port féminin du torques chez certaines tribus de l'est de la Gaule. Etude d'archéologie gauloise. *Mémoires de la société d'agriculture, commerce, sciences et arts du département de la Marne*, 77-89.
- Preuschoft, Holger 1964. Die Skelettreste aus dem Gräberfeld von Nebringen. In: Krämer, Werner. *Das keltische Gräberfeld von Nebringen (Kreis Böblingen)*. Veröffentlichungen des Staatlichen Amtes für Denkmalpflege Stuttgart A 8. Stuttgart: Silberburg, 31-37.
- Scheeres, Mirjam, Knipper, Corina, Hauschild, Maya, Schönfelder, Martin, Siebel, Wolfgang, Vitali, Daniele, Pare, Christopher, and Alt, Kurt W. 2013. Evidence for "Celtic migrations"? Strontium isotope analysis at the early La Tène (LT B) cemeteries of Nebringen (Germany) and Monte Bibele (Italy). *Journal of Archaeological Science*, 40, 3614-3625.
- Scholz, Michael, Hald, Jürgen, Dicke, Peter, Hengst Sylvia, and Pusch, Carsten M. 1999. Das frühlatènezeitliche Gräberfeld von Gäufelden-Nebringen. Neue Erk-

- enntnisse zur inneren Gliederung unter Anwendung archäobiologischer Analyseverfahren. *Archäologisches Korrespondenzblatt*, 29, 223-235.
- Schumann, Robert, Leskovar, Jutta, and Marschler, Maria 2015. *Corrigenda* zu den vermeintlichen Kindergräbern mit reicher Ausstattung aus Mitterkirchen. *Archaeologia Austriaca*, 99, 31-52.
- Sørensen, Marie Louise S. 2000. *Gender Archaeology*. Cambridge: Polity.
- Sørensen, Marie Louise S. 2004. The interconnection of age and gender: a Bronze age perspective. *Ethnographisch-Archäologische Zeitschrift*, 45-2, 327-338.
- Tischler, Otto 1887. Eine Emailscheibe von Oberhof und Kurzer Abriss der Geschichte des Emails. Vortrag gehalten in der Sitzung der physikalisch-ökonomischen Gesellschaft zu Königsberg in Pr. am 2. Dezember 1886. *Schriften der physikalisch-ökonomischen Gesellschaft zu Königsberg in Pr.*, 27, 3-24.
- Viollier, David 1916. *Les sépultures du second âge du Fer sur le plateau Suisse*. Schriften der Stiftung von Schnyder von Wartensee 20. Genève: Georg.

3 Gendering and shaping the environment

Gender and the environment in archaeology. A discussion

Julia Katharina Koch and Oliver Nakoinz

Environmental research in prehistoric and archaic contexts has rarely been linked to gender archaeology. Environmental research combines topics and, above all, methods that, because of their scientific character, ostensibly cannot be linked to questions of gender research. In the evaluation of pollen profiles, for example, the reconstruction of the vegetation is of primary interest. But even though the interaction between humans and the environment is becoming the focus of research, many are struggling to find a connection to gender research.

Archaeological gender research means using a differentiated perspective to reconstruct the social structures of cultural communities – with their different and related roles, power structures, and patterns of interaction – that underlie the traditional material culture of past cultural groups. Both at the level of the individual and at that of social groups, assignments of activities and material goods – and thus social roles – are constantly changing in both time and space.

In their seminal article, Margaret Conkey and Janet Spector (1984), outlined an analysis method, the task-differentiation framework, that establishes a connection between the *chaîne opératoire* of Leroi-Gourhan and the concept of what West and Zimmermann (1987) have termed *doing gender*. In doing so, they made a link with the spatial aspects:

“The spatial dimension of task differentiation identifies where each task is performed within the context of particular site types. Attention is drawn to tasks that may be spatially discrete in contrast to others that maybe performed in various locations. Some task always take place within a dwelling or proximate to certain stationary facilities. Other tasks are less restrictive in a spatial sense. Again this dimension of task differentiation has implications in terms of understanding variability in gender systems – for example, differences in the mobility patterns and use of space by men and women within and between cultures – and in terms of understanding possible relationship between gender arrangements and archaeological site formation processes and site structure.” (Conkey and Spector 1984, 35).

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They thus outline how we might reconstruct activity zones and connect work/activities and space. In gender research, one focus can be described as 'household research', with its reconstruction of activities in houses, assignment of domestic activities to gender groups, and juxtapositioning with analogies from ethnography.

The environment can be involved in archaeological investigations, and thus also in gender-oriented work, in three different ways. In the first, the absolute space, in the sense of a connecting coordinate system, is used to join different environmental and cultural parameters using their position. If gender-specific information is available for these locations, this can also be integrated. In the end, the procedure follows the traditional approach of archaeology, which works out correlations of different parameters and interprets these relationships. Correlation with spatial parameters is a particularly rewarding approach, since the location of finds and sites is often known and the connection to spatial parameters can therefore easily be established.

The relative space is constituted by social processes. In the second approach, gender is thus taken up directly as a central aspect. Questions that are dealt with in this approach are how power is exercised spatially, for example in the gender context, and how spatial structures are used to support or manipulate power structures. It is precisely this interaction between space and society that distinguishes this approach from one that uses absolute space. Environmental parameters are incorporated into spatial models in different ways and can, for example, make a connection or demarcation in different places more meaningful. The issue of social accessibility is closely related to that of spatial accessibility. Which places were or were not accessible to which groups? Were there any restrictions? Was the access regular, seasonal, or one-off?

Finally, the landscape-archaeological approach in a sense represents a synthesis of the two approaches mentioned above. The term 'landscape archaeology' is quite vague and covers a variety of settlement archaeologies, up to and including a semiotic archaeological geography. Terminologically and conceptually it makes the most sense to view landscape archaeology as archaeology of the perceived space. This concept ultimately covers a whole gamut of approaches and raises the research to a reflexive level. Here complex gender-environment-society-economy relationships can be worked on in an integrative manner. What is perceived by whom? Which interests are there and how do they influence perception and actions? These questions have to be answered not by the research, but also by the researchers. There is a tension between the perception of interest/use and of role, whereby gender is reflected in specific role behaviour.

All three approaches allow for the integration of environmental factors, such as soil, relief, raw materials, water, and climate. The traditionally used dichotomy of culture vs. nature can be problematic. Like the contrasting pair of women vs. men, this concept is considered outdated, but yet it persists, hidden in archaeologists' interpretations. We have to face this problem, and we can do so in two different ways. The landscape archaeology approach offers the opportunity to work on complex relationships and also to consider scales with numerous characteristics. Sometimes, however, a deliberate simplification and reduction to rather unrealistic, binary scales can make sense, although in such models, it is essential to make the assumptions and simplifications explicit. In a next step, the models can be progressively expanded and the scales made more realistic. This applies as much to the categorisation of human vs. environment as it does to the categorisation of genders.

Another aspect evident in gender research, and one we should distance ourselves from, is 'fair-weather archaeology'. In addition to the positive, there were also negatives in prehistoric societies, both in terms of human behaviour (violence, oppression, robbery, and fraud) and in terms of environmental factors (predators, floods, uncontrolled forest fires). These, too, should be considered.

In doing so, the important thing is not whether the questions about the behaviour of the gender groups in their environment can actually be answered, but, rather, that they are asked in the first place. Only when we ask these questions can we conceptualise the diversity of prehistoric societies and, at the same time, clarify our own scientific point of view, to recognize our own premises, which flow into our research, and which do so at least in part unconsciously. If methods were to be developed that recognize the interaction of gender groups with their environment, this would obviously be an important step in the reconstruction of the past.

The relationship between gender and the environment can be summarized in two theses:

1. Different gender-specific perceptions of the environment contribute to a multi-faceted and differentiated landscape archaeology.
2. The environment as a conceptual framework of activities partly gives access to their context and enriches the discussion of gender-specific activities by placing them in context.

References

- Conkey, Margaret, and Spector, Janet 1984. Archaeology and the Study of Gender. *Journal of Archaeological Method and Theory*, 7, 1-38.
- West, Candace, and Zimmerman, Don H. 1987. Doing Gender. *Gender and Society*, 1, 2, 125-151.

The gender division of labour during the proto-Elamite period in late 4th millennium BCE Iran. A case study from Tepe Sofalin in Iranian Central Plateau

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Abstract

This article examines craft specialisation and the gender division of labour in pastoral nomad societies on the Iranian Central Plateau in the late 4th millennium BCE, a time when specialisation reaches its highest level of complexity. In proto-Elamite communities, women's involvement in non-domestic production increased as social complexity progressed. Although archaeologists have largely moved beyond these typologies, the remnants of these modes of thought that the role of women were underestimated are still pervasive in much of the literature on the gender division of labour. This article argues that in proto-Elamite societies, specialised production occurred within the household, using specialised workers, and that this involved the participation of men, women, and children. Using Iranian archaeology of the 4th millennium BCE, during which complex societies emerged, as a reference point, this article constructs the argument that the specialised workers divided within their gender may have been the centre of production before pre-state political systems, within a pastoral nomadism subsistence system. Such household production and payment of workers by means of rations does not necessarily connote a lower level of socio-political or economic development (Johnson 1973; Wright and Johnson 1975). In this article, we explore the history of research on proto-Elamite economic systems, in particular, archaeological research on late 4th millennium BCE Iran. We then use these concepts to examine the role of gender in specialised household production based on proto-Elamite written texts, which mainly deal with workers and rations.

Keywords: *Iran, proto-Elamite period, gender, labour, specialised worker*

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Introduction

In the study of pastoral nomad subsistence systems, household archaeology plays an integral role. Within many archaeological regions of study, the household is an important unit of analysis, because the activities that form the backbone of the economy – that is, production, consumption, and distribution (Costin 1991) – often take place in household contexts. In studies of the proto-Elamite economy, household production is argued to be the foundation of the community (Amanollahi Baharvand 1982; Alizadeh 2010) and the labour is argued to be a partnership among men, women, and children (Yousefi Zoshk 2010). The devaluation by researchers of women's work in proto-Elamite pastoral nomad societies has caused households to be disregarded in formal economic studies.

Abbas Alizadeh questioned this evolutionary scheme¹ for economic complexity in Iranian prehistory in the 5th and 4th millennium BCE (Alizadeh *et al.* 2014) based on ethnographic data on the Bakhtiari nomadic tribes in south-western Iran (Alizadeh 2010). He discovered that economic activity relating to animal by-products and dairying initially took place in non-domestic workshops and then developed into intensive domestic production as demand increased and production techniques became more complex. The entire household became involved in production as output increased. Yousefi's study on pastoral nomads of the northern part of the Iranian Central Plateau also questions traditional assumptions that specialised production always moves from women's work to men's work as production is intensified (Hessari and Yousefi Zoshk 2013). This finding (including tablets and impressed sealings) demonstrates the importance of the new assumption about household production in the study of pastoral nomadism economic systems, as many economic activities take place in a household context – especially craft specialisation. In pastoral nomad societies, the development of specialised dairy production did not involve non-domestic workshops but, instead, entailed the use of designated workspaces within the household itself and the labour of both male and female family members.

Proto-Elamite phenomena

During the past decades, research attention has focused, initially in large measure due to political imperatives, on the borderlands of Mesopotamia (Nicholas 1980, 5). An important subject of study for archaeologists has been the cause and nature of change from simple village communities to more complex societies (Nicholas 1980, 5). Archaeologists have variously used the term *proto-Elamite* to mean a people, a script, a material culture, and a time period; in addition, the term has been used in archaeology to carry inherent geographic implications (Alden 1982; Carter 1980; Dittmann 1986c; Pittman 1997; Potts 1999). The proto-Elamite administrative system was used over a very large geographical area, stretching from Tepe Sialk (ostan Isfahan, Iran; Ghirshman 1938) and Tepe Ozbaki (ostan Alborz, Iran; Majidzadeh 2010) in the north to Tepe Yahya (ostan Kerman, Iran; Lamberg-Karlovsky 1970, 1972; Potts *et al.* 2001) and Malyan (ostan Fars, Iran; Sumner 1986, Dittmann 1986c, 334-37; Nicholas 1990; Stolper 1985) in the south, and from Shahr-i-Sokhta (ostan Sistan and Baluchistan, Iran; Tosi 1984) in the east to Susa (ostan Khuzestan, Iran; Carter 1980; Dittmann 1986a, 173-75, 182; 1986b, 347; Le Brun 1971) in the west (Fig. 1). The presence of proto-Elamite administrative technology over this vast geographical range is variously explained as the result of gradual cultural

1 Many archaeologists working on Iranian prehistoric follow the evolutionary trend of complexity started from early sedentary subsistence system in Neolithic to urbanisation and early states in 4th millennium BCE and disregard the emergence of pastoral nomadism in prehistory of Iran. For further reading see Potts 2014.



diffusion, colonial activity, traders' settlements (Alden 1982; 2013), demographic developments (Lamberg-Karlovsky 1978; Alden 1982), or interactions among pastoral nomads (Yousefi Zoshk 2010).

The label proto-Elamite was first applied to a pictographic script at the site of Susa, in the province of Khuzestan, south-western Iran (Scheil 1905; Brice 1962). Susa was known to be the historical capital of the Kingdom of Elam, and numerous records written in Elamite had been recovered from the upper levels of that site. It was therefore inferred that the crude pictographic tablets coming from the lower levels at Susa represent early attempts at writing by the ancestors of the later Elamites; accordingly, the script was designated as proto-Elamite (Nicholas 1980, 7). However, it has since been proven that the authors of the tablets were not the forerunners of the people known as the Elamites; indeed, the 'proto-Elamite' script has now been recovered over an area considerably more extensive than the known boundaries of ancient Elam (Biscione *et al.* 1977). Labelling individual sites as proto-Elamite should thus at present only be done on the basis of the presence of tablets written in the proto-Elamite script or numerical notation (Whitcomb 1971). Scholars date the proto-Elamite period to sometime around 3350 BCE, or contemporary with the late Uruk period in Mesopotamia.

The distribution area of the proto-Elamite tablets was much wider than that of the proto-cuneiform documents, which were limited to southern Mesopotamia. It seems that these two writing systems were mutually exclusive, since they have never been found together on the same site. The reason is still elusive. Was it redundant or pointless to apply a system devised for the sedentary subsistence systems of southern Mesopotamia (Wright 2013) to the pastoral nomadism economy of highland Iran (Alizadeh 2010; Alden 2013), and vice versa? Did the distribution area reflect an identity border?

Figure 1. Geographical distribution of proto-Elamite material culture across Iran (Desset 2016, 69).

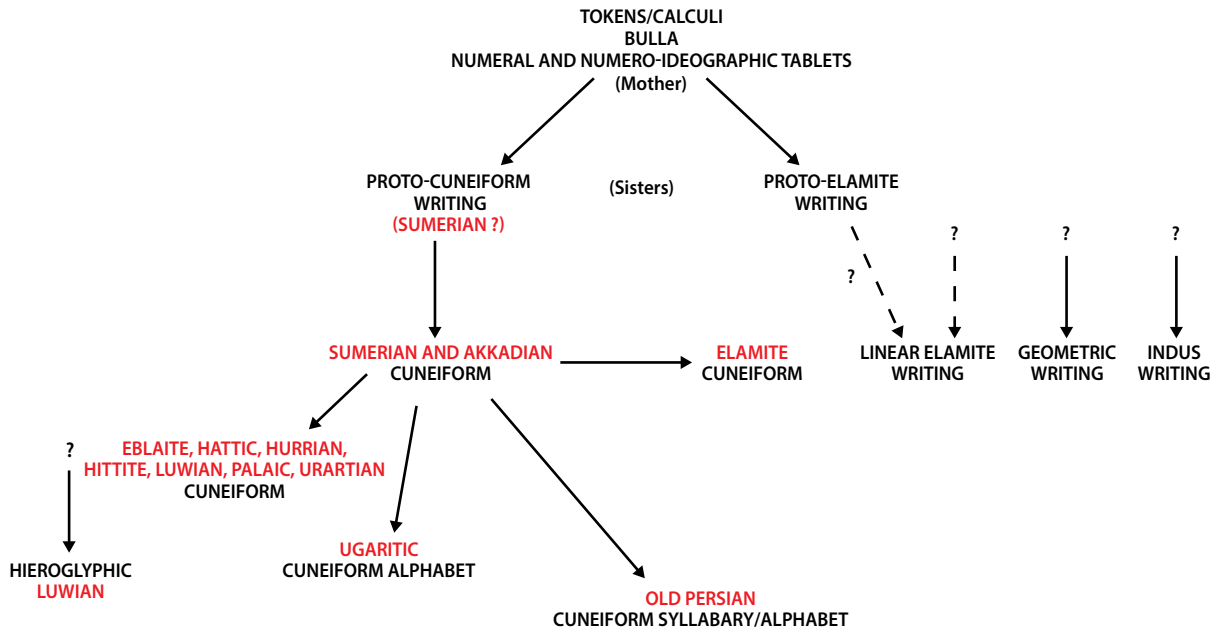
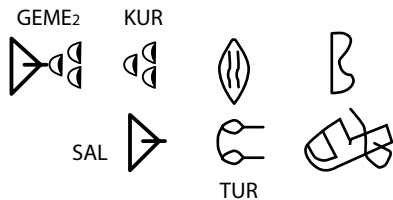


Figure 2. Schematic showing the evolution of writing and the correlation between the proto-cuneiform and proto-Elamite writing systems (Desset 2014, 108).

PROTO CUNEIFORM

accounted with the sexagesimal numeral system



low-status humans

PROTO ELAMITE

accounted with the decimal numeral system

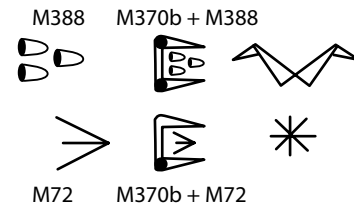


Figure 3. Graphical correspondences between proto-cuneiform and proto-Elamite workers' signs (Desset 2016, 73).

Like proto-Elamite, proto-cuneiform was also written on clay. However, whereas proto-Elamite is written in an in-line style, perhaps coding some elements of speech (Desset 2016), proto-cuneiform is written in visual hierarchies. The proto-Elamite tablets are exclusively local administrative documents accounting for economic units, such as cereals, cattle, or workers, and attributing them sometimes to institutions or persons whose names might have been written down. In comparison with the contemporary proto-cuneiform tablets, their semantic field of application seems to have been more restricted, since no proto-Elamite lexical list has been found (Fig. 2).

Because the proto-Elamite writing system was dropped at the beginning of the 3rd millennium BCE, no more recent texts can be used to assist in its decipherment. Proto-cuneiform continued for longer. Thanks to the more recent cuneiform documents, proto-cuneiform texts are better understood than the proto-Elamite tablets of the same time period, and the proto-cuneiform texts have therefore been used as a possible route to deciphering proto-Elamite. It has been hypothesised that graphically close proto-cuneiform and proto-Elamite signs could be also semanti-

cally related (Fig. 3), suggesting that proto-Elamite scribes were influenced by the proto-cuneiform tradition (Damerow and Englund 1989, 6-7; Englund 1996, 162; Potts 1999, 74) or, as we would argue, that both proto-cuneiform and proto-Elamite scribes inherited these signs from a common ancestor.

Decipherment of proto-Elamite workers' signs

Individual signs in each system have been assigned identifiers for ease of reference (Englund 2004). Proto-Elamite signs M388 and M72 have been compared to proto-cuneiform signs *KUR* and *SAL*, meaning, respectively, male and female worker in proto-cuneiform. Consequently, M388 and M72 could, respectively, record male and female low-status workers, with some proto-Elamite texts accounting up to 591 instances of M388 (Scheil 1923, MDP 17 n° 45) and 1776 of M72 (Scheil 1935, MDP 26 n° 205). (The pastoral nomadic communities, in contrast to the urban communities, did not have middle-class workers, only elites and low-status workers.) The proto-Elamite sign M370b is considered to be graphically close to the proto-cuneiform sign *TUR*, expressing the notion of child (*dumu*) (Englund 2006). Composite signs M370b + M388 and M370b + M72 could then be interpreted as boy and girl low-status worker/slave.

Several proto-Elamite texts show a sequence made up of at least seven signs that probably records humans according to unknown social/legal/honorary categories. Signs recording children (such as M370b + M388 or M370b + M72) are notably absent from Jacob Dahl's proto-Elamite anthropomorphic sign list (Dahl 2006), as are M388 and M124, which very likely stood for specific human statuses. The decimal system, only present in the proto-Elamite documents, was probably used to account for discrete objects, such as animals, notably caprine, as well as low-status humans, such as M388 or M72. This specific field of semantic application shows that these low-status persons were accounted for (and considered) as animals, while the high-status humans were perhaps accounted for with the sexagesimal system (an ancient counting system in Iran and Southern Mesopotamia whose denominator is 60 or a power of 60). The constant ratio between M388/M54 (workers) and M288 (cereal) observed on many tablets from proto-Elamite communities was considered as a standard salary/ration paid in cereals to low-status workers according to their gender (Damerow and Englund 1989, 27; 57). A certain amount of N1 of M288 is attributed to each worker according to their specific job and gender (M388/M54). In proto-cuneiform documents, 1 N1 of

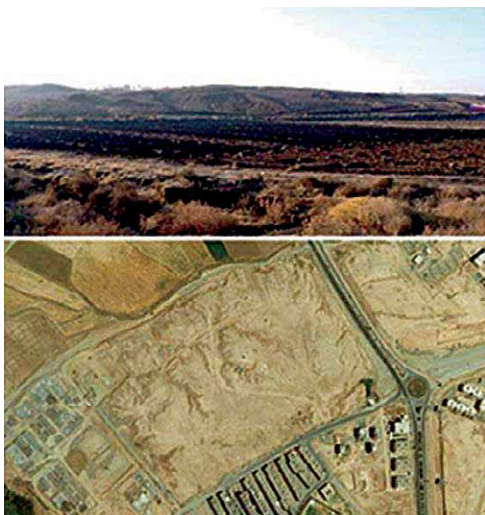


Figure 4. Tepe Sofalin (ostan Teheran, Iran). View from the north (above) and aerial view (below; Dahl et al. 2012, 59).

cereal represented the monthly (30 days) ration of an adult worker, perhaps 24-25 L of grain. If this absolute value was the same in the proto-Elamite tablets, then the fact that 0.5 N1 of cereal is attributed to each worker would show that in the proto-Elamite period the standard interval for salary payment was a bi-monthly. Below, we examine some proto-Elamite texts from Tepe Sofalin (ostan Teheran, Iran)² (Fig. 4) from the viewpoint of the gender division of labour.

Gender division of labour in proto-Elamite tablets from Tepe Sofalin

Text 1

This tablet preserves the upper half of a small, sealed proto-Elamite tablet. The only remaining parts of the inscription are the header and parts of two entries. Most proto-Elamite tablets begin with a header indicating the ‘institution’ to which the transaction recorded in the following related. The first sign, M376, is a graphic variant of a well-known sign in the Susa repertoire, M375, which represents a category of workers. Usually the header of the tablet refers to the tribe or the institute that the owner is affiliated with. However, in this simple text, the name in the header of the tablet and the name of the first owner of the text, to whom the bookkeeping relates, are identical. This text recounts the rations for two groups of workers according to their gender. The category of the first group has been preserved; it is written with the common sign M124, which is five female workers. The category of the second may, based on a comparison with other standard texts, have been a group of male workers (M388). Due to the fragmentary nature of the text, it is not possible to calculate the size of the rations (recorded in the grain capacity system as units of M288). The text reconstructs as shown in Figure 5.

Text 2

This is a small fragment of a record of two genders of workers and their rations. The first partly preserved entry records six female workers. The corresponding notation of the cereal is missing. The second entry records 11 male workers, followed by a subsidiary entry recording the grain allowance or rations of the worker. This is expressed by an object sign, M288, thought to represent a large grain container, followed by a notation in the capacity system (Fig. 6).

Text 3

This tablet is of medium size and is comprised of columns of ideograms and numerical notations, with one third of the whole having been lost. There is no effacement of either the obverse or the reverse side. This is a multi-entry text, with line dividers. It is inscribed on the obverse, reverse, and top edge (the right edge, according to the original direction of writing). The text has a total on the reverse, and the text of the obverse spills over onto the reverse, resulting in writing in opposite directions

2 The site of Sofalin lies in the eastern Plain of Ray, in the northern portion of the Iranian Central Plateau, at lat. 51° 44' 06 N, long. 35° 18' 58 E, at a general elevation of 966 m above sea level. This location is some 35 km south-east of the city of Tehran. The site takes its name from the density of pottery sherds on its surface (*sofalin* means pottery sherds). The extensive remains of Tepe Sofalin, extending over an area about 500 m long and 400 m wide, and up to 10 m high, consist of material culture of the late 4th millennium BCE and Iron Age III. There is no evidence of occupation between these periods.

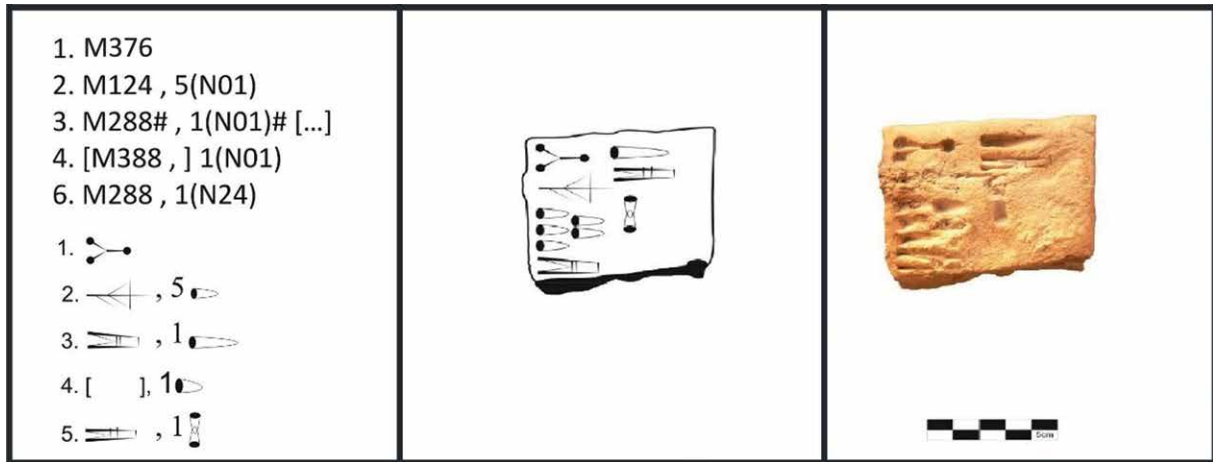


Figure 5. Tepe Sofalin (ostan Teheran, Iran). Transliteration and reconstruction of Text 1 (Dahl et al. 2012, 63).

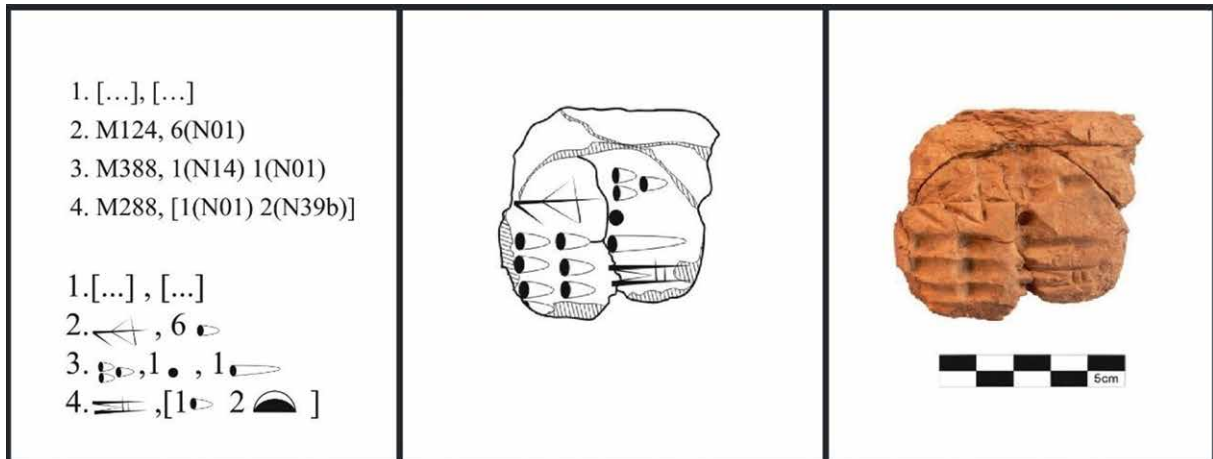


Figure 6. Tepe Sofalin (ostan Teheran, Iran). Transliteration and reconstruction of Text 2 (Dahl et al. 2012, 64).

on the reverse. The text is more or less well preserved, presumably an account of male workers (M376, interpreted by Damerow and Englund [1989] to be a variant of M388 or Mesopotamian *KUR*) and their rations. Strikingly, the rations are counted with a previously unattested numerical system, resembling the much later BAN2 of Mesopotamia. The total is separated into three parts: two for the total of the grain rations and one for the total of the male workers. The workers are identified by short strings of signs. The same header (M375) found in this text is found in a number of other proto-Elamite texts; it may represent either the ruler or the 'designation' of the particular household³. At least two numerical sign systems are used in this tablet. One is the previously unattested numerical system used for the grain rations of the workers. The composition of the numerical signs for the grain rations is unique of its kind in rationing systems (Damerow and Englund 1987, 132-135), and the other is the Decimal Numerical System, used for the total of workers (Fig. 7).

³ M375 in the proto-Elamite corpus has two functions. In couple of tablets, it functions as a header, but in many other cases, it represents male workers. It is worth mentioning that M375 is a variation of *ruler* or *institution*, mostly used in the northern portion of the Iranian Central Plateau, which was in contact with Susa and Malyan.

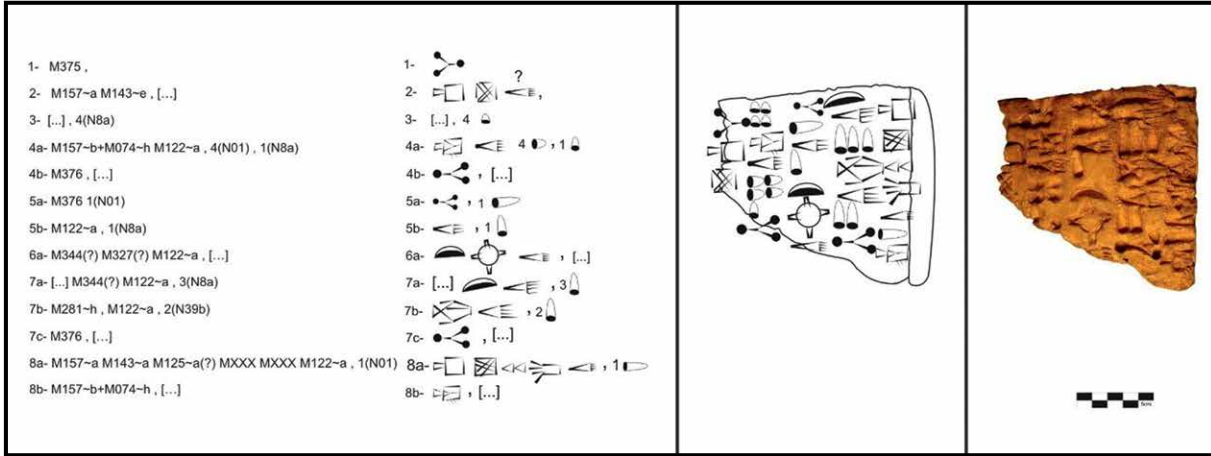
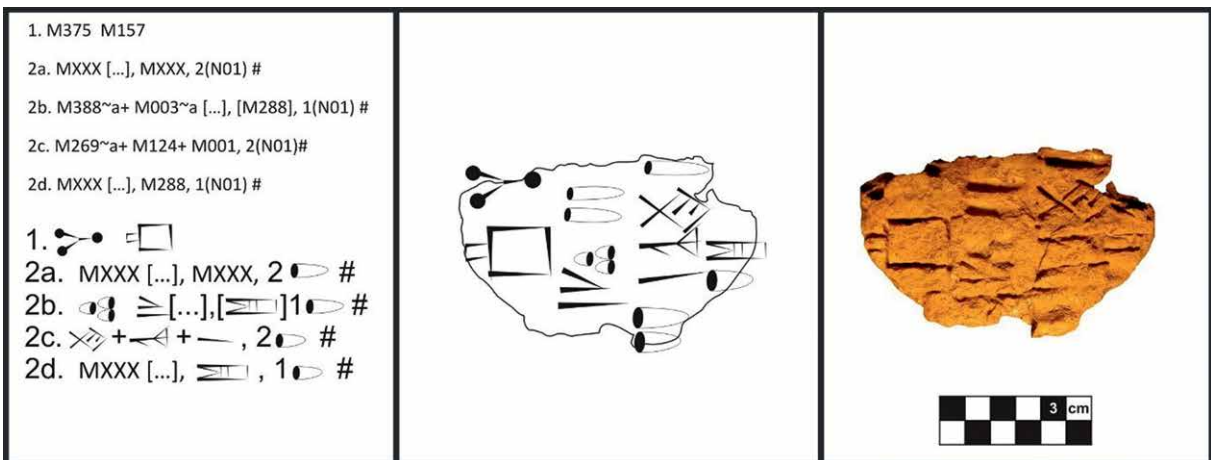


Figure 7. Tepe Sofalin (ostan Teheran, Iran). Transliteration and reconstruction of Text 3 (Yousefi Zoshk 2010, 268).

Text 4

This is the upper-left part of a large-size tablet that is comprised of four columns of ideograms and numerical notations. This is a multi-entry text, with line dividers. It is inscribed on the obverse. The text is more or less well preserved, presumably an account of four groups of male and female specialised workers assigned to specific work (M388 and M124, interpreted by Damerow and Englund [1989] to be a variant of the Mesopotamian KUR) and their rations. The remaining parts of the inscription are the header and parts of four entries. The first entry records the first group of workers and their rations. The corresponding notation of worker and cereal is missing, and only 2N1 notions of capacity system. The second entry comprises male workers (M388) modified by a sign (M003) that means dry cheese. The corresponding notation of cereal (M288) is missing. The third entry counts a group of female workers (M124), attested by a string of signs explaining their job (M269 + M001) and their ration. In the proto-Elamite lexicon, M269 means butter oil, and the combination of signs indicates that a group of female workers assigned to produce butter oil were paid according to their job. Unfortunately, the corresponding notation of cereal (M288) for this gang of workers is missing. In the fourth entry, the notation for the worker is missing and only the corresponding notation for the cereal exists. The text reconstructs as follows (Fig. 8).

Figure 8. Tepe Sofalin (ostan Teheran, Iran). Transliteration and reconstruction of Text 4 (Yousefi Zoshk 2010, 267).



Discussion and Conclusions

Specialised production in pastoral nomad proto-Elamite societies often includes household production by men and women and, in some cases, children. If we ignore the household as a locus of craft production, we are missing not only work done by women, but also work done by men. Complex political and economic systems come in many forms. The proto-Elamite culture may not have had non-domestic workshops in most cases, but specialised production, especially of animal by-products, was a feature of the economy, perhaps existing as attached and independent forms of specialisation at the same time, often on a full-time basis, since workers received their wages bi-monthly. We may expect important work related to the political economy to take place outside of the house due to gender bias in the past, but the majority of specialised production in the proto-Elamite community took place in domestic contexts. Household labour could be highly gendered, especially that relating to animal by-products. Households, particularly among nomads, could mobilise a labour force involved in gender-segmented tasks. Non-domestic workshops are not the only marker of social and economic complexity. As we have argued in this article, the household is a source of complex social relationships that can include ideological and economic control of production by elites and the production of both ordinary and elaborate items. The elites were in control, and their agents facilitated this control by taking advantage of people at the bottom of society. The flow of information and the management of labour led to the emergence of a particular kind of complexity in Iranian prehistory, specially in late 4th millennium BCE. A gendered division of labour within the household demonstrates complex social, economic, and political arrangements. As a locus of craft and subsistence production, the household provides the context for men's, women's, and children's contributions to the political economy.

We would argue that we must move beyond traditional conceptualisations of highly gendered, non-domestic workshop production if we are to identify gendered labour or specialised labour in proto-Elamite communities. The recognition of domestic production through transliteration of the worker and ration texts has allowed us to make headway in highlighting multiple activities within the household that can often be highly gendered. Task differentiation also can be applied to understand the mobilisation of multiple household members in the production of a particular product. Bookkeeping data from the corpus of proto-Elamite clay tablets can provide the primary information for the investigation of the gendered division of labour. In all cases, household labour was the primary source of specialised labour for the proto-Elamite community, and it therefore must be the primary unit of analysis.

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References

- Alizadeh, Abbas 2010. The Rise of the Highland Elamite State in Southwestern Iran. “Enclosed” or Enclosing Nomadism. *Current Anthropology*, 51, 3, 2010, 353-383.
- Alizadeh, Abbas, Ahmadzadeh, Loghman, and Omidfar, Mehdi 2014. *Ancient Settlement Systems and Cultures in the Ram Hormuz Plain, Southwestern Iran. Excavations at Tall-e Geser and Regional Survey of the Ram Hormuz Area*. Oriental Institute Publications 140. Chicago: Oriental Institute.
- Amanollahi Baharvand, Sekandar 1982. Nomadism in Iran. Tehran: Nashr-e Ketab [in Persian].
- Alden, John R. 1982. Trade and Politics in Proto-Elamite Iran. *Current Anthropology*, 23, 6, 613-640.
- Alden, John R. 2013. The Kur River Basin in the Proto-Elamite Era: Surface Survey, Settlement Patterns, and the Appearance of Full-Time Transhumant Pastoral Nomadism. In: Petrie, Cameron (ed.). *Ancient Iran and its Neighbors: local developments and long-range interactions in the fourth millennium BC*. British Institute of Persian Studies Archaeological Monograph Series 3. London: Oxbow, 207-232.
- Biscione, Raphael, Salvatori, Sandro, and Tosi, Maurizio 1977. Shahr-I Sokhta: L'abitato Protostorico e La Sequenza Cronologica. In: Giuseppe Tucci (ed.). *La città bruciata nel deserto salato*. Venice: Erizzo, 77-112.
- Brice, Walter 1962. The Writhing System of the Proto-Elamite Account Tablets of Susa. *Bulletin of the John Rylands Library*, 45, 15-39.
- Carter, Elizabeth W. 1980. Excavations in Ville Royale I at Susa: The Third Millennium B.C. Occupation. *Cahiers de la Délégation archéologique française en Iran*, 11, 11-134.
- Costin, Cathy L. 1991. Craft Specialization: Issues in Defining, Documenting, and Explaining the Organization of Production. *Archaeological Method and Theory*, 3, 1-55.
- Dahl, Jacob L. 2006. J. Dahl's working sign list. In: *CDLI:wiki. A Library of Knowledge of the Cuneiforme Digital Library Initiative*. <cdli.ucla.edu/tools/cdlifiles/signlists/prE_signlist.zip>, e-published 28 June 2006; retrieved 15 May 2019.
- Dahl, Jacob L., Hessari, Morteza, and Yousefi Zoshk, Rouhollah 2012. The proto-Elamite Tablets from Tepe Sofalin. *Iranian Journal of Archaeological Studies*, 2, 1, 57-73.
- Desset, Francois 2014. A new writing system discovered in 3rd millennium BCE Iran: the Konar Sandal ‘geometric’ tablets. *Iranica Antiqua*, 49, 83-109.
- Desset, Francois 2016. Proto-Elamite Writing in Iran. *Archéo-Nil*, 26, 67-105.
- Dittmann, Reinhard 1986a. Betrachtungen zur Frühzeit des Südwest-Iran. Regionale Entwicklungen vom 6. bis frühen 3. vorchristlichen Jahrtausend. *Berliner Beiträge zum Vorderen Orient* 4. Berlin: Reimer.
- Dittmann, Reinhard 1986b. Susa in the Proto-Elamite Period and Annotations on the Painted Pottery of Proto-Elamite Khuzestan. In: Finkbeiner, Uwe, and Rolling, Wolfgang (eds). *Gamdat Nasr: Period or Regional Style?* Beihefte zum Tübinger Atlas des Vorderen Orients B 62. Wiesbaden: Reichert, 171-196.
- Dittmann, Reinhard 1986c. Seals, Sealings and Tablets: Thoughts on the changing pattern of Administrative control from the late Uruk to the Proto-Elamite period at Susa. In: Finkbeiner, Uwe, and Rolling, Wolfgang (eds). *Gamdat Nasr: Period or Regional Style? Papers given at a symposium held in Tübingen, November 1983*. Beihefte zum Tübinger Atlas des Vorderen Orients B 62. Wiesbaden: Reichert, 332-366.
- Damerow, Peter, and Englund, Robert K. 1987. Die Zahlzeichensysteme der archaischen Texte aus Uruk. In: Green, Margaret W., and Nissen, Hans J. (eds). *Zeichenliste der archaischen Texte aus Uruk*. Archaische Texte aus Uruk 2. Berlin: Mann, 117-166.

- Damerow, Peter, and Englund, Robert K. 1989. *The Proto-Elamite Texts from Tepe Yahya*. American School of Prehistoric Research Bulletin 39. Cambridge: Peabody Museum of Archaeology and Ethnology, Harvard University.
- Englund, Robert K. 1996. The Proto-Elamite Script. In: Daniels, P., and Bright, W. (eds). *The World's Writing Systems*. Oxford: Oxford University Press, 160-164.
- Englund, Robert K. 2004. The State of Decipherment of Proto-Elamite. In: Houston, Stephen D. (ed.). *The First Writing: Script Invention as History and Process*. Cambridge: Cambridge University Press, 100-149.
- Englund, Robert K. 2006. An Examination of the 'Textual' Witnesses to Late Uruk World Systems. In: Yushu Gong and Yiyi Chen (eds). *Special Issue of Oriental Studies. A Collection of Papers on Ancient Civilizations of Western Asia, Asia Minor and North Africa*. Beijing: Jing ji ri bao chu ban she, 1-38.
- Ghirshman, Roman 1938. *Fouilles de Sialk 1*. Musée du Louvre. Département des Antiquités Orientales: Série archéologique 5. Paris: Guenther.
- Hessari, Morteza, and Yousefi Zoshk, Rouhollah 2013. New Evidence on emergence of complex societies in Central Iranian Plateau. In: Katrien DeGraef and Jan Tavernier (eds). *Susa and Elam. Archaeological, philological, historical and geographical perspectives. Proceedings of the international congress at Ghent University, December 14-17, 2009*. Mémoires de la Délégation en Perse 58. Leiden: Brill, 27-43.
- Johnson, Gregory A. 1973. *Local Exchange and Early State Development in Southwestern Iran*. Anthropological Papers 51. Ann Arbor: University of Michigan.
- Lamberg-Karlovsky, Carl C. 1970. *Excavation at Tepe Yahya, Iran, 1967-1969. Progress report*. American School of Prehistoric Research Bulletin 27. Cambridge: Peabody Museum, Harvard University.
- Lamberg-Karlovsky, Carl C. 1978. The Proto-Elamites of the Iranian Plateau. *Antiquity*, 52, 114-120.
- Le Brun, Alain 1971. Recherches startigraphiques l'acropole de suse, 1969-1971. *Cahiers de la Delegation archeologique Francaise en Iran*, 1, 163-216.
- Majidzadeh, Yousef 2010. *Archaeological Excavations at Tepe Ozbaki 1*. Tehran: Art & Architecture [in Persian].
- Nicholas, Illene M. 1980. *A Spatial/Functional Analysis of Late Fourth Millenium Occupation at the TUV Mound, Tal-e Malyan, Iran* [PhD thesis, Department of Anthropology, University of Pennsylvania]. Ann Arbor: University Microfilms.
- Nicholas, Illene M. 1990. *The Proto-Elamite Settlement at TUV*. Malyan Excavation Report 1. Philadelphia: University Museum, University of Philadelphia.
- Pittman, Holly 1997. The Administrative Function of Glyptic Art in proto-Elamite Iran. A Survey of the Evidence. Sceaux d'orient et leur employ. *Res orientales*, 10, 133-153.
- Potts, Daniel T. 1999. *The Archaeology of Elam. Formation and Transformation of an Ancient Iranian State*. Cambridge world archaeology. Cambridge: Cambridge University press.
- Potts, Daniel T., Lamberg-Karlovsky, Carl C., Beale, Thomas W., Adovasio, James, and Pittmann, Holly 2001. *Excavations at Tepe Yahya, Iran 1967-1975. The Third Millennium*. Cambridge. Cambridge: Harvard University.
- Potts, Daniel T. 2014. *Nomadism in Iran: From Antiquity to the Modern Era*, Oxford University Press, New York.
- Scheil, Vincent 1905. *Documents archaïques en Ecriture Proto-Elamite*. Mémoires de la Mission Archéologique de Perse 6. Paris: Leroux.
- Scheil, Vincent 1923. *Textes de comptabilité proto-élamites, avec liste de signes proto-élamites*. Mémoires de la Mission Archéologique de Perse 17. Paris: Leroux.
- Scheil, Vincent 1935. *Textes de comptabilité proto-élamites*. Mémoires de la Mission Archéologique de Perse 26. Paris: Leroux.
- Stolper, Matthew W. 1985. Proto-Elamite texts from Tall-I Malyan. *Kadmos*, 24, 1-12.

- Sumner, William M. 1986. Proto-Elamite Civilization in Fars. In: Finkbeiner, Uwe, and Rolling, Wolfgang (eds). *Gamdat Nasr: Period or Regional Style?* Beihefte zum Tübinger Atlas des Vorderen Orients B 62. Wiesbaden: Reichert, 199-211.
- Tosi, Maurizio 1984. The Notion of Craft Specialization and its Representation in the Archaeological Record of Early States in the Turanian Basin. In: Spriggs, Matthew (ed.). *Marxist Perspective in Archaeology*. New directions in archaeology. Cambridge: Cambridge University Press, 22-53.
- Whitcomb, Donald S. 1971. *The Proto-Elamite Period at Tall-i Ghazir, Iran* [M.A. thesis, University of Georgia].
- Wright, Henry T. 2013. A Bridge Between Worlds: Southeastern Iran During the Early 4th Millennium. In: Petrie, Cameron (ed.). *Ancient Iran and its Neighbors: local developments and long-range interactions in the fourth millennium BC*. British Institute of Persian Studies Archaeological Monograph Series 3. London: Oxbow, 51-74.
- Wright, Henry T., and Johnson, Gregory 1975. Population, Exchange and Early State Formation in Southwestern Iran. *American Anthropologist*, 77, 267-289.
- Yousefi Zoshk, Rouhollah 2010. *Prestate Society Formation in Central Iranian Plateau. Proto Elamite Chiefdoms at Tepe Sofalin*. [PhD thesis, Prehistoric Archaeology, University of Tehran; in Persian].

Change and continuity. Gender and flint knapping activities during the Neolithic in the Paris basin

Anne Augereau

Abstract

In the Paris basin, the Early Neolithic belongs to the Danubian cultures area with the Rubané culture, which is so-called LBK culture at the European level, followed the Blicquy/Villeneuve-Saint-Germain culture. The flint knapping of these cultures is characterised by several types of production and different levels of know-how: blade knapping, by indirect percussion; acquisition of rare or imported raw materials for certain blades; and flake knapping, mainly by hard percussion. Data on production and know-how, combined with the identification of houses or villages specialised in the production and the distribution of certain products, allow us to envisage that flint tools were produced by several social categories. These include the more or less specialised groups of individuals in particular houses or villages, for the production of regular blades, as well as individuals living throughout the settlements, for the production of flakes and irregular blades. More generally, the study of funerary goods in the first Danubian cultures in particular western LBK, shows that regular blades produced from rare raw materials accompanied a small number of males, while women were accompanied by ordinary flakes or irregular tools made with local materials. This seems to indicate that, during this period, regular blade knapping was a male activity, while the production of the less regular blades on local flints and the production of the tool flakes could have been activities carried out by women and children. During the first part of the Middle Neolithic, the areas in the southern part of the Paris basin abandoned blade production by indirect percussion (Cerny culture), while this activity continued in the north-eastern portion of the Paris basin (Rössen culture). However, in the south, even if daily tools were made of flakes, some men were still being buried with regular blades, showing that this type of production remained confined to the male sphere, at least in death. This situation changed during the second part of the Middle Neolithic (Chassey culture of Burgundy) where, in funerary contexts, blades were associated with female graves.

Keywords: *Neolithic, Paris basin, lithic industries, division of labour*

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Introduction

Gender roles and activities constitute an important issue in the archaeological study of the differences between men and women in ancient societies. The division of labour is a central aspect, and it is probably the gender manifestation most frequently discussed by archaeologists. In the archaeological record, be it in the case of subsistence – such as fishing, hunting, gathering, agricultural activities, and animal husbandry – or the production of tools, utensils, and other objects (pottery, lithics, items of worked bone, wooden utensils, wickerwork, *etc.*), the challenge is to trace how production was organised between men and women. This approach sometimes refers to ethnological surveys. Paola Tabet (1979) and Alain Testart (2014), after analysing the cross-cultural ethnological documentation gathered by Murdock and Provost (1973), underline constants in the activities carried out by women and men: for example, women would perform repetitive tasks mainly in pose percussion like grinding or crushing, and men would use thrown percussion tools, such as axes for tree cutting or woodworking; and arrows for hunting. From the point of view of prehistoric lithic industries, Joan Gero argued, on the contrary, that there are no objective reasons to think that women could not have produced and used all types of stone tools (Gero 1991).

Although these points of view, observations, and universal traits provide general theoretical trends, it is, however, necessary to explore this domain for each human society in order to observe how the sexual division of labour is specifically managed in each of them. Through flint knapping activities, I will attempt to illustrate how an appropriate approach can provide hypotheses about the sexual division of labour in flint tool procurement, its complexity, and its stability, from the Early Neolithic to the end of the Middle Neolithic. To achieve these goals, I base my work on two complementary sets of data. The first concerns the organisation of flint tool production. In the Paris basin, the data from settlements and dwellings show contrasting productions with more or less regular blades and flakes, made on different qualities of raw materials. Throughout the Neolithic, these productions have various representations, and they bear witness to the different technical processes, from raw material procurement to tool discard. These variations are often interpreted as the result of different makers and specialised productions, from the simple production of local flint flakes to the highly elaborated blades fabricated from exogenous or rare flints.

The second set of data is connected to the individuals who could have made these tools and products, that is to say, the men and the women found in funerary contexts and their stone tool grave goods. The aim is to examine whether different flint tool equipment existed for men and women and whether this equipment can be linked to lithic productions as perceived in dwellings and settlements. Flint and stone objects are, however, rare in Early Neolithic burials of the Paris basin, and therefore it is necessary to examine funerary contexts from other, nearby areas, for example, the Alsace region in France, or parts of Germany. This rarity remains unexplained, and it constitutes a real handicap in my research; indeed, it could cause the reliability of my conclusions to be questioned. This is, however, a risk that I choose to assume in order to propose hypotheses to test. Furthermore, it is an acceptable risk since it should be noted in this context that a great homogeneity characterises the earlier Neolithic of Western Europe, that is to say, the Rubané culture/LBK, resulting from a gradual migration of populations from Hungary to the Paris basin. Between 5500 and 4800 BCE, in this vast area, technology, funerary practices, dwellings, economy, subsistence, *Spondylus* ornaments, and pottery designs are very similar, making the comparison relevant from the cultural point of view.

Lithics, funerary practices, and gender: some definitions

The discussion about the sexual division of labour in prehistory is often focused on the question of whether flint knapping was or was not a male activity. The general trend as seen in anthropological approaches sees ‘*man as the tool maker*’ (Gero 1991; Bird 1993; Finlay 2013). Indeed, Tabet’s and Testart’s demonstrations, which I cited earlier (Tabet 1979; Testart 1986; 2014), remain convincing for one reason: They integrate numerous varied and cross-cultural data, especially from Murdock and Provost (1973), to presents a panorama of the division of labour throughout time and in different geographical areas all over the world, notwithstanding the male cultural bias suggested by several authors regarding the collection of these data (Owen 2005).

Tabet and Testart highlighted that women would generally perform repetitive tasks and use tools in pose percussion, such as manual grinders for crushing and grinding, and that they would also be under-equipped, often doing without the efficient tools reserved for men. Furthermore, a universal blood taboo linked to their menses would have prevented women from practicing activities that make blood flow, like hunting or even warfare. By extension, they would be excluded from the production of stone tools that can be used to let blood, such as flint arrowheads, stone adzes, axes, and knives. In contrast, men would partake predominantly in activities using thrown percussion, such as hunting with projectiles or woodworking with axes.

In an article supporting a gendered approach to prehistoric lithics, Gero wrote that, not only could women have produced and used all these types of stone tools, but the male tool maker is a modern cultural bias (Gero 1991). In support of this statement, some of the ethnological studies from Aboriginal Australia analysed by the prehistorian Caroline Bird (1993) show a great variability in the fabrication and use of stone tools. Indeed, in some cases, women participated in the production of these tools, by carrying or preparing the raw materials; in certain circumstances, they also used men’s tools and could make their own tools for their daily tasks. She concluded that one can see that women are not completely excluded from the production of stone tools and that this variability needs to be explored in a scientific way: ‘*the distribution of economic and social roles by gender should not be assumed, but rather seen as a problem worthy of exploration in its own right*’ (Bird 1993, 22).

It is therefore pertinent to explore the relationship between gender and lithic industries and to not consider Tabet’s and Testart’s assertion to be absolute and definitive. But how? Following on from Spector and Whelan (1989), for whom ‘*Any single task has social, spatial, temporal and material dimensions*’, Gero (1991) enumerated the aspects to be taken into account for a gender lithic approach: the variability of raw materials, their origins, their quality, and their knapping properties; the types of products and the technical skills involved in working each raw material; the degree of retouch on the tools; and the context of stone tool preparation and use, including dwelling, workshop and funerary contexts. The combination of all these features could lead to the identification of different types of tool production, with different makers or social categories. Subsequently, various studies have been conducted in order to find women in lithic data, in particular within use wear analysis (Odell 2004; van Gijn 2010). Another way to trace women stone craft is to explore the archaeological spaces considered as the female domain, such as dwellings or the area around them (Gero and Scattolin 2002). Some authors have suggested that it is also pertinent to focus on simple flake tools, in contrast, for example, to projectile points, considered to be male weapons for big game hunting or war (Gero 2000).

But this kind of approach continues to promote gender biases, such as the female domestic domain and the male external world (Finlay 2013); furthermore, the search

for gender within lithic industries cannot be limited to the detection of women. Indeed, lithic industries are the result not only of technological practices, but also of social relationships, where sex, age, and social status are among the variables.

The '*chaîne opératoire*' concept offers a broader framework for dynamically linking technological practices and the social conditions of their realisation where gender was one of the factors (Dobres 2000). This concept was elaborated in France by André Leroi-Gourhan (1964) and was successfully applied to technological lithic studies by others (Tixier *et al.* 1980). By referring to mental process and experimental dataset, it consists of attributing each piece of each raw material to a technical step in order to reconstitute the fabrication method and process of lithic tools. This concept allows researchers to report the variability in lithic raw material procurement, in the treatment of the different materials, in the selection of the products, in retouch and hafting, and also in use and final discard. The research on skill and craft learning that emerged from this concept appeared as a strong tool to trace personal and collective identities, to touch individuals and their identity construction over the course of their life (Bamforth and Finley 2008). To illustrate this idea, which is not so far from Gero's statement, one can give an example from France. In 1987, Nicole Pigeot concluded that in the production of Magdalenian blades at Etiolles, in the Paris basin, the remains of irregular blades carved away from the fireplace were the waste from objects produced by children or by apprentices. She also wrote that experienced adults produced the long, regular blades made near the hearth, from the better flint nodules. In this hypothesis, the notions of skill, raw material quality, and spatial analysis were combined to arrive at a social interpretation of how production was organised. To sum up, variability in raw materials and origins, in technical investments, in know-how, in degrees of retouching, in contexts of preparation and of use of various tools indicate a variability in production which can be further interpreted as a variability in producers (Pigeot 1987).

But it remains very difficult to identify whether lithic items resulted from male or female production, and, in most cases, the differences recorded within industries, with complex and less complex types of productions and tools, cannot be attributed for certain to a gendered social group. It is necessary to take in account other data, such as those provided by funerary contexts. The anthropological studies carried out by Louis-Vincent Thomas and Patrick Baudry showed that death is a kind of staging of the deceased, with their attributes and social position as conceived and perpetuated in the society of the living (Thomas 1976; Baudry 2007). From an archaeological point of view, Marie-Louise Sørensen also thought that the funerary domain is an arena where gendered social constructs can be approached because social differentiation or categorisation are often marked in death (Sørensen 2000). In addition, Bettina Arnold suggested that a pertinent engendered mortuary analysis can be carried out at different levels: the treatment of individual women, men, and children; the grave's emplacement within the cemetery; the layout of the tomb; the position of the body; the nature and spatial distribution of the grave goods, and so forth. (Arnold 2006). In prehistoric funerary practices, where numerous grave goods are often present in tombs, gender identity can be displayed in dress and ornament and in various objects and accessories which symbolise or characterise the individual and their social status, age, gender, skills, role, and so forth. Sørensen has successfully used this approach in European Bronze Age populations, correlating dress elements to the sex and age of individuals (Sørensen 1997; 2000; 2004).

However, the link between sex, gender, and grave goods is never strictly gender-based (Arnold 2012), and mortuary practices do not always take into account the gender divisions in daily life. For example, the burials of the Inuit of Canada of all sexes and ages (Crass 2001), or those of the Chumash of California (Hollimon 1996), contain objects or tools normally reserved for one of the genders during life. Nevertheless, the individuals studied in funerary archaeology can be sexed, and their

age can be determined. Some are associated with grave goods, others are not, and it seems pertinent to explore the links between these variables. According to Sørensen and Arnold, I assume that identities can be studied through mortuary practices and funerary goods assemblages: utensils; tools; weapons; and various deposits evoking the artisanal sphere, the agricultural sphere, hunting, war, *etc.* Therefore, correlations between sex, age, and funerary identity can be indicators of social category. The main requirement for adopting this approach is that the determination of sex and age must be reliable. Modern anthropological methods can guarantee this reliability.

The Neolithic of the Paris basin and its lithic industries

From a geological point of view, the Paris basin stretches from northern Burgundy to southern Belgium and from the Centre region and Normandy to a part of the Champagne region. As elsewhere in Western Europe, the Neolithic of this area is represented by the Rubané culture, a representative of the Europe-wide Linearbandkeramik culture. The following period, the Blicquy/Villeneuve-Saint-Germain (BVSG) culture, is classed as an evolution of the Rubané culture, while remaining similar in terms of dwelling architecture, funerary practices, technical and economic systems, *etc.* Both these cultures belong to the first Danubian cultures, responsible of the neolithisation of Western Europe. They form the Early Neolithic of the Paris basin, between 5200 and 4700 BCE (Figs. 1 and 2A). The settlement sites of these two periods are numerous, and they present the same characteristics: the post holes of Danubian longhouses, very stereotyped and well known from Hungary to the Paris basin, with an east-west orientation, and lateral pits filled with domestic waste. Studies show that lithic tools were made and used in the surroundings of these dwellings: flint knapping waste and used tools; waste from bone tool production, animal exploitation, and meal preparation; and pottery remains are numerous in the lateral pits. In sum, these buildings were the setting of craft workshops, as well as of all the tasks and activities of daily life. In addition, it is postulated that the inhabitants of a house used the pits alongside it for discarding waste. In the Paris basin, the number of habitation sites of the Early Neolithic (Rubané and BVSG) can be estimated at about 70 and the number of dwelling units, at around 300.

The lithic industry from these settlements is very abundant. In the south-western portion of the Paris basin (Seine and Yonne valleys), for example, 111 260 flint artefacts were collected in the pits located alongside the houses of nine sites belonging to the Rubané culture up to the final BVSG. Elsewhere, in the Marne, Aisne, and Oise valleys, the amount of flint artefacts is the same and the sample seems to be reliable. The characteristics of all these collections are stable, with the use of several types of flint for various purposes (Bostyn 1997; Augereau 2004; Allard 2005a; Denis 2017). Generally, the local flint was used for making flakes, although proportions vary from north to south and from one site to another. Several blade productions by indirect percussion from pyramidal cores also existed, attesting to higher levels of skill. They were made of different types of flint with a more or less fine-grained matrix, which provided various quality products: long and regular blades in Bartonian flint and shorter blades in different Cretaceous flints (Fig. 3).

During the following period, between 4700 and 4400 BCE, two main cultures occupied the Paris basin (Fig. 2B). In the north-east, the Rössen culture is an avatar of the previous Danubian cultures formed from the Rubané. Enclosures with a palisade and long pits filled with domestic remains are known, for example, at Berry-au-Bac (Dép. Aisne, France, Dubouloz *et al.* 1982). As before, blade production by indirect percussion continued to be important, and at the same time flake

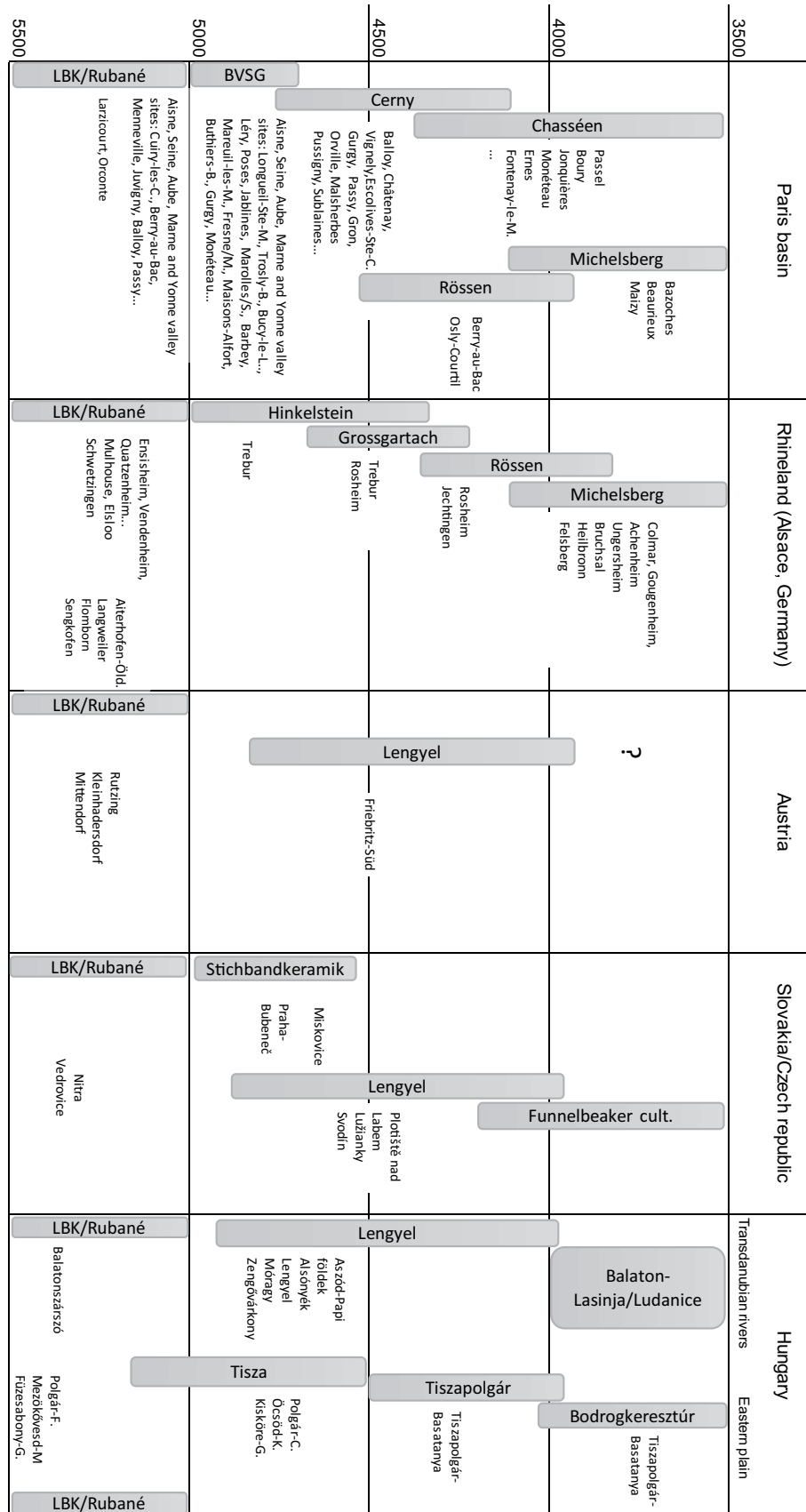


Figure 1. General chronological framework and main sites of the Western European Neolithic (Anne Augereau).

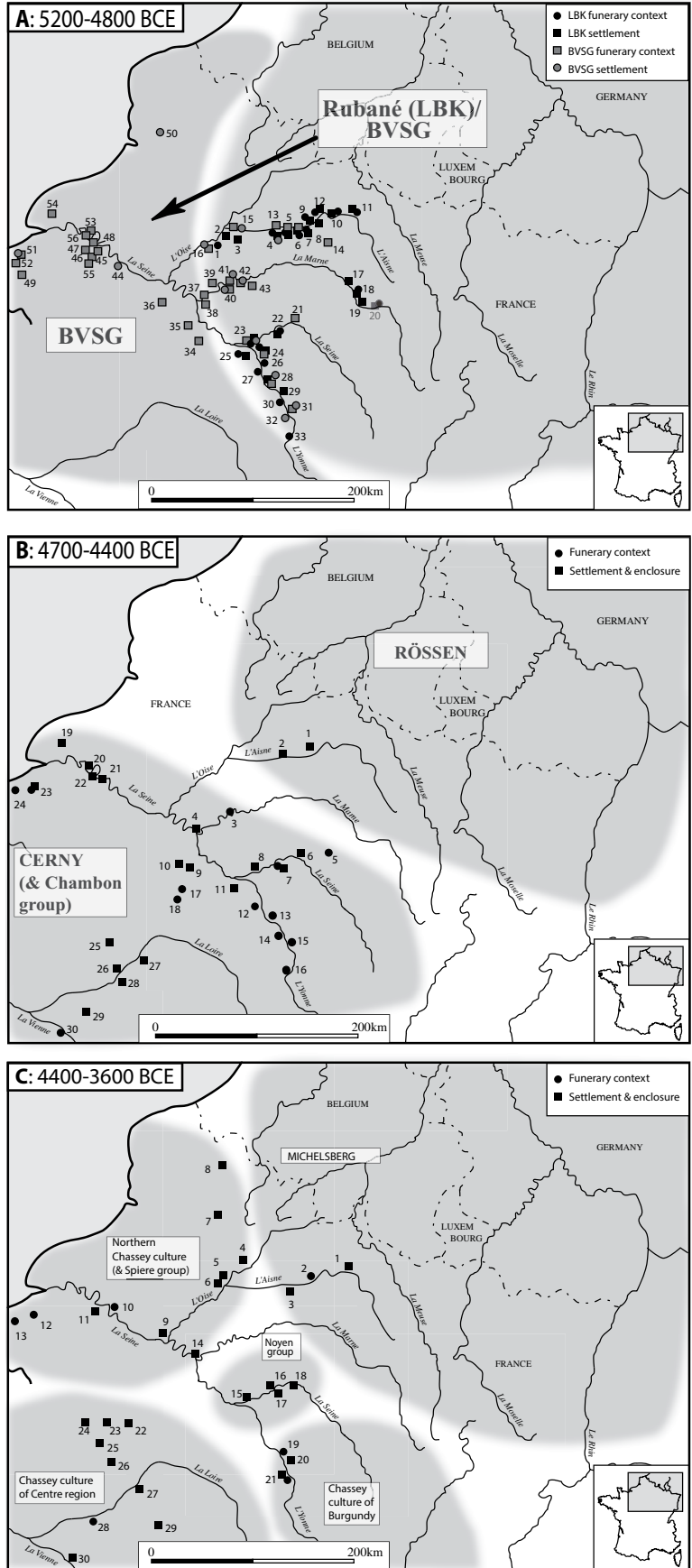


Figure 2. Spatial distribution and main sites of the Neolithic cultures in the Paris basin between 5200 and 3600 BCE. – A Early Neolithic (BMSG: Blicquy/Villeneuve-Saint-Germain culture). – B Middle Neolithic I. – C Middle Neolithic II. For the names of the numbered sites, see Appendix (Anne Augereau).

production by hard percussion increased. In the south-east and in the west, the Cerny culture emerged: enclosures with domestic remains are also the rule, as at Balloy (Dép. Seine-et-Marne, France; Mordant 1997) and Barbuise-Courtavant (Dép. Aube, France; Piette 1989). The lithic industry was characterised by flake production, whereas regular blades were found in funerary contexts, which are now more numerous than in the Early Neolithic, for example, at Passy, Gron, Gurgy, Chichery (all Dép. Yonne, France; Duhamel *et al.* 1997; Müller *et al.* 1997; Rottier *et al.* 2005; Chambon *et al.* 2010; Duhamel 2004) and at Balloy (Mordant 1997). A cultural mosaic marks the end of the Middle Neolithic (Fig. 2C). In the north-east, there is the Michelsberg culture, which, as far as the lithic industry is concerned, shows continuity in know-how, with an important blade production by indirect percussion. Elsewhere, a more contrasting situation emerges, with a main flake industry by hard percussion in the Noyen group and more balanced productions with flakes and blades in the Chassey culture of Burgundy and Centre region. Finally, flake productions and imported blade products characterise the Northern Chassey culture (Augereau *et al.* 2016).

Lithic variability and spatial data during the Early Neolithic

Several types of production characterised Rubané and BVSG flint tool procurement, with similar main ‘débitage’ methods and techniques the European scale. Blades knapped by indirect percussion were mainly used to make arrowheads, sickles, and burins. These blades, less than 10 cm long, are more or less regular depending on the quality of the raw material. In the southern portion of the Paris basin, many were made from the commonly present flint from Cretaceous formations, which is of medium quality, with numerous zones of poor silicification; consequently, the blades that have been recovered archaeologically are rather irregular (Fig. 3,1). They have large cortical zones, and their dimensions are not standardised. Let us also note that the preparation of the cores was reduced, consisting of only one front crest, which was a partial crest in most cases; preparation with two crests (one on the front, one on the back) is rare. Higher quality flints, with fewer imperfections in the matrix, gave higher quality products. For productions involving the Bartonian flint or the fine-grained flint from the south-western portion of the Paris basin, knapping techniques were the same, by indirect percussion, but the blades were regular, with parallel and rectilinear edges and arris (sharp edge formed by the meeting of two previous knapping surfaces on the surface of the product). (Fig. 3, 2 and 3). Metric studies indicate a better control of the thickness, with measurements grouping into only a few classes of thickness (between 2 and 7 mm). These characteristics were the consequence not only of the higher quality of the raw material, but also of a better preparation of the cores, which were prepared with two crests, one on the front and one on the back. In some cases, there are three crests, one on the front and two on opposite sides laterally. Bartonian flint gives the most regular blades, especially during the Blicquy/Villeneuve-Saint-Germain period, where we find the longest and most regular products. For example, some of the Bartonian blades of the BVSG site of Barbey ‘Le Chemin de Montereau’ (Dép. Seine-et-Marne, France; Augereau 1997) are 105 mm in length (Fig. 3,3).

However, flakes knapped by hard percussion on local Cretaceous flint of medium quality represent the main production. They were made from cores for which the preparation was limited to the opening of the striking platform by a simple flake removal. Various retouched tools, mainly scrappers and denticulates, were produced, as well as some borers, burins, *etc.* (Fig. 3,4). To sum up, flint tool production at the beginning of the Neolithic was characterised by signif-

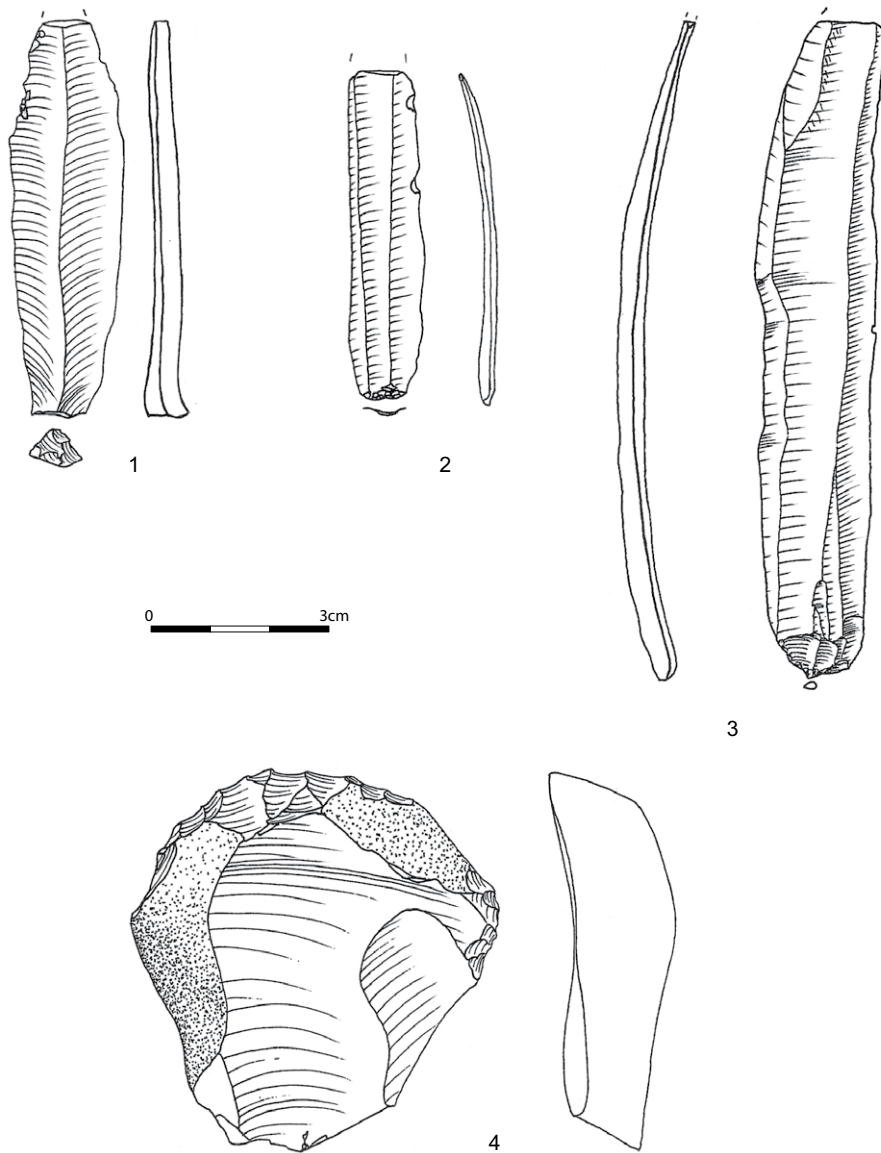


Figure 3. Lithic industries of the Early Neolithic (LBK and Blicquy/Villeneuve-Saint-Germain cultures) in the south-western portion of the Paris basin.

1 irregular local flint blade (Passy 'Les Graviers', Dép. Yonne, France); 2 regular, fine-grained flint blade (Balloy 'Les Réaudins', Dép. Seine-et-Marne, France); 3 long and regular Bartonian flint blade (Barbey 'Le Chemin de Montereau', Dép. Seine-et-Marne, France); 4 local flint flake scrapper (Passy 'Les Graviers', Dép. Yonne, France) (Anne Augereau).

icant variability in the types of products, the quality of the raw materials, their rarity, and their accessibility.

Let us now look at the spatial distribution of these products and their knapping waste. For the south-eastern portion of the Paris basin (Seine and Yonne valleys), this approach has already been published (Augereau 1997; 2003). In this region, Bartonian flint, which gives the most regular blades, is rare. However, the spatial analysis of the raw material at some sites shows that itinerant knappers from areas near to the Bartonian outcrops made Bartonian flint blades while visiting certain settlements, indicated by the fact that only finished products and rejuvenation flakes of the cores for immediate 'débitage' are found, but no Bartonian cores. This is the case at Barbey, where the southern sector of the site presents a high rate of blade knapping waste from Bartonian and fine-grained flint, but no cores (Fig. 4). A specialised production of Bartonian and fine-grained blades was probably located in this sector.

The cores were probably carried away to other areas for further use by the itinerant knappers. The characteristics highlighted for this region partly hold at the scale of the entire Paris basin, in particular for the BVSG culture. Indeed, Françoise

A: Flint raw material distribution among waste blade production by site

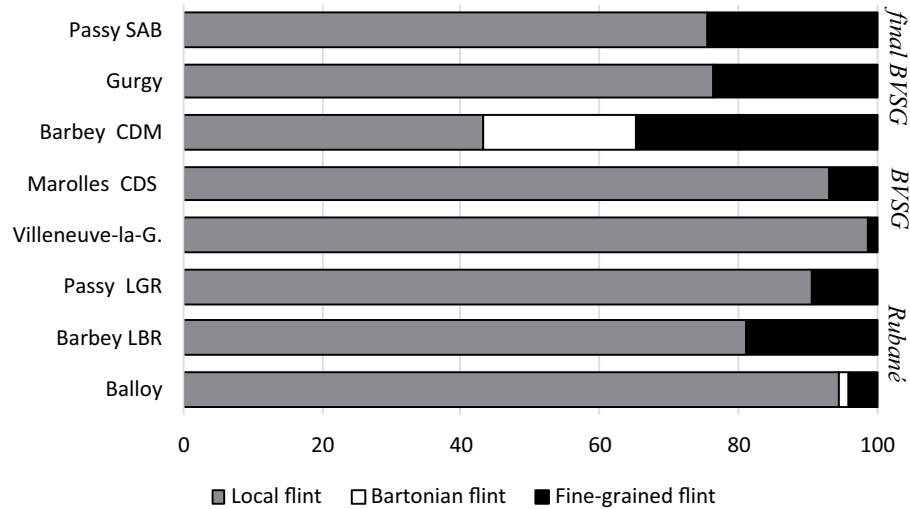
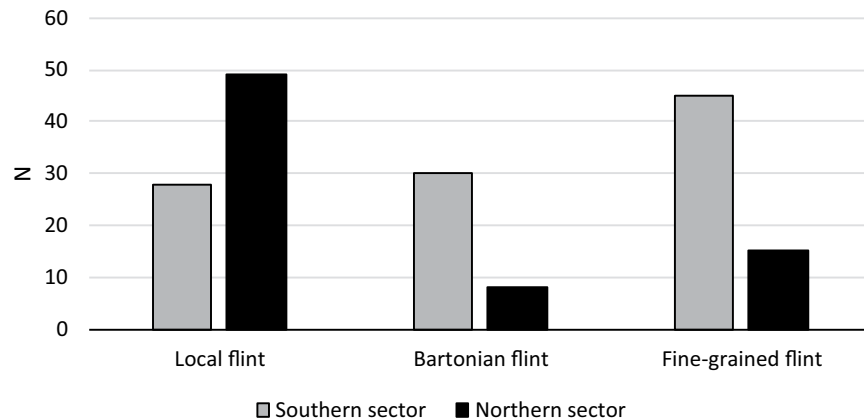


Figure 4. Flint raw material distribution among blade production waste (preparation and rejuvenation flakes, crests, prepared cores) in the south-eastern portion of the Paris basin. – A: Distribution by site. A larger rate of waste blades from Bartonian and fine-grained flint distinguishes Barbey ‘CDM’ (Barbey ‘Le Chemin de Montereau’, Dép. Seine-et-Marne, France). – B: Detail of Barbey ‘CDM’. The southern sector provided the majority of waste blade production made of rare flints (Bartonian and fine-grained flint).

B: Flint raw material distribution among waste blade production in Barbey CDM sectors



Bostyn and Solène Denis have shown circulation and exchange of skills, products and individuals. Very experienced blade knappers probably moved from Hainaut to the Hesbaye region, to produce regular blades in Hesbaye flint (known as Ghlin flint in Belgium). At the beginning of the period, that it is also likely that knappers coming from the Paris basin Bartonian outcrops knapped regular blades, which were distributed towards the north and the south (Bostyn 1997; Denis 2017). Some settlements, like Barbey, played a role in the redistribution of Bartonian blades – or of Ghlin flint blades in Belgium where a similar situation existed – to other, surrounding villages, where only regular blades have been found. In the south-eastern portion of the Paris basin, some fine-grained flint blades were probably produced in a similar manner, but on a smaller scale. In Barbey, too, one example shows that the waste of this production was concentrated in one house, whereas the blade products were disseminated in several dwellings. In contrast, productions using local Cetaceous flints show no preferential distribution, with blades and flakes being present and produced everywhere.

In the Paris basin, this production structure, with more or less specialised places and knappers for different types of products, was a major characteristic of the flint lithic industries of the BVSG culture and probably also of the Rubané culture. Pierre Allard showed all the flint procurement complexity of the Rubané culture: circulation of finished blade products, introduction and knapping of prepared cores within the villages, direct supply of raw material from the outcrops, with a major concern for the search for and the choice of high quality raw material for blade making by indirect percussion (Allard 2005a). Elsewhere in Europe, the concern was the same. For example, in the western LBK zone, the more regular blade productions always used high quality raw materials, which were, in most cases, of exogenous origin or rarer. This is true for the Carpathian obsidian or the Szentgál radiolarite, which circulated in the Carpathian basin, Transdanubia, and Lower Austria (Gronenborn 1997; 2003; Mateiciucová 2008). In addition, as Inna Mateiciucová (2008) has shown, some raw materials, such as Krumlovský Les flint, were used for the manufacture of blades on special settlements, and other sites were users or intermediate redistribution sites between producers and consumers. A similar organisation is found in the Merzbach valley, on the Aldenhoven plateau, and in the lower Maas valley, where some villages, such as Langweiler 8 (Kr. Düren, Germany) and Elsloo (Prov. Limburg, Netherlands), were central places connected to the Rijckholt flint exploitation area and seemed to be in charge of the distribution of Rijckholt blades to the surrounding settlements (Zimmermann 1995; De Grooth 1987; 1990). At Verlaine (Prov. Liège, Belgium), Pierre Allard (2005b) highlighted a blade production with a surplus for export. In Bavaria, where local cherts are of very poor quality, an exchange of blade products made from Baltic or Rijckholt flints can also be envisaged (Scharl 2015). In some areas, the shortage of acceptable quality local flint required an external supply. This seems to have been the case in Alsace, where the Kimmeridgian flint outcrops are limited to the south of the region and where the lithic industry was clearly conditioned by these supply constraints, particularly in lower Alsace, where flint from the Paris basin was used (Mauvilly 1997; Allard 2005a).

These examples illustrate that, in the Early Neolithic, lithic procurement and lithic raw material management were divided into several degrees of complexity. At the highest degree, the regular blade procurement required a complex organisation, sometimes with some special places where the inhabitants were in contact with production areas or where highly skilled knappers would come and make these products. In contrast, at the lowest degree, more ordinary flints were used for irregular blades or flakes, manufactured within each dwelling unit.

Who knapped what?

Productions connected to several places of manufacture can be seen as a basic trend of Early Neolithic lithic industries at the micro-regional, regional, and extra-regional levels. With the identification of different skill levels; the complexity and diversification of raw material procurement in relation to the type of product (regular blades, irregular blades, flakes); and the identification of centres of production and recipient sites, this dataset also allows us to envisage that flint tools were produced by several social categories. This includes more or less specialised groups of individuals in particular houses or villages, producing regular blades, and individuals throughout all settlements, making flakes and irregular blades.

Furthermore, this dataset suggests different degrees of labour specialisation for the chipped stone tool industry. The first degree is at a household level, where knappers probably made flakes and irregular blades. In this context, the gap between simplistic flake production and blade production, even on poor quality raw materials, suggests that the makers were different. The second degree,

sometimes observed in villages, is at the level of certain houses that were in charge of regular blade production from better quality flint and provided them to the whole community. The third degree is at the level of the region, involving the procurement of the very good blades through exchange with the villages that had control over the good flint outcrops or that received knappers coming from those outcrops.

But how can we determine the social categories responsible for these various productions? To do so, it is necessary to consider the individuals and the objects that they are associated with within funerary contexts. During the European LBK, the list of objects found within graves is relatively long, including pottery vessels, dyes (graphite but especially ochre powder or nodules), and, rarely, faunal remains. However, for various reasons that I will not go into here, but mainly because of the ambiguous nature of these objects, I consider that they do not contribute directly to the identity of the dead. In contrast, adornments and other objects deposited near or on the body are testimonials of the deceased's identity. This includes jewellery and ornaments that adorn the deceased, such as belts, necklaces, clasps, and bracelets, made of stone, animal bone, or shell. In addition, tools and various utensils, deposited next to the body, were familiar objects belonging to the deceased. The list includes adzes and other polished axes in different stones; flint flakes, blades, sickles, and arrows; bone instruments, such as deer antler objects, bone needles, awls, and smoothers; grinding stones; and percussion set lighters, marked by the association of ferrous nodules and flint flakes bearing traces of percussion.

Unfortunately, in the Paris basin, stone tool artefacts are very rare in funerary contexts – consisting of some flakes and two arrowheads – and it is therefore impossible to compare the management of flint tools in the dwellings and villages with the lithic grave goods of the individuals. Thus, it is necessary to embrace the entire western LBK territory, where the graves of around 3000 individuals are currently known from Hungary to the Alsace region (Bickle and Whittle 2013). In this area, where the structure of tool procurement is the same as in the Paris basin, the characteristics of the flint products, and especially the blade products, in burials could be gender-oriented, because while flakes, borers, scrappers, and burins are indiscriminately present in male and female tombs as well as in infant graves, arrowheads and the most regular blades are found exclusively in male burials.

In addition, although some women are associated with blades, these blades are not comparable with those deposited in men's tombs. For example, the blade population collected from the graves of the necropolis of Schwetzingen (Rhein-Neckar-Kr., Germany; Gerling 2012) can be divided into three main groups (Table 1). The first group consists of fragments, mostly mesial, of retouched or unretouched blades. The second group contains irregular whole blades, sometimes retouched, whose ribs and edges are sinuous and whose lengths range between 76 and 140 mm. The third group includes regular long blades with trapezoidal sections and parallel edges and ribs, probably knapped by indirect percussion; their length is between 140 and 180 mm. These groups of blades are present in different proportions in male and female graves. Blades are more numerous in male tombs, which include six times more blades than female tombs. Regular blades are only present in male tombs, with the exception of one infant tomb. Female tombs only contain blade fragments.

As at Schwetzingen, female tombs in Alsace only contain flakes, never blades. In this region, deposits of regular blades exist, but they are found in graves with poor bone preservation, and the sex of the individuals is often undetermined. This is the case at Quatzenheim (Dép. Bas-Rhin, France) where blades were found with polished adzes. In the European LBK, polished objects are exclusively linked to male burials, and we can assume that the blades were also part of this male gender tool kit. In the Transdanubian LBK, at Nitra (Nitriansky kraj, Slovakia; Pavúk 1972) and Vedrovice (Okres Znojmo, Moravia; Zvelebil and Pettitt 2008), but also in the lower Rhine-Maas area, at Elsloo and at Langweiler (Modderman *et al.* 1970), the data show that the

	Women	Men	Children	Total
Blade fragments	2	3	2	7
Irregular blades, retouched and unretouched		5	1	6
Long regular blades		4	1	5
Total	2	12	4	18

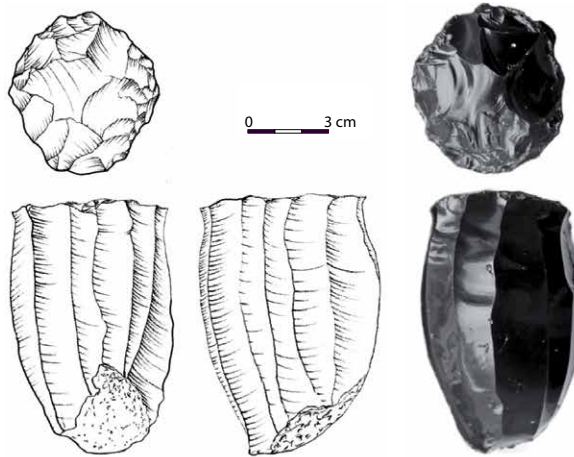


Table 1. Schwetzingen (Rhein-Neckar-Kr., Germany). Distribution of flint blades in the burials of the necropolis (data from Gerling 2012).

Figure 5. Polgár Ferenci-hát (Hajdúnánási járás, Hungary). Hungarian LBK male grave with an obsidian core (Kaczanowska and Kozłowski 2016, 73, Figs. 8 and 9).

deposition of flint objects, in particular of blades, took place in higher proportions in graves with polished adzes and male burials. Likewise, at Balatonszárszó (Siófok járás, Hungary; Oross and Marton 2012) and Vedrovice, the exogenous radiolarite products were only introduced in male burials. Furthermore, in the Hungarian Alföld LBK, at Polgár-Ferenci-hát (Hajdúnánási járás, Hungary; Raczky 2002), where rare obsidian blades were associated with women, men, and children, only male burials contained cores in this raw material, as perhaps only men were able to work this material (Fig. 5).

In contrast, female graves only contain irregular blades and flakes made from local or poor quality raw material. This underlines that the distribution of the knapped artefacts in tombs is not haphazard, as it conformed to criteria of scarcity of or differential access to raw materials and probably also to the skill levels that were needed to produce lithic products. Only some men were depositories in death of certain production capacities or high quality products, such as long and regular blades, exogenous blades, and obsidian cores. All over the western LBK territory, women were not associated with these products or raw materials.

What is the situation in the BVSG culture, which succeeds the Rubané culture in the Paris basin? Burials are rarer, accounting for about 60 individuals. Three of them, one man and two women (from Fresnes-sur-Marne, Dép. Seine-et-Marne, and Bucy-le-Long, Dép. Aisne, France; Thevenet 2010; Constantin *et al.* 1995), seem associated with blades and fragments. But the regularity and raw material of these objects remain unknown. Thus, it is still necessary to consider a larger territory. In the necropolis of Trebur (Kr. Groß-Gerau, Germany; Spatz 1999), 22 women and 27 men belonging to the Hinkelstein culture, which follows the LBK culture in the Rhineland, were exhumed. Females had no flint tools, and only males were associated with regular blades, flint arrowheads, and sickles made from blades. It seems likely that in the European Danubian cultures knapping regular blades from high quality raw material would be a male domain. In almost all of Western Europe this association is sufficiently frequent that it can be considered a constant.

In the Paris basin, if connecting lithic productions to individuals is difficult because of the scarcity of flint tools in burials, external funerary data provide a stable image of lithic product distribution between women and men. This result allows me to propose a hypothesis about the labour division of flint tool procurement during the Early Neolithic of the Paris basin. Thus, previous observations about raw material management, spatial data, and funerary equipment can be synthesised provisionally as follows (Fig. 6).

In the Paris basin, flakes and irregular blades on local flints were manufactured in unspecialised domestic settlements and houses and can be found Europe-wide in almost all tombs, in particular those of women, which never contain regular blades. Several social categories would have produced these objects: inexperienced younger flint knappers and women would have manufactured the majority of the flakes, whereas more experienced adults would have made blade products. The latter would have been mainly men, since some of these blades were used for arrowheads and archery, which are, according to Tabet and Testart, male activities. However, it is not impossible that women made some of these blades, namely, those that did not involve hunting or bloodletting, as some female graves do contain these irregular blades.

Blade production in higher quality flint, such as the fine-grained or Bartonian flint from the Paris basin, was carried out within specialised contexts or special houses and would have been undertaken by the more experienced knappers, since the debitage methods were often more elaborated than those for ordinary flint. This, and the identification of the workshops, could indicate that this high quality and rare raw material was reserved for the more experienced craftspeople, who distributed their products. This can also apply to exogenous flints or siliceous rocks

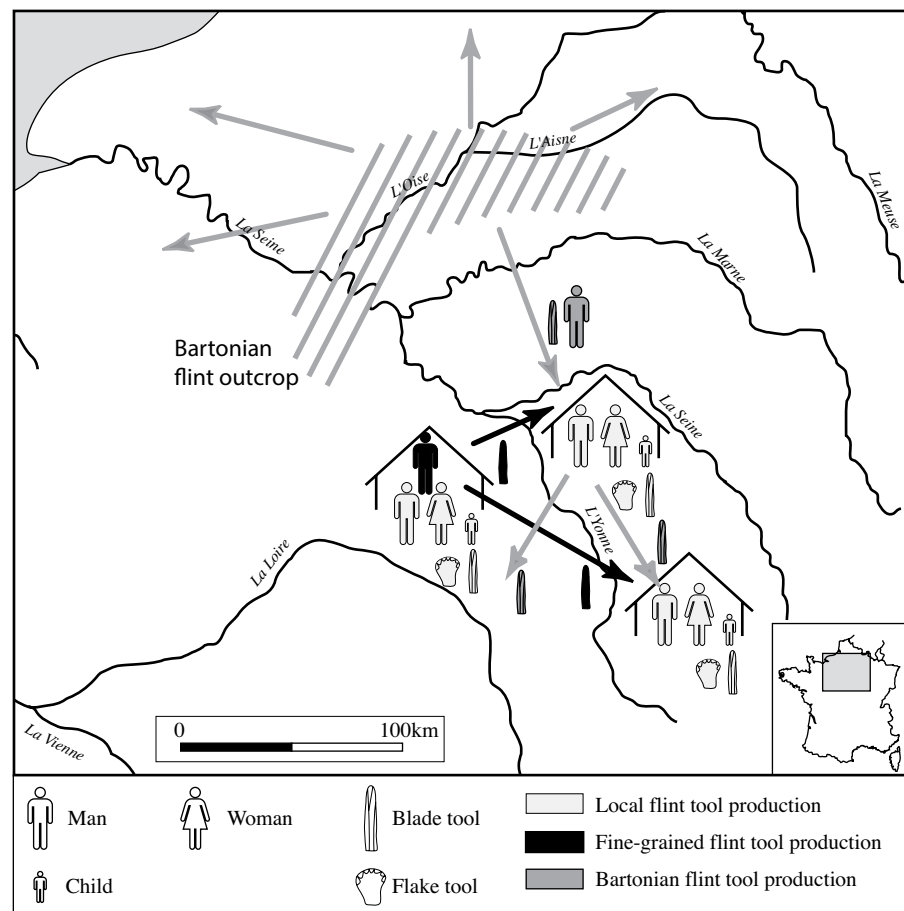


Figure 6. Flint tool production associated in the Early Neolithic in the south-eastern portion of the Paris basin (Anne Augereau).

(some Bartonian flints, obsidian, radiolarite, *etc.*), which would be provided by itinerant knappers from settlements near their outcrops. It is also possible that the better local makers had privileged access to this raw material. As funerary contexts have shown, they were probably male.

Therefore, as a preliminary conclusion, we can assume that at the beginning of the Neolithic, regular blade knapping in high quality siliceous rocks would be a male activity learned by a process of apprenticeship, while the production of less regular blades and tools flakes in local flints were perhaps tasks shared with women and children. It is very likely that women made their own stone tools.

Change and continuity during the Middle Neolithic

During the first part of the Middle Neolithic, knappers in the areas in the south and the west of the Paris basin abandoned blade production by indirect percussion (Cerny culture), while those in the north-east continued this tradition (Rössen culture). However, in the south and the west, although daily tools were made of flakes probably made by each individual when needed, some men would have continued to manufacture regular blades. Indeed, in most of the necropolises of this culture, which comprise a total of around 300 excavated individuals, these products, knapped by indirect or soft percussion, are exclusively associated with male burials and, more specifically, with those directly associated with longbarrows funerary monuments. This is the case at Passy (Duhamel *et al.* 1997), where grave 4.1 contained a man buried in the axis of monument 4, accompanied by regular blades of similar length and 12 arrowheads (Fig. 7). Similar cases have been recorded from nine other male burials, with a total of 19 blades, at, among other sites, Gron, Escolives-Sainte-Camille, Gurgy 'Les Noisats', and Chichery 'Sur Les Pâturaux' (all Dép. Yonne, France) (Fig. 9).

Unfortunately, there are no Rössen burials in the north-eastern part of the Paris basin, and it is difficult to study the relationship between the flint productions and the individuals who, potentially, knapped them. In the Rhineland, the sites of Rosheim (Dép. Bas-Rhin, France; Bakaj *et al.* 1998) and Jechtingen (Lkr. Emmendingen, Germany; Dornheim 2011) are both necropolis sites. The first one belongs to the Groosgartach culture (partly contemporary with the Cerny and Rössen cultures) and the second to the Rössen culture. At Jechtingen, the sex determination of the individuals was very difficult because of the poor preservation of the bones. At both sites, gender did not seem to have been a criterion for assigning most funerary goods. Female and male graves indiscriminately contained grinding stones and, sometimes, arrowheads and blades. However, polished tools as well as sickle blades are linked with men, and the blade-to-male association seems to have been partly maintained.

What was the situation in the second part of the Middle Neolithic? In the Michelsberg culture, the two male graves from Beaurieux (Dép. Aisne, France; Colas *et al.* 2017) contained numerous regular blades and arrowheads, continuing the previous linking of men and regular blades. In other areas, the association between individuals and the funerary goods within the grave is often uncertain or doubtful (in the case of the Chassey culture of the Atlantic area) or the burial contexts remain unknown (in the case of the Chassey culture of the Centre region and the Northern Chassey culture). But in the south of the region, in the Chassey culture of Burgundy, the situation changed. At the Monéteau necropolis (Dép. Yonne, France; Augereau and Chambon 2011), where more than 60 burials have been excavated, this type of flint product is exclusively linked to women: four women have a blade, but none of the men do, in contrast with the findings relating to the Early Neolithic and the Cerny cultures, where these pieces characterise only men's graves (Fig. 8). What does this

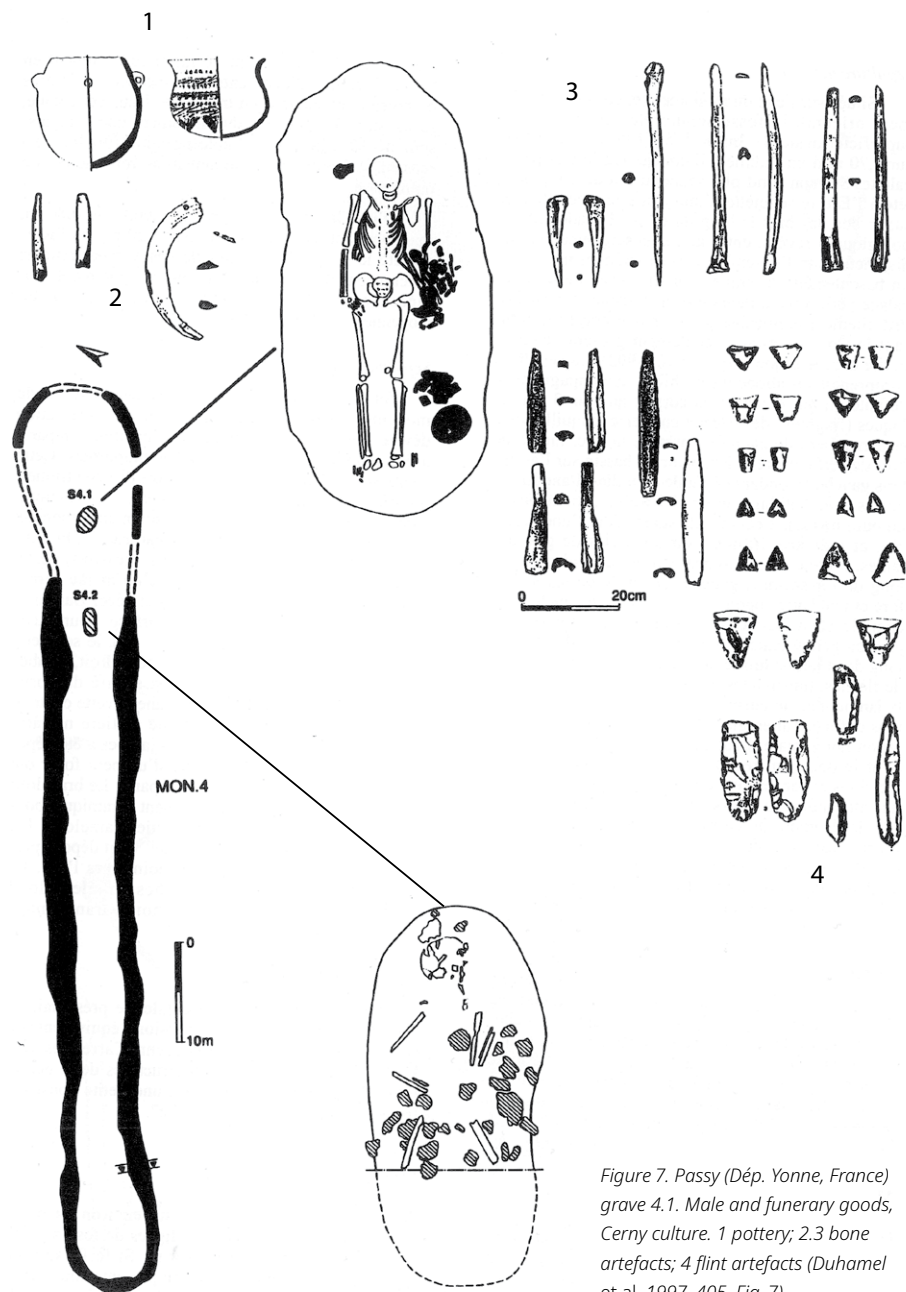
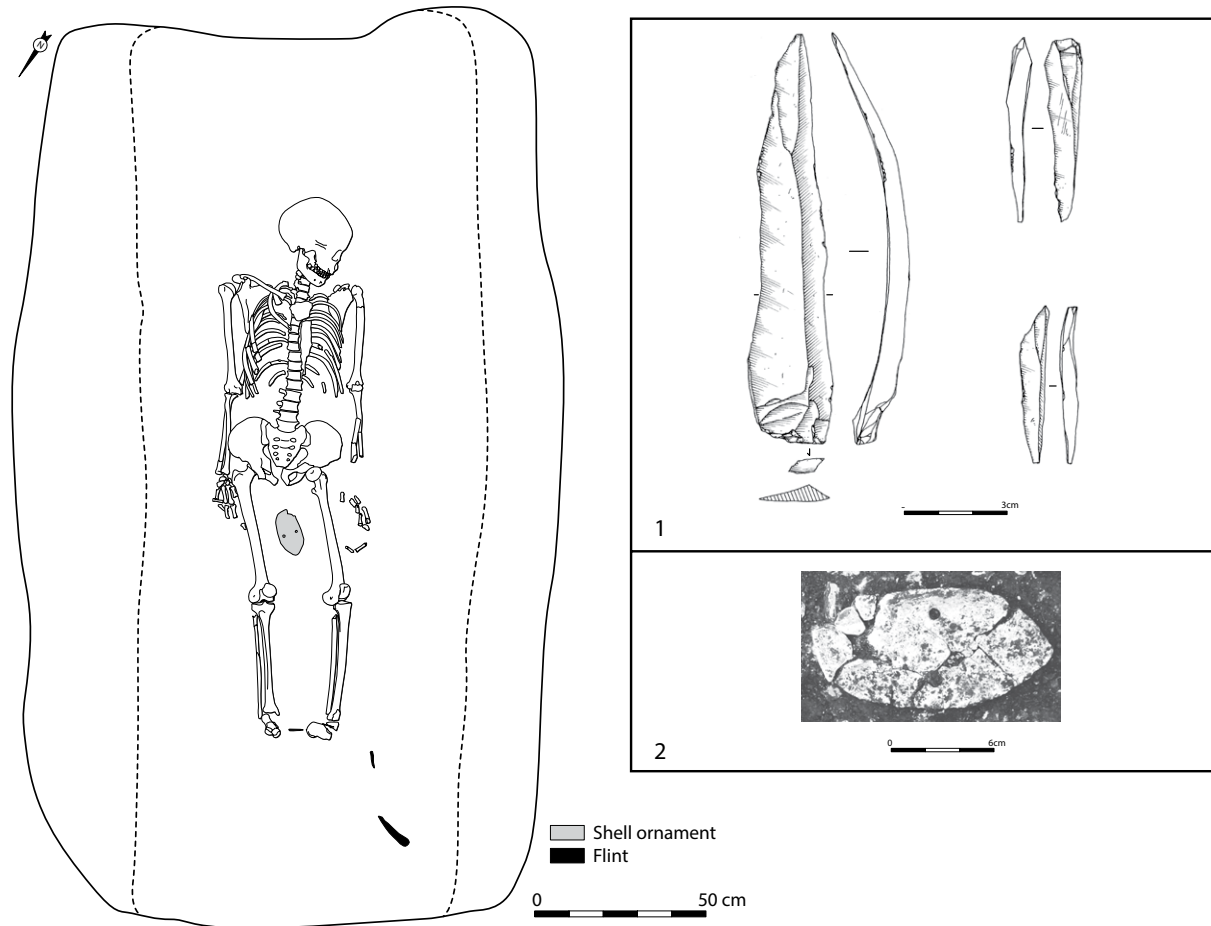


Figure 7. Passy (Dép. Yonne, France) grave 4.1. Male and funerary goods, Cerny culture. 1 pottery; 2,3 bone artefacts; 4 flint artefacts (Duhamel et al. 1997, 405, Fig. 7).

result mean? We must not come to the easy conclusion that Monéteau women, or those of Jechtingen and Rosheim, knapped these blades. First, it is possible that men manufactured these female tools, as is quite frequently observed in ethnographic narratives. Tabet (1979) has shown this in her study of the differentiation of tools by sex. Second, Monéteau men continued to be buried with flint arrowheads, which were mostly made from blades, showing that the pattern associating male individuals, blade tools, and such classic male activities as hunting and fighting was always true. However, these laminar objects were probably a part of women's equipment in life. The question therefore needs to focus on the uses of these blades: Were the activities the same between men and women? Such a conclusion was drawn from the study of the Sant Pau del Camp Neolithic necropolis (Barcelona district, Spain) where similar tools in the tombs of men and women corresponded to different uses:



cutting plants and woodworking for men and leather working for women (Wünsch and Gibaja Bao 2003). So, if the long blades were female tools in Monéteau, what was their use and what material did they work? In which activities were they involved, and did these activities differ between men and women? Only a functional approach can answer the question of the division of labour between women and men at Monéteau in relation to the manufacture and use of regular laminar products. This remark also holds for the blades associated with Rosheim and Jechtingen women and men belonging to the previous period.

Figure 8. Monéteau (Dép. Yonne, France) grave 04-99. Woman with (1) a flint blade, two flint burin spalls and (2) a shell ornament. Chassey culture (drawing: P. Pihuit, Inrap).

Conclusion

In the Paris basin, the lithic productions of the Early Neolithic are diversified and were carried out in different locations. Some of these locations were specialised in the production and distribution of regular blades in high quality raw material, whereas irregular blades and flakes were made by a larger segment of the community in all the dwellings. Following a comparison of these production structures with the siliceous knapped products associated with male and female graves of the western LBK territory and of the Danubian cultures in general, it seems realistic to conclude that regular blades were made by men and that flakes were made by women for their daily use. Only male tombs contain regular blades or laminar cores in rare siliceous rock, often produced in special settlements or houses and then exchanged. Female graves contain irregular flakes and tools, maybe made by all members of the community, in all of the dwelling units (Fig. 6).

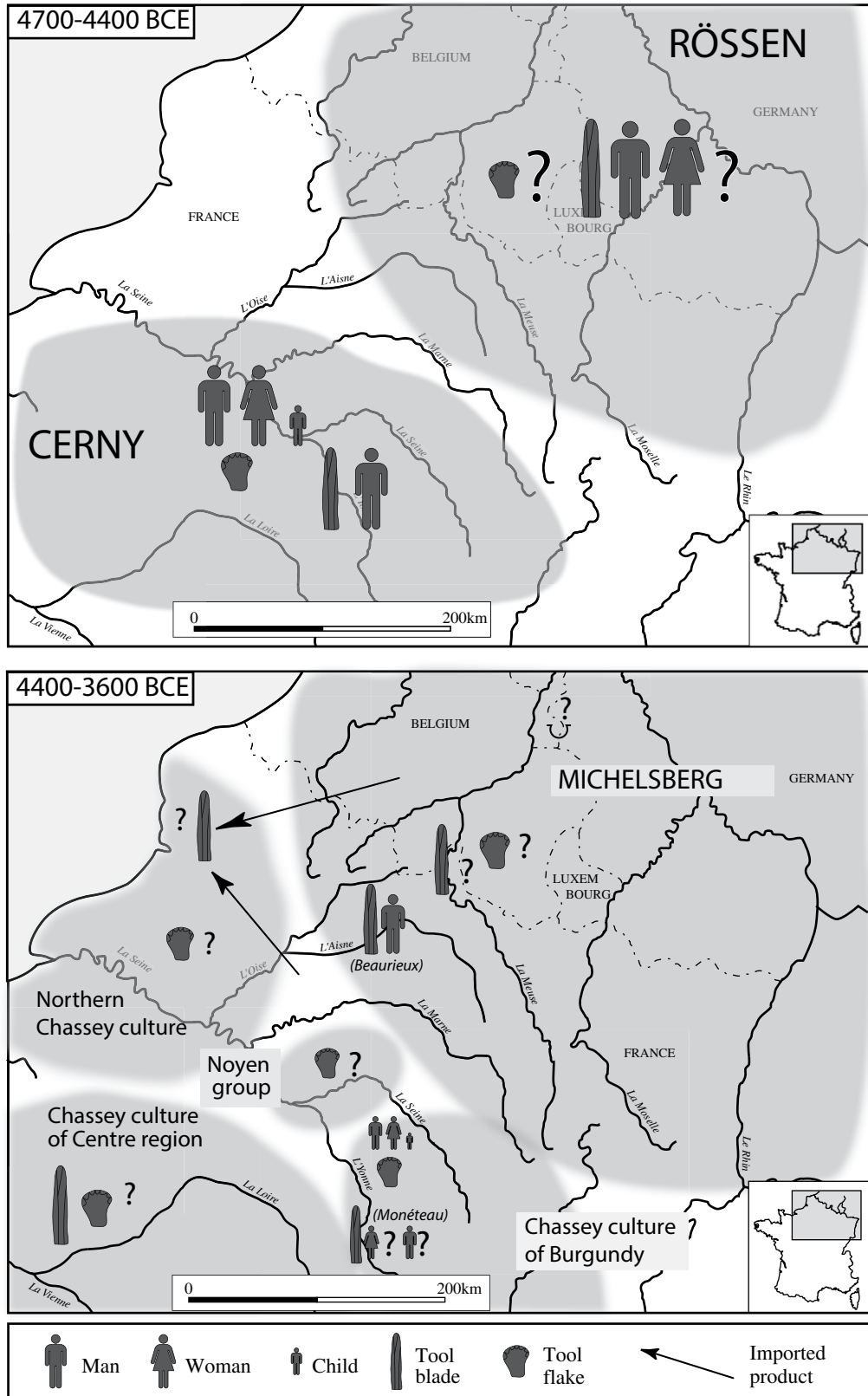


Figure 9. Gendered lithics during the Middle Neolithic of the Paris basin: hypothesis based on comparison of the productions from enclosures and settlements vs. those from funerary contexts (Anne Augereau).

This situation was perpetuated during the next period, between 4700 and 4400 BCE, especially in the Cerny culture, where regular blades are exclusively associated with men in funerary contexts (Fig. 9). However, the Monéteau site (4400 BCE), belonging to the Chasséen culture, paints a different picture. In this cemetery, only women are associated with long and regular blades. I have noted that the presence of these tools in female graves, already perceived in certain necropolises of the previous period in the Rhineland, was not a sufficient reason to think that blade manufacture was a female activity. Men could continue to produce female tools, following Tabet's point of view based on ethnological survey. This activity could be a manifestation of the domination of men over women by making them technically dependent. Furthermore, the funerary goods show that Neolithic men retained in death the more symbolic objects of the male condition, which was already present during the Mesolithic: flint arrowheads made from regular blades, which allowed them to hunt large game and fight. Depending on the Neolithic culture and period, they also had adzes, axes, and picks, as well as 'tranchets'. We can associate them with such activities as hunting with projectiles, or thrown percussion gestures with sharp or perforating tools, such as woodworking with an adze. In contrast, women never seem to have had this type of tool in death. Their own were more common and without specificity: flakes on commonly occurring flints, broken or irregular blades, but also bone tools, probably for scraping, perforating skins, or sewing, such as awls and needles, and stone manual grinders, for grinding, crushing, *etc.* The long blades that they had in certain Middle Neolithic necropolises could also be used in pose percussion. To conclude, if men as blade makers seems a serious assumption, only systematic micro-wear analysis carried out on Neolithic stone and bone tools from burials and dwellings can provide data on the tools and task distribution between males and females. The study of change and continuity in the division of labour by sex during the Neolithic in the Paris basin may then be developed in a relevant way, allowing researchers to assess whether the origin of the almost universal partition of gendered activities highlighted by Tabet (1979) and, subsequently, by Testart (1986; 2014) is of ancient origin.

Appendix: List of the sites shown in Figure 2

A: 5200-4800 BCE, Early Neolithic.

1 Pontpoint (Dép. Oise); 2 Pont-Sainte-Maxence (Dép. Oise); 3 Osly-Courtil (Dép. Aisne); 4 Bucy-le-Long (Dép. Aisne); 5 Missy-sur-Aisne (Dép. Aisne); 6 Chassemy (Dép. Aisne); 7 Presles-et-Boves (Dép. Aisne); 8 Concevreux (Dép. Aisne); 9 Cuiry-lès-Chaudardes (Dép. Aisne); 10 Berry-au-Bac (Dép. Aisne); 11 Menneville (Dép. Aisne); 12 Pontavert (Dép. Aisne); 13 Villeneuve-Saint-Germain (Dép. Aisne); 14 Tinquieux (Dép. Aisne); 15 Trosly-Breuil (Dép. Oise); 16 Longueil-Sainte-Marie (Dép. Oise); 17 Juvigny (Dép. Marne); 18 Larzicourt (Dép. Marne); 19 Norrois (Dép. Marne); 20 Orconte (Dép. Marne); 21 La Saulsotte (Dép. Aube); 22 Balloy (Dép. Seine-et-Marne); 23 Marolles-sur-Seine (Dép. Seine-et-Marne); 24 Barbey (Dép. Seine-et-Marne); 25 Villeneuve-la-Guyard (Dép. Yonne); 26 Vinneuf (Dép. Yonne); 27 Gron (Dép. Yonne); 28 Passy (Dép. Yonne); 29 Champlay (Dép. Yonne); 30 Charmoy (Dép. Yonne); 31 Gurgy (Dép. Yonne); 32 Monéteau (Dép. Yonne); 33 Escolives-Sainte-Camille (Dép. Yonne); 34 Buthiers-Boulancourt (Dép. Seine-et-Marne); 35 Maisse (Dép. Essonne); 36 Neauphle-le-Vieux (Dép. Yvelines); 37 Chelles (Dép. Seine-et-Marne); 38 Rungis (Dép. Val-de-Marne); 39 Fresne-sur-Marne (Dép. Seine-et-Marne); 40 Jablines (Dép. Seine-et-Marne); 41 Vignely (Dép. Seine-et-Marne); 42 Mareuil-lès-Meaux (Dép. Seine-et-Marne); 43 Luzancy (Dép. Seine-et-Marne); 44 Saint-Pierre d'Autils (Dép. Eure); 45 Aubevoye (Dép. Eure); 46 Incarville (Dép. Eure); 47 Léry (Dép. Eure); 48 Poses (Dép. Eure); 49 Jort (Dép. Calvados); 50 Loison-sous-Lens (Dép. Pas-de-Calais); 51 Colom-

belles (Dép. Calvados); 52 Fontenay-le-Marmion (Dép. Calvados); 53 Bardouville (Dép. Seine-Maritime); 54 Saint-Vigor d'Ymonville (Dép. Seine-Maritime); 55 Guichainville (Dép. Eure); 56 Alizay (Dép. Eure).

B: 4700-4400 BCE, Middle Neolithic I.

1 Berry-au-Bac (Dép. Aisne); 2 Osly-Courtil (Dép. Aisne); 3 Vignely (Dép. Seine-et-Marne); 4 Bercy (Paris); 5 Buchères (Dép. Aube); 6 Barbuise-Courtavant (Dép. Aube); 7 Balloy (Dép. Seine-et-Marne); 8 Châtenay-sur-Seine (Dép. Seine-et-Marne); 9 Videlles (Dép. Essonne); 10 Cerny (Dép. Essonne); 11 Villeneuve-la-Guyard (Dép. Yonne); 12 Gron (Dép. Yonne); 13 Passy (Dép. Yonne); 14 Chichery (Dép. Yonne); 15 Gurgy (Dép. Yonne); 16 Escolives-Sainte-Camille (Dép. Yonne); 17 Malsherbes (Dép. Loiret); 18 Orville (Dép. Loiret); 19 Saint-Vigor d'Ymonville (Dép. Seine-Maritime); 20 Muids (Dép. Eure); 21 Bouafles (Dép. Eure); 22 Poses (Dép. Eure); 23 Condé-sur-Ifs (Dép. Calvados); 24 Bretteville-le-Rabet (Dép. Calvados); 25 Pezou (Dép. Loir-et-Cher); 26 Fossé (Dép. Loir-et-Cher); 27 Muides-sur-Loire (Dép. Loiret); 28 Contres (Dép. Loir-et-Cher); 29 Ligueil (Dép. Indre-et-Loire); 30 Pussigny (Dép. Indre-et-Loire).

C: 440-3600 BCE, Middle Neolithic II.

1 Bazoches-sur-Vesles (Dép. Aisne); 2 Beaurieux (Dép. Aisne); 3 Maizy (Dép. Aisne); 4 Passel (Dép. Oise); 5 Jonquières (Dép. Oise); 6 Catenoy (Dép. Oise); 7 Villers-Carbonnel (Dép. Somme); 8 Carvin (Dép. Pas-de-Calais); 9 Boury-en-Vexin (Dép. Val d'Oise); 10 Portejoie (Dép. Eure); 11 Louviers (Dép. Eure); 12 Ernes (Dép. Calvados); 13 Fontenay-le-Marmion (Dép. Calvados); 14 Bercy (Paris); 15 Châtenay-sur-Seine (Dép. Seine-et-Marne); 16 Grisy-sur-Seine (Dép. Seine-et-Marne); 17 Noyen-sur-Seine (Dép. Seine-et-Marne); 18 Pont-sur-Seine (Dép. Aube); 19 Bonnard (Dép. Yonne); 20 Beaumont (Dép. Yonne); 21 Monéteau (Dép. Yonne); 22 Auneau (Dép. Eure-et-Loire); 23 Chartres (Dép. Eure-et-Loire); 24 Nogent-le-Retrou (Dép. Eure-et-Loire); 25 Saumeray (Dép. Eure-et-Loire); 26 Sorel-Moussel/Fort Harouard (Dép. Eure-et-Loire); 27 Muides-sur-Loire (Dép. Loiret); 28 Sublaines (Dép. Indre-et-Loire); 29 Bruère-Alli-champs (Dép. Cher); 30 La Celle-Saint-Avant (Dép. Indre-et-Loire).

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References

- Allard, Pierre 2005a. *L'industrie lithique des populations rubanées du Nord-Est de la France et de la Belgique*. Internationale Archäologie 86. Rahden/Westf.: Leidorf.
- Allard, Pierre 2005b. Surplus Production of Flint Blades in the Early Neolithic of Western Europe: New Evidence from Belgium. *European Journal of Archaeology*, 8, 205-223.
- Arnold, Bettina 2006. Gender and archaeological mortuary analysis. In: Nelson, Sarah M. (ed.). *Handbook of gender in archaeology*. Berkeley, Oxford: AltaMira Press, 137-170.
- Arnold, Bettina 2012. Gender, Temporalities, and Periodization in Early Iron Age West-Central Europe. *Social Science History*, 36, 86-112.
- Augereau, Anne, 1997. Analyse spatiale et organisation techno-économique au Néolithique ancien dans le sud-est du Bassin parisien: l'exemple de la taille du silex à Barbey "Le Chemin de Montereau" (Seine-et-Marne). In: Auxiette, Ginette, Hachem, Lamys, and Robert, Bruno (eds). *Espace physiques espaces sociaux dans l'analyse interne des sites du Néolithique à l'âge du Fer. Actes du 119e congrès*

- national des sociétés historiques et scientifiques*. Paris: Comité des travaux historiques et scientifiques, 200-215.
- Augereau, Anne 2003. Early Neolithic Settlements of the South-East of the Paris Basin (Seine/Yonne sector) and their Flintworking Industries: Characterization, Specialization and Function of Knapping Activities. In: Burnez-Lanotte, Laurence (ed.). *Production and Management of Lithic Materials in the European Linearbandkeramik. Acts of the XIVth UISPP Congress*. BAR International Series 1200. Oxford: Archaeopress, 77-83.
- Augereau, Anne 2004. *L'industrie du silex du Ve au Ive millénaire dans le sud-est du Bassin parisien. Rubané, Villeneuve-Saint-Germain, Cerny et groupe de Noyen*. Documents d'archéologie française 97. Paris: Editions de la Maison des sciences de l'homme.
- Augereau, Anne, Bostyn, Françoise, and Garmond, Nicolas 2016. Impacts de la circulation des objets et des idées dans la structuration des assemblages lithiques chasséens dans le bassin de la Seine. In: Perrin, Thomas, Chambon, Philippe, Gibaja Juan, and Goude, Gwenaëlle (eds). *Le Chasséen, des Chasséens... Retour sur une culture nationale et ses parallèles, Sepulcres de fossa, Cortailod, Lagozza. Actes du colloque international tenu à Paris (France) du 18 au 20 novembre 2014*. Toulouse: Archives d'Écologie Préhistorique, 221-235.
- Augereau, Anne, and Chambon, Philippe 2011 (eds). *Les occupations néolithiques de Macherin à Monéteau (Yonne)*. Mémoire de la Société Préhistorique Française 53. Paris: Société Préhistorique Française.
- Bakaj, Bertrand, Boës, Eric, Jeunesse, Christian, and Mauvilly, Michel 1998. La nécropole Néolithique moyen de Rosheim "Rosenmeer", fouilles 1998. *Cahiers de l'Association pour la Promotion de la Recherche Archéologique en Alsace*, 14, 45-106.
- Bamforth, Douglas B., and Finlay, Nyree 2008. Introduction: Archaeological Approaches to Lithic Production Skill and Craft Learning. Theme issue. *Journal of Archaeological Method and Theory*, 15, 1-27.
- Baudry, Patrick 2007. Histoire de la mort. In: Destemberg, Antoine, and Moulet, Benjamin (eds). *La mort. Mythes, rites et mémoire. Hypothèses 2006. Travaux de l'Ecole doctorale de l'Université Paris I*, 10, 147-154.
- Bickle, Penny and Whittle, Alasdair W. R. 2013 (eds). *The first farmers of central Europe: diversity in LBK lifeways*. Oxford: Oxbow Books.
- Bird, Caroline F.M. 1993. Woman the toolmaker: Evidence for women's use and manufacture of flaked stone tools in Australia and New Guinea. In: du Cros, Hilary, and Smith, Laurajane (eds). *Women in Archaeology. A Feminist Critique*. Canberra: The Australian National University, 22-30.
- Bostyn, Françoise 1997. Characterization of flint productions and distribution of the tabular Bartonian flint during the early neolithic (Villeneuve-Saint-Germain period) in France. In: Schild, Romuald, and Sulgostowska, Zofia (eds). *Man and Flint. VIIth International Flint Symposium*. Warsaw: Institute of Archaeology and Ethnology Polish Academy of Sciences, 171-184.
- Chambon, Philippe, Delor, Jean-Paul, Augereau, Anne, Gibaja, Juan, Meunier, Katia, Thomas Aline, and Murail, Pascal 2010. La nécropole du Néolithique moyen de Sur les Pâturaux à Chichery (Yonne). *Gallia Préhistoire*, 52, 33-108.
- Colas, Caroline, Manolakakis, Laurence, Thévenet, Corinne, Baillieu, Michel, Bonnardin, Sandrine, Dubouloz, Jérôme, Farruggia, Jean-Paul, Maigrot, Yolaine, Naze, Yves, and Robert, Bruno 2007. Le monument Michelsberg ancien de Beaurieux "La Plaine" (Aisne, France). In: Besse, Marie (ed.). *Société néolithique. Des faits archéologiques aux fonctionnements socio-économiques. Actes du colloque du 27e colloque interrégional sur le Néolithique*. Cahiers d'archéologie romande 108. Neufchâtel: Cahiers d'archéologie romande, 329-334.

- Constantin, Claude, Farruggia, Jean-Paul, and Guichard, Yves 1995. Deux sites du Villedeneuve-Saint-Germain à Bucy-le-Long (Aisne). *Revue Archéologique de Picardie*, 1-2, 3-59.
- Crass, Barbara A. 2001. Gender and Mortuary Analysis: What Can Grave Goods Really Tell Us? In: Arnold, Bettina, and Wicker, Nancy L. (ed.). *Gender and the Archaeology of Death*. Walnut Creek: AltaMira Press, 105-119.
- De Grooth, Marjorie E. Th. 1990. In search of bandkeramik specialist flint knappers. In: Cahen, Daniel, and Otte, Marcel (eds). *Rubané et Cardial. Actes du colloque international de Liège*. Liège: ERAUL 39, 89-93.
- De Grooth, Marjorie. E. Th. 1987. The flint industry of the dutch linearbandkeramik. In: Kozłowski, Janusz Krzysztof, and Kozłowski, Stephan K. (eds). *Chipped stone industries of early farming cultures in Europe*. Cracow: Archaeologia Interregionalis, 203-221.
- Denis, Solène 2017. *L'industrie lithique des populations blicquiennes (Néolithique ancien, Belgique): organisation de productions et réseaux de diffusion. Petits échanges en famille*. BAR International Series 2873. Oxford: Archaeopress.
- Dobres, Marcia-Anne 2000. *Technology and Social Agency: Outlining a Practice Framework for Archaeology*. Oxford: Blackwell.
- Dornheim, Saskia 2011. Jechtingen "Humbergäcke". Ein mittelnéolithisches Gräberfeld am Kaiserstuhl. In: Denaire, Anthony, Jeunesse, Christian, and Lefranc, Philippe (eds). *Nécropoles et enceintes danubiennes du Ve millénaire dans le Nord-Est de la France et le Sud-Ouest de l'Allemagne. Actes de la table ronde internationale de Strasbourg*. Monographie d'archéologie du Grand Est 5. Strasbourg: Université de Strasbourg, 127-142.
- Dubouloz, Jérôme, Ilett, Michael, and Lassere, Marina 1982. Enceinte et maisons chalcolithiques de Berry-au-Bac, La Croix Maigret (Aisne). In: Société archéologique Sens (ed). *Le Néolithique dans l'Est de France. Actes du colloque interrégional sur le Néolithique de Sens, 27-28 septembre 1980*. Cahier de la Société Archéologique de Sens 1. Sens: Société archéologique de Sens, 193-206.
- Duhamel, Pascal 2004. La nécropole monumentale d'Escolives-Sainte-Camille "La Pièce de l'Étang" (Yonne), premiers résultats (fouilles 1997-1999). *Internéo*, 5, 6372.
- Duhamel, Pascal, Fonton, Michelle, and Carré, Henri 1997. La nécropole monumentale de Passy (Yonne): description d'ensemble et problèmes d'interprétation. In: Constantin, Claude, Mordant, Daniel, and Simonin, Daniel (eds). *La culture de Cerny. Nouvelle économie, nouvelle société au Néolithique*. Mémoires du Musée de Préhistoire d'Ile de France 6. Nemours: Association pour la Promotion de la Recherche Archéologique en Ile de France, 397-448.
- Finlay, Nyree 2013. Gender and Lithic Studies in Prehistoric Archaeology. In: Bolger, Diane (ed.). *A Companion to Gender Prehistory*. Chichester: Wiley-Blackwell, 147-165.
- Gerling, Claudia 2012. Das linearbandkeramische Gräberfeld von Schwetzingen, Rhein-Neckar-Kreis. *Fundberichte aus Baden-Württemberg*, 32, 7-263.
- Gero, Joan M. 1991. Genderlithics: Women's Roles in Stone Tool Production. In: Gero, Joan, and Conkey, Margaret W. (eds). *Engendering archaeology. Women and Prehistory*. Oxford: Blackwell, 163-193.
- Gero, Joan M., 2000. The Social World of Prehistoric Facts: Gender and Power in Paleoindian Research. In: Thomas, Julian (ed.). *Interpretive Archaeology: A Reader*. Leicester: Leicester University Press, 304-316.
- Gero, Joan M., Scattolin, M. Cristina, 2002. Beyond Complementarity and Hierarchy: New Definitions for Archaeological Gender Relations. In: Nelson, Sarah M., and Rosen-Ayalon, Myriam (eds). *In Pursuit of gender*. Walnut Creek: Altamira Press, 155-171.

- Gronenborn, Detlef 1997. *Silexartefakte der ältestbandkeramischen Kultur*. Universitätsforschungen zur prähistorischen Archäologie 37. Bonn: Habelt.
- Gronenborn, Detlef 2003. Lithic Raw Material Distribution Networks and the Neolithization of Central Europe. In: Burnez-Lanotte, Laurence (ed.). *Production and Management of Lithic Materials in the European Linearbandkeramik. Acts of the XIVth UISPP Congress*. BAR International Series 1200. Oxford: Archaeopress, 45-50.
- Hollimon, Sandra E. 1996. Sex, Gender and Health among the Chumash: An Archaeological Examination of Prehistoric Gender Roles. *Proceedings of the Society for California Archaeology*, 9, 205-208.
- Kaczanowska, Małgorzata, and Kozłowski, Janusz K. 2016. The evolution of chipped stone industries in the 'Polgar island' from the Middle Neolithic to the Early Copper Age. *Folia Quaternaria*, 84, 67-84.
- Leroi-Gourhan, André 1964. *Le geste et la parole 1. Technique et langage*. Sciences d'aujourd'hui. Paris: Albin Michel.
- Mateiciucová, Inna 2008. *Talking stones: the chipped stone industry in Lower Austria and Moravia and the beginnings of the Neolithic in central Europe (LBK), 5700-4900 BC*. Brno: Masarykova univerzita.
- Mauvilly, Michel 1997. L'industrie lithique de la Culture à Céramique linéaire de Haute Alsace: état des recherches et bilan provisoire. In: Jeunesse, Christian (ed.). *Le Néolithique danubien et ses marges entre Rhin et Seine. XXII Colloque Interrégional sur le Néolithique 1995, Strasbourg*. Cahiers de l'Association pour la Promotion de la Recherche Archéologique en Alsace supplément 3. Zimmerheim: APRAA, 327-358.
- Modderman, Pieter J.R., Newell, R.R., and Onderdelinden, Sjaak 1970. *Linearbandkeramik aus Elsloo und Stein*. Analecta Praehistorica Leidensia 3. Leiden: Institut für Prähistorie der Universität Leiden.
- Mordant, Daniel 1997. Le complexe des Réaudins à Balloy: enceinte et nécropole monumentale. In: Constantin, Claude, Mordant, Daniel, and Simonin, Daniel (eds). *La culture de Cerny. Nouvelle économie, nouvelle société au Néolithique, Actes du colloque international de Nemours*. Mémoires du Musée de Préhistoire d'Ile de France 6. Nemours: Association pour la Promotion de la Recherche Archéologique en Ile de France, 449-479.
- Müller, Fabrice, Duhamel, Pascal, Augereau, Anne, and Depierre, Germaine 1997. Une nouvelle nécropole monumentale à Gron Les Sablons (Yonne). In: Jeunesse, Christian (ed.). *Le Néolithique danubien et ses marges entre Rhin et Seine*. Cahiers de l'Association pour la Promotion de la Recherche Archéologique en Alsace supplément 3. Strasbourg: Association pour la promotion de la recherche archéologique en Alsace, 103-133.
- Murdock, George P., and Provost, Caterina 1973. Factors in the Division of Labor by Sex. A Cross-Cultural Analysis. *Ethnology*, 12, 2, 203-225.
- Odell, George H. 2004. *Lithic Analysis*. New York: Kluwer Academic/Plenum.
- Owen, Linda R. 2005. *Distorting the Past: Gender and the Division of Labor in the European Upper Palaeolithic*. Tübingen: Kerns.
- Oross, Krisztián, and Marton, Tibor 2012. Neolithic burials of the Linearbandkeramik settlement at Balatonszárszó and their European context. *Acta Archaeologica Academiae Scientiarum Hungaricae*, 63, 257- 300.
- Pavúk, Juraj 1972. Neolithisches Gräberfeld in Nitra. *Slovenská Archaológia*, 20, 5-105.
- Piette, Jacques 1989. Le camp néolithique moyen (Cerny) de Barbuise-Courtavant (Aube). In: *Pré- et Protohistoire de l'Aube: exposition, Musée de Nogent-sur-Seine*. Vertus: Assoc. Régionale pour la Protection et l'Etude du Patrimoine Préhistorique, 121-133.

- Pigeot, Nicole 1987. *Magdaléniens d'Étiolles, Économie de débitage et organisation spatiale (l'unité d'habitation U5)*. Supplément à Gallia Préhistoire 15. Paris: Centre National de la Recherche Scientifique.
- Raczky, Pál 2002. Polgár, Ferenci-hát. *Régészeti Kutatások Magyarországon, 2002*, 257-258.
- Rottier, Stéphane, Chambon, Philippe, Mordant, and Claude, Thévenet, Corinne 2005. Découverte de plus d'une centaine de sépultures du Néolithique moyen à Gurgy, Les Noisats (Yonne). *Bulletin de la Société Préhistorique Française*, 102, 3, 641-645
- Scharl, Sylviane 2015. Lithic exchange systems during the LBK-Post-LBK transition: dramatic change or continuous development? A case study from Northwestern Bavaria. *Anthropologie*, 53, 3, 345-386.
- Spatz, Helmut 1999. *Das mittelneolithische Gräberfeld von Trebur, Kreis Groß-Gerau*. Materialien zur Vor- und Frühgeschichte von Hessen 19. Wiesbaden: Landesamt für Denkmalpflege Hessen.
- Sørensen, Marie-Louise S. 1997. Reading Dress: The Construction of Social Categories and Identities in Bronze Age Europe. *Journal of European Archaeology*, 5, 93-114.
- Sørensen, Marie-Louise S. 2000. *Gender Archaeology*. Cambridge: Polity Press.
- Sørensen, Marie-Louise S. 2004. The Interconnection of Age and Gender: A Bronze Age Perspective. *Ethnographisch-Archäologische Zeitschrift*, 45, 327-338.
- Spector, Janet, and Whelan, Mary K. 1989. Incorporating gender into archaeology courses. In: Morgen, Sandra (ed.). *Gender and anthropology: Critical review for Research and Teaching*. Arlington: American Anthropological Association, 65-94.
- Tabet, Paola 1979. Les Mains, les outils, les armes. *L'Homme*, 19, 3-4, 5-61.
- Testart, Alain 1986. *Essai sur les fondements de la division sexuelle du travail chez les chasseurs-cueilleurs*. Cahiers de l'Homme, nouvelle série 25. Paris: École des hautes études en sciences sociales.
- Testart, Alain 2014. *L'amazone et la cuisinière. Anthropologie de la division sexuelle du travail*. Paris: Gallimard, Bibliothèque des Sciences humaines.
- Thévenet, Corinne 2010. *Des faits aux gestes. Des gestes aux sens ? Pratiques funéraires et société durant le Néolithique ancien en Bassin parisien*. [Thèse de troisième cycle, Université de Paris I]. Paris.
- Thomas, Louis-Vincent 1976. *Anthropologie de la mort*. Bibliothèque scientifique. Paris: Payot.
- Tixier, Jacques, Roche, Hélène, and Inizan, Marie-Louise, 1980. *Préhistoire de la pierre taillée; 1: terminologie et technologie*. Valbonne: CREP.
- van Gijn, Annelou 2010. *Flint in Focus: Lithic Biographies in the Neolithic and Bronze Age*. Leiden: Sidestone.
- Wünsch, Germà, and Gibaja Bao, Juan F. 2003. La nécropole néolithique de Sant Pau del Camp (Barcelona): interprétation socio-économique à partir du traitement statistique du mobilier des sépultures. In: Chambon, Philippe, and Leclerc, Jean (eds). *Les pratiques funéraires néolithiques avant 3500 av. J.-C, en France et dans les régions limitrophes*. Mémoire de la Société Préhistorique Française 33. Paris: Société Préhistorique Française, 115-123.
- Zimmermann, Andreas 1995. *Austauschsysteme von Silexartefakten in der Bandkeramik Mitteleuropas*. Universitätsforschungen zur prähistorische Archäologie 26. Bonn: Habelt.
- Zvelebil, Marek, and Pettitt, Paul 2008. Human condition, life and death at an Early Neolithic Settlement: bioarchaeological analyses of the Vedrovice cemetery and their biosocial implications for the Spread of Agriculture in Central Europe. *Anthropologie*, 46, 2-3, 195-218.

Labour organisation between horticulture and agriculture. Two separate worlds?

Wiebke Kirleis

Abstract

This paper discusses the organisation of labour between horticulture and agriculture in the southwestern Baltic region in the Neolithic Funnel Beaker period on the basis of selected archaeobotanical, archaeological, and ethnographic data. The beginning of the Neolithic in general is the time period of the establishment of farming, a new economic strategy with far-reaching sociocultural implications. For the south-western Baltic region, a gradual establishment of the Neolithic plant economy by Funnel Beaker groups is envisaged, involving diverse subsistence strategies, including intensive and extensive farming practices as well as the gathering of plants. In particular, the technological innovation of the ard, a simple plough used to scratch the soil before seeding, is considered to have revolutionised arable farming. Its initial implementation in the course of the late Early Neolithic, around 3650 BCE, and its combination with animal traction, which started to occur on a regular basis in the Middle Neolithic, around 3300 BCE, led to sustainable changes in agricultural techniques. This paper discusses if and to what extent this technological innovation had an impact on the social fabric of Neolithic society, with emphasis on potentially gendered specialisation of labour.

Keywords: *Funnel Beaker Neolithic, SW Baltic region, plant economy, labour organisation, gender*

Introduction

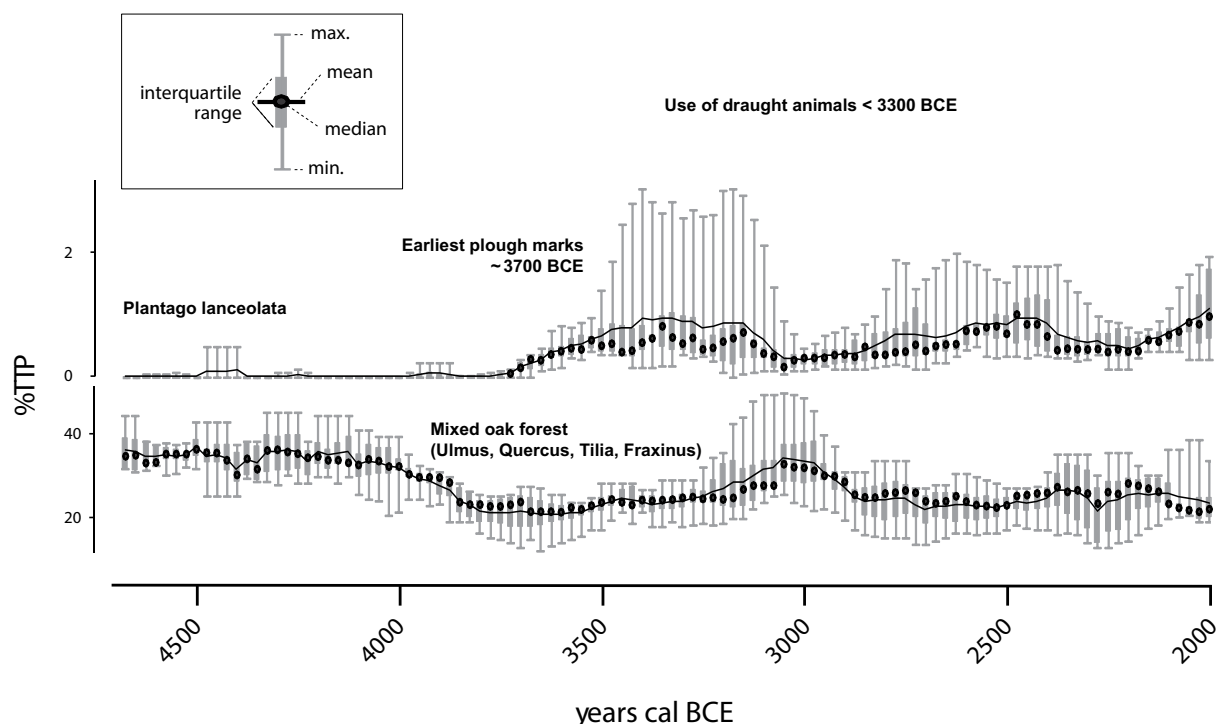
The transformation from Mesolithic to Neolithic lifeways is a hotly debated topic in European archaeology. The focus is on abrupt societal and economic shifts, be it the onset of sedentism, of ceramic production, or of farming (Gronenborn 2007; Schier 2009; Fowler *et al.* 2015; Harris and Hillman 1989). Arguments against a universal

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and synchronic adaptation of domesticates have been a focal point in debates on the Mesolithic-Neolithic transition in the British Isles (e.g. Piggott 1954; Thomas 1991; 2003). On a wider geographic scale, it has been shown that there is no single mode of implementation of Neolithisation (e.g. Denham *et al.* 2007; Breunig and Neumann 2002; Barker and Janowski 2011). To gain an informed understanding of how major transformations have shaped Neolithic societies and vice versa, and of how transformations were brought into practice, it may help to critically assess concepts and theories on labour organisation from social archaeology, feminist archaeology, anthropology, and ethnology. Until recently, gender constructions in archaeological and anthropological theory building, for example those of Marshall Sahlins (1963), were often based on 19th-century dualistic ascriptions to men and women. These constructions were subsequently continued with Andrew Sherratt's (1981) concept of 'male agriculture'. Only in the 1980s and 1990s was the focus shifted, by feminists, to female matters (e.g. Ehrenberg 1989; Conkey and Spector 1984). However, their works barely influenced mainstream archaeology. Recent studies by Eric Smith *et al.* (2010) on inequality and wealth transmission of hunter-gatherers, horticulturalists, and agriculturalists add a new perspective to gain a better understanding of power relations in past societies. Here, I critically evaluate some of the concepts on Neolithisation and early agriculture with respect to the aspect of plant economy by asking the following questions: in prehistory, is there a strict evolutionary development from intensive to extensive agriculture, or vice versa? Are changes in early arable practices and technological innovations in the field of agriculture accompanied by new ways of organising labour? Who are the actors? Who is involved in which task? Are the different tasks gendered? And how can we identify gendered tasks in the archaeological record? Do ethno-archaeological studies help to gain an understanding of how things worked out in the past?

The focus of this paper is the plant economy and, in particular, the possible social organisation of plant food gathering and crop cultivation in the Funnel Beaker Neolithic in the south-western Baltic region in the 4th mill. BCE (Kirleis *et al.* 2012; Kirleis and Fischer 2014). The paper is centred around the following question: Can transformations in plant use patterns be linked with and explained by aspects of

Figure 1. Diachronic perspective from pollen analyses on opening up of the woodland and the onset of farming, in the form of regional average curves (% of total terrestrial pollen, TTP) for ribwort plantain *Plantago lanceolata* as secondary anthropogenic indicator and mixed-oak forest for eastern Schleswig-Holstein and Western Mecklenburg, Germany (Feeser and Dörfler 2015).



gendered labour organisation in plant use and crop cultivation? *Gender* is defined here as a social construct that is maintained and negotiated through material culture. One dimension of gender as practice is the extent to which enactments or performances become involved with the distribution of power. Here, objects have the ability to link to and transgress contexts (to represent tradition and link past actions, meanings, events, and people with the present). A gendered meaning of objects can be analysed within the objects' context of action and identify the presence of power relations (Sørensen 2000). The next step is to discuss, based on these considerations, what gender aspects are ascribed to specific tools for crop cultivation and for related tillage techniques, and how such tools and techniques fit into their context of action. The timeline and region addressed here is the Neolithic of the south-western Baltic, and the focus is on plant use, divided into three main activities: plant gathering and intensive and extensive crop cultivation. It is crucial here not only to overcome Ester Boserup's (1965) evolutionary view on farming systems as moving from extensive to intensive in a unidirectional sequence, but also to understand extensive and intensive forms of cultivation as different options, rather than stages in an evolutionary ascending order (van der Veen 2005). Assumptions presented here for the Funnel Beaker groups in the south-western Baltic are based on an empirical dataset that relies on archaeological plant remains, tools, and features as the main proxies.

An archaeobotanical perspective on the stepwise establishment of human landscapes in the northern Neolithic

Mesolithic hunter-fisher-gatherers prevailed in the south-western Baltic region until the late 5th millennium BCE (Kabaciński *et al.* 2015). It is only around 4100/4000 BCE that a Neolithisation is observed with the occurrence of permanent settlements, intensive ceramic production, and an economy based on agriculture (Müller 2011a). The plant economy of the Neolithic Funnel Beaker groups in the south-western Baltic is approached here through archaeobotanical investigations on macro- and micro-botanical remains from anthropogenic and natural archives. The establishment of the cultural landscape is reflected as an opening up of the woodland, accompanied by the occurrence of anthropogenic indicators, such as crop and weed species, in the pollen records. A regional signal is inferred from a combination of pollen records from eastern Schleswig-Holstein and Western Mecklenburg, Germany (Fig. 1; Feeser and Dörfler 2015). A gradual opening of the woodland can be observed in the pollen record as the mixed-oak forest pollen curve declines at the onset of the Early Neolithic, around 4100/4000 BCE. The pollen core taken from the bottom of Lake Belau shows an intensive peak in the curve for microscopic charcoal particles in the Early Neolithic, proving that in the immediate surroundings of the lake the first opening up of the woodland was triggered by the use of fire (Dörfler *et al.* 2012; Feeser *et al.* 2012). Toward the late Early to Middle Neolithic, from c. 3700 BCE onwards, the landscape becomes even more open, as shown by the continued decline of the pollen curve of mixed-oak forest. It is now accompanied by a prominent increase of indicators for crop cultivation, such as ribwort plantain *Plantago lanceolata*, and also a regular occurrence of cereal pollen. Ribwort plantain is understood here as persistent perennial weed in arable plots. As a secondary anthropogenic indicator, it suggests extensive cultivation and the possible existence of fallow land (Fig. 2).

The Funnel Beaker macrobotanical crop assemblage comprises cereals – mainly emmer and barley – and oil plants (Kirleis *et al.* 2012; Brozio *et al.* 2019; Kirleis 2019). Throughout the Neolithic, crop cultivation is accompanied by the gathering of plant foods (Kirleis 2018). Archaeobotanical data from 21 northern German Neolithic

Archaeological period	4000-3901 ENa	3900-3801 ENa	3800-3701 ENiB	3700-3601 ENiB	3600-3501 ENiB	3500-3401 EN II	3400-3301 EN II	3300-3201 MN Ia	3200-3101 MN Ib	3100-3001 MN II	3000-2901 MN III/IV	2900-2801 MN V/VN1	2800-2701 VN 1	2700-2601 VN 1	2600-2501 VN 2	2500-2401 VN 2	2400-2301 VN 3	2300-2201 VN 3	2200-2101 LN	2100-2001 LN	2001-1901 LN	1900-1801 LN	1800-1701 LN	
<i>Polygonum persicaria</i>			0.80	0.80	0.80	0.80	0.80	4.50	6.50	24.50	2.50	0.50							18.40	18.40				
<i>Bromus arvensis</i>					0.30	0.30	0.30	1.80	1.80	95.00	1.00	1.00						9.20	18.40	18.40	9.40	0.40	0.40	
<i>Bromus secalinus</i>								4.00	4.00	46.50	11.50	4.50						42.80	85.70	85.70	44.30	3.10	3.10	
<i>Polygonum convolvulus</i>			0.80	0.80	0.80	3.80	3.80	21.00	23.00	27.70	4.20	4.20						1.20	2.40	2.40	1.40	0.40	0.40	
<i>Corylus avellana</i>	0.60	0.60	17.90	17.90	17.90	485.80	485.80	475.70	480.70	779.90	32.50	345.50	8.10	8.10	7.20	3.80	0.50	2.00	3.40	3.40	3.50	3.00	3.00	
<i>Malus sylvestris/domestica</i>								4.30	4.30	1376.30	7.30	4.30												
cf. <i>Prunus</i> spec.									1.00															
<i>Quercus</i> spec.																		0.50	1.10	1.10	1.10	1.10	1.10	1.10
<i>Rubus fruticosus</i> agg.			0.53	0.53	0.53	7.20	7.20	11.10	11.10	14.70	4.00	5.00												
<i>Rubus idaeus</i>						1.50	1.50	5.00	5.00	15.50	1.80	0.80						0.10	0.20	0.20	0.20	0.20	0.20	0.20
<i>Rubus</i> spec.						0.80	0.80	0.30	0.30	5.00														
cf. <i>Rubus</i> spec.											1.00													
<i>Sambucus</i> spec.									0.50	0.50														
<i>Avena</i> spec.									1.00	1.00									0.10	0.20	0.20	0.20	0.20	0.20
Brassicaceae			0.20	0.20	0.20	1.00	1.00	0.30	0.30	1.00														
<i>Bromus</i> spec.						0.30	0.30	3.50	3.50	9.70	3.00	2.00						44.80	89.50	89.50	45.90	7.00	7.00	
<i>Lathyrus/Pisum/Vicia</i>																								
<i>Polygonum lapathifolium/persicaria</i>										2.00														
<i>Bromus secalinus</i> -type	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.60	0.60	0.60	0.60	0.60												
<i>Corylus</i>								0.30	0.30	0.30														
<i>Malus</i> spec.								1.00	1.00	1.00	1.00	1.00												
<i>Polygonum lapathifolium</i> agg.								0.70	0.70	3.70														
<i>Bromus hordeaceus</i> (ssp. <i>hordeaceus</i>)								1.30	1.30	2.30	1.30	1.30												
<i>Fragaria vesca</i>						0.30	0.30	0.30	0.30															
<i>Lapsana communis</i>										1.00														
<i>Chenopodium album</i>			2.60	2.60	2.60	3.40	3.40	29.70	30.70	1388.00	57.30	18.30						0.10	0.20	0.20	0.20	0.20	0.20	0.20
<i>Echinochloa crus-galli</i>								2.60	2.60	8.60	2.30	2.30												
Sum gathered plants	0.90	0.90	23.13	23.13	23.13	505.50	505.50	569.50	579.50	3804.30	131.30	391.30	8.10	8.10	7.20	3.80	0.50	102.30	204.10	204.10	107.90	16.00	16.00	16.00

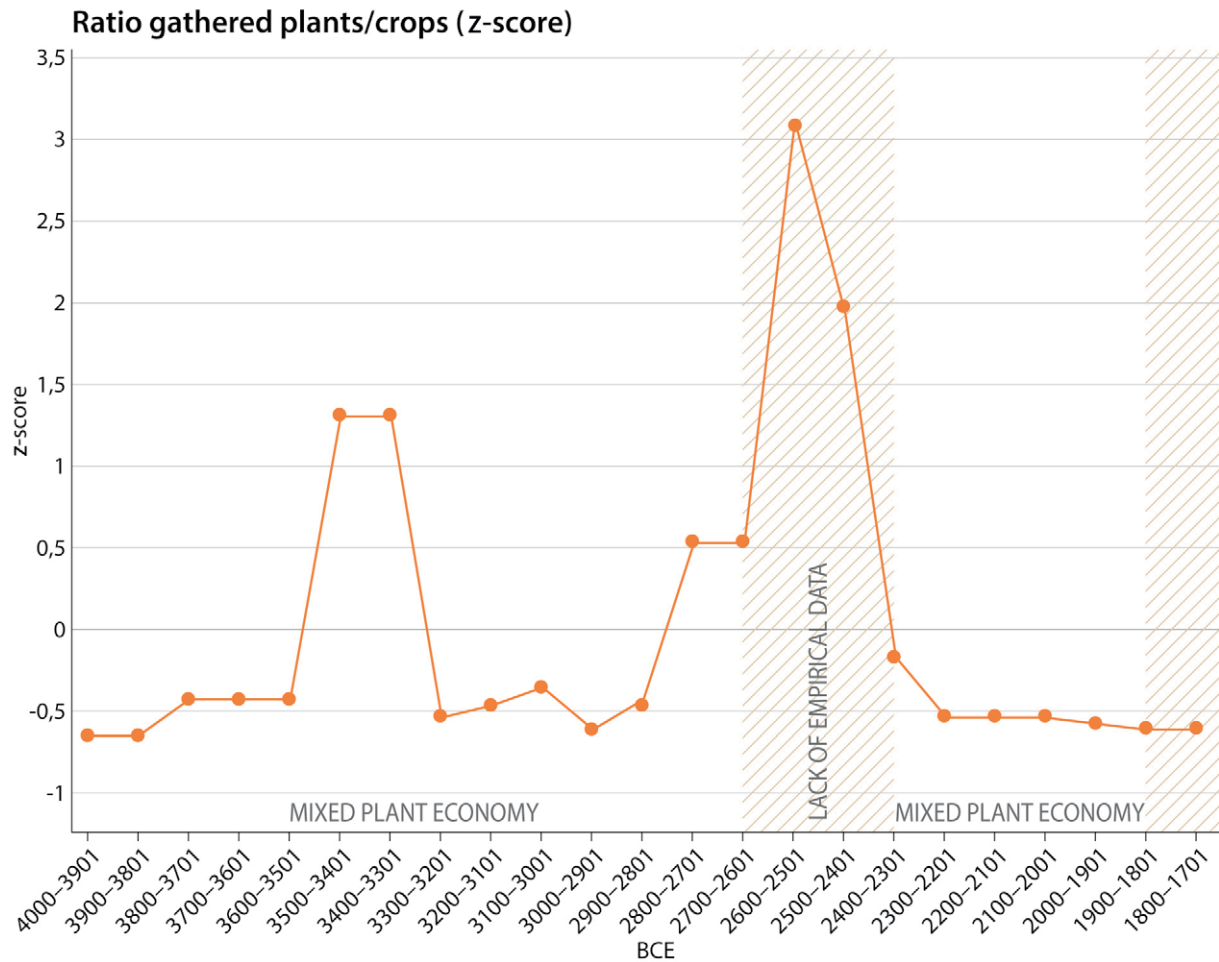
Seeds / fruits

Archaeological period	ENIA	ENIA	ENIA	ENIB	ENII	ENII	MNIa	MNIb	MNI	MNI II	MNI III	MNI V	YN 1	YN 1	YN 2	YN 2	YN 3	YN 3	LN	LN	LN	LN	LN	LN	LN	LN	LN	LN	
Archaeological dating (BCE)	4000-3901	3900-3801	3800-3701	3700-3601	3600-3501	3500-3401	3400-3301	3300-3201	3200-3101	3100-3001	3000-2901	2900-2801	2800-2701	2700-2601	2600-2501	2500-2401	2400-2301	2300-2201	2200-2101	2100-2001	2001-1901	1900-1801	1800-1701						
Cerealia indet.							20.50	20.50	229.60	25.30																			
<i>Triticum cf. spelta</i>							1.30	1.30	1.30	1.30																			
<i>Triticum monococcum</i>							37.90	37.90	50.90	14.20	4.20																		
<i>Triticum monococcum/dicoccum</i>							2.30	2.30	5.30																				
<i>Triticum dicoccum</i>	13.00	13.00	21.50	21.50	21.50	121.90	1498.10	950.10	15779.10	1359.00	1084.00									1936.00	1047.90								176.80
<i>Hordeum vulgare</i> var. <i>nudum</i>												4.00																	
<i>Triticum aestivum</i> s.l.							0.30	0.30	11.30	0.30	0.30	4.30																	
<i>Triticum durum</i> s.str.											2.00																		0.40
<i>Triticum</i> spec.										10.00																			
<i>Hordeum vulgare</i>	0.20	0.20	0.20	0.20	0.20	1.20	180.50	180.50	505.00	180.00	271.00									3.60	3.30								2.90
Cerealia indet.							37.80	37.80	137.00	13582.20	3057.10	2245.10								938.10	606.40								274.60
<i>Hordeum vulgare</i> , hulled							0.40	0.40	0.40	132.20	132.50									33.40	30.00								26.60
<i>Hordeum vulgare</i> var. <i>nudum</i> free-threshing	226.00	226.00	231.00	231.00	231.00	540.80	2057.00	2072.30	5104.70	1315.60	1243.60									340.70	282.30							223.40	
<i>Triticum aestivum</i> s.l.							1.50	3.50	12.50	0.80	2.80									522.90	288.70							54.60	
<i>Triticum cf. spelta</i>																													
<i>Triticum compactum</i> s.str.							3.30	3.30	3.30	3.30	3.30																		
<i>Triticum dicoccum</i>	27.30	27.30	34.10	34.10	34.10	72.20	2833.00	2841.00	6057.00	1546.70	1248.40									1718.40	1013.30							308.30	
<i>Triticum monococcum</i>							14.30	14.30	24.30	9.30	8.30									45.40	24.90							5.40	
<i>Triticum</i> spec.							4.00	28.00	36.00	23.30	21.30																		
<i>Linum usitatissimum</i>							0.40	0.30	0.30	0.30	0.30																		
<i>Papaver somniferum</i>									1.00		2.00																		
Sum crops	266.50	266.50	328.20	328.20	328.20	887.20	18224.00	9855.00	41546.00	7667.70	6144.60									6575.70	4302.90							2049.50	

Table 1. Diachronic perspective (100-year slices) on the gathered plants and crops from 21 Neolithic sites in northern Germany. Absolute numbers of seeds and fruits (S/F) and threshing remains (TR) were calculated by application of the aoristic approach (Mischka 2004; Ratcliffe 2002). Spelt caryopses are accompanied by glume bases in the respective samples, thus proven. EN = Early Neolithic; MN = Middle Neolithic; YN = Younger Neolithic; LN = Late Neolithic.



*Figure 2. Modern-day extensive cultivation close to Kosel (Kr. Rendsburg-Eckernförde, Germany), showing an arable field dominated by ribwort plantain *Plantago lanceolata* after a fallow period of one year (above), and zooming in (below) (photographs: Agnes Heitmann, Kiel).*



sites (as listed and detailed in Brozio *et al.* 2019) were transformed into 100-year time slices by application of an aoristic approach (Mischka 2004; Ratcliffe 2002). To ensure a high degree of representativeness, the data incorporated satisfies the basic criteria of having (a) absolute dates assigned to one or more Neolithic phases and (b) a minimum number of 25 cereal grains from at least three features. A broad definition is used for the gathered plants, to include common hazel and crab apple as well as wild plants and weedy herbaceous plants, such as white goosefoot, that provide edible fruits and seeds (Table 1). The relevance of gathered plants in northern Germany in a diachronic Neolithic perspective is depicted as z-scores of the ratio of gathered plants to crops (Fig. 3).

The graph suggests that the subsistence economy involved a mixed plant economy, including components of plant gathering and of cultivation, throughout the Neolithic (Fig. 3). These two strategies of plant use co-existed, but to a variable extent. Interestingly, the phase of extensive crop cultivation between 3500 and 3300 BCE (Fig. 4) coincides with a phase of high relevance of gathered plants as indicated by high values therefor.

Archaeobotanical remains of arable weeds can be used as proxies for the different modes of arable practice: horticulture, and extensive agriculture. The weeds can be grouped into annual and perennial species. Annual weed species are predominant in horticulture, or intensive cultivation regimes with high labour input, whereas perennial weed species tend to prevail in extensive cultivation regimes with low labour input (Table 2; van der Veen 2005). Thus, it is possible to estimate labour input into arable plots based on the grouping of the weeds into

Figure 3. Graph of ratio of remains of gathered plants vs. crop plants in the south-western Baltic, 4100-1700 BCE (z-score standardisation based on ratios of absolute remains per 50-year slice) (graphics: Wiebke Kirleis and Karin Winter, Kiel).

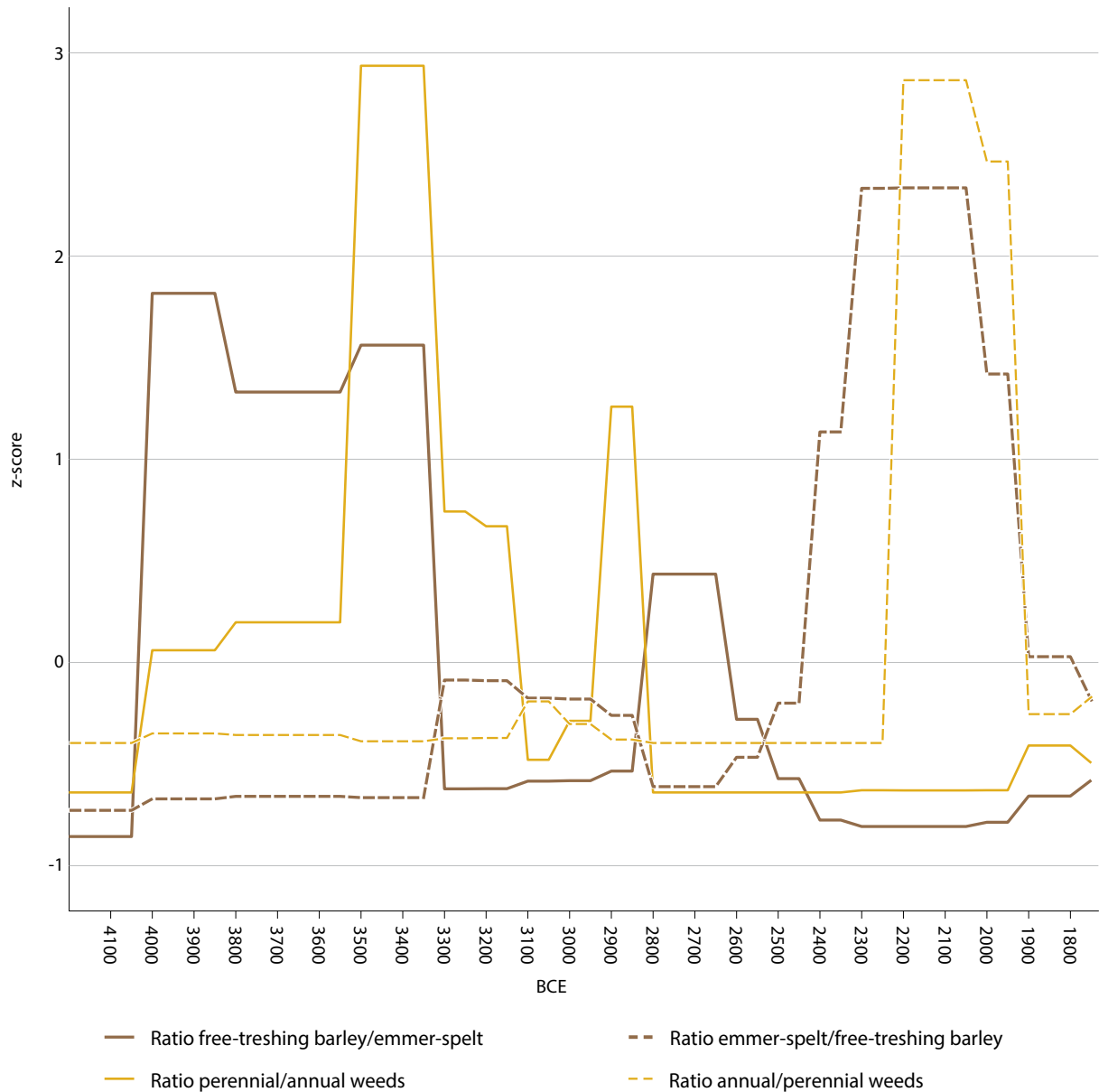
	Intensive arable farming	Extensive arable farming
Input per unit area	high	low
Return per unit area	high	low
Return per capita	low	high
Examples	small-scale arable farming, horticulture, gardening	large-scale cereal (mono-) cropping, shifting cultivation

Table 2. Definition of intensive vs. extensive crop growing (from van der Veen 2005).

annual and perennial species. The ratio of annual/perennial or perennial/annual weeds, respectively, can be used as a proxy for labour investment in crop growing. In addition, the occurrence of each weed group comprising the annual and the perennial species, in arable plots is correlated with variable degrees of disturbance, such as digging the soil, weeding, and so on, and thus each group is linked with a specific mode of arable practice.

To identify the modes of arable practice carried out, the same dataset and method were used to calculate the ratio of free-threshing barley to hulled wheats (*i.e.* emmer and spelt)¹ and compare it with the ratio of perennial to annual weed species. This results in a model in which different values of the two sets of ratios can be used to indicate intensive and extensive cultivation. To infer tendencies toward intensive vs. extensive cultivation, the ratios of emmer and spelt to free-threshing barley and annual to perennial weeds are used (Fig. 4), based on reliable data on cereal and weed seeds and fruits for the periods *c.* 4000-2800 and *c.* 2300-1900 BCE. These data show that free-threshing barley may have been grown extensively in the Early to Middle Neolithic (4000-2800 BCE). Emmer and annual weeds are present as well, showing that intensive crop growing was an add-on to the dominant extensive strategy. However, the ratio of emmer and spelt to free-threshing barley in the Younger to Late Neolithic (2300-1900 BCE) parallels the ratio of annual to perennial weeds, showing that intensive arable farming was the practice applied to the hulled wheats emmer and spelt in the Younger to Late Neolithic. From a methodological point of view, it is necessary to critically assess these data, because the Late Neolithic assemblages lack the tiny seeds and fruits that dominate the perennial species, which may indicate deposition of assemblages at a different stage of cereal processing, that is, after sieving of the crop to remove impurities (Fuller *et al.* 2014). But, since the big caryopses of annual species occur in both periods, it is most probable that the assemblages were not fully processed and prepared for food preparation, but rather represent an original absence of the tiny seeds in the crop. This said, it can be cautiously assumed that an intensive agricultural regime was possibly applied to emmer, and that intensive agriculture gained in importance when spelt entered the crop spectrum, in the Late Neolithic. In summary, during the course of the Neolithic, three phases can be identified with respect to the different modes of arable practice: an early phase with a domination of extensive cultivation (*c.* 4000-3300 BCE), a Middle Neolithic phase with both extensive and intensive cultivation (*c.* 3300-2800 BCE), and a Younger to Late Neolithic phase where intensive practices prevail (*c.* 2300-1900 BCE) (Brozio *et al.* 2019).

1 With free-threshing or naked cereals the grains are deliberately released from the ears during the threshing process. The storage unit of free-threshing cereals are the grains. Thus, food preparation starts with grain processing and does not account for extra labour input. However, under wet climate conditions, grain storages are easily infected by fungi. In contrast, the ears of hulled cereals when being threshed fall apart in the unit of grains still coated with the glumes. Thus, the storage unit are the hulled grains and food preparation has to start with dehusking. Food preparation thus accounts for extra labour input. Under wet climatic conditions the storage of the hulled cereal grains however is beneficial because the coated grains are less prone to fungus infections.



How can these changes in cereal production be explained? One important driver for the change is an innovation in tillage technology (e. g. Fries 1995). Therefore the answer may lie in which tools were used for preparing the soil and what the use of these different tools implies with respect to the intensity of cultivation.

Material culture related to crop growing: Digging stick, hoe, and ard

Following the division into intensive and extensive cultivation (following van der Veen 2005) with help of the archaeobotanical weed spectrum, specific archaeological artefacts can be related to each of these techniques. Intensive crop growing is carried out with the digging stick and the hoe, often as a collective activity (Fig. 5). Hoes and digging sticks are tools that are easy to handle, may serve multiple purposes, and belong to the basic equipment of any household. The main usage of

Figure 4. Graph of ratios of weed and cereal species in the charred plant assemblages as proxy records for intensive versus extensive agricultural practices in the south-western Baltic, 4100-1750 BCE (z-score standardisation based on ratios of absolute remains per 50-year slice) (after Brozio et al. 2019).

digging sticks and hoes is tillage. In the archaeological record, the tools as well as the traces of the use of digging sticks and hoes are rare. One example for the possible use of a digging stick was unearthed in a Swifterband context in the Netherlands dating to the second half of the 5th millennium BCE (Huisman and Raemaekers 2014).

Extensive crop cultivation is mainly carried out with the ard, a simple plough that scratches the soil before seeding. The ard is a technological invention of the 4th millennium BCE, with the earliest ard marks, found in Denmark, dating to about 3700 BCE (Sørensen and Karg 2014). For the northern Neolithic, ard marks are commonly preserved and identified, for example, below megalithic tombs that were erected between 3600 and 3200 BCE (Müller 2014). Clumps of cereal pollen found in situ below megalithic tombs in the furrows of the ard marks have been argued to indicate former arable plots (Andersen 1993). Zooarchaeological evidence for the use of animals in relation to the ard takes the form of specific bone traits, and these show that animals started to be used for traction on a regular basis in the Middle Neolithic, from 3300 BCE onwards (Johannsen 2013).

With respect to labour organisation, there are clear differences in the application of the two introduced arable tool types. In contrast to the hoe or digging stick, the ard is a large and bulky tool, in particular if it is combined with draught animals. The ard cannot be used as part of collective activity. It has to be handled by one individual, who is skilled in steering the bulky ard and trained in dealing with the draught animals (Fig. 6).

While the hoe can be associated with the collective activity of tilling, the ard makes the individual the focus of crop cultivation. Janine Fries (1995) interprets the ard as a tool that initiates an early division of labour in agriculture. She argues that the person responsible for ploughing is the patriarch, perceived as the breadwinner of a nuclear family. Based, among other things, on the observation that Funnel Beaker house plans are small-sized compared with, for example, those of the Linearbandkeramik groups, Fries (1995, 159 ff.) assumes that the establishment of the nuclear family as the main economic unit is rooted in the Funnel Beaker period, though not yet fully developed. She considers that the ownership of land (and possibly the ard) may have remained communal and that societal cohesion was maintained by large-scale cooperative and collective activities in the ritual sphere, for example, the erection of megalithic tombs.

Excursus: Gender in (archaeological) knowledge production

Diving into earlier theoretical archaeological studies, we see that basic assumptions on the organisation and division of labour in small-scale, egalitarian societies rely on sex and age as the main criteria. However, these assumptions often underlay contextual or supposed analytical aspects that ascribe certain activities to specific gendered groups and thus may be heavily biased. Even Marxist concepts of social organisation are often built upon a clear labour division according to sex (*e.g.* Sahlins 1963). Women's participation is assumed to be restricted for biological reasons relating to (a) gestation and lactation, because, it is argued, adult women are primarily responsible for nourishing and socialising infants and small children, although various others could assist with these tasks, and (b) the physical strength of males and variable hormone levels between males and females, because, it is argued, men are primarily responsible for safeguarding the domestic space and taking on tasks that require sudden bursts of energy, such as running after game (Watson and Kennedy 1998). This construct of ideas mirrors stereotypes of the 18th and 19th centuries, in which women were supposed to carry out domestic activities, while men were responsible for the external world, exploiting mobile resources and



Figure 5. Women hoeing their vegetable plots in Zimbabwe, 2002 (photograph: Chad Ehlers, picture-alliance/dpa).



Figure 6. Ploughing in Rajasthan, India (photograph: Gerlind Schneider, Brot für die Welt, Berlin).

defending the homestead. Such ascriptions were taken up in theoretical approaches to explain subsistence economies in cultural anthropology and to explain Neolithisation, finding expression, for example, in something termed ‘male agriculture’ in the concept of Sherratt’s secondary products revolution (Sherratt 1981). A prevailing attribution in ethnographic studies is that collective hoeing of cultivated plots often is assigned to groups of females.

Does this scenario of horticulture or intensive crop cultivation with a hoe then involve a collective activity – and one that can be labelled ‘female horticulture’? And can this scenario be opposed to the scenario of extensive agriculture, by use of the ard, under the responsibility of the individual serving the nuclear family, labelled ‘male agriculture’? I argue that this simple, dualistic construction of ideas based upon outdated stereotypes is hardly helpful to gain a holistic understanding of Neolithic societies and economies.

Mainstream archaeology was confronted with new research questions when feminist archaeologists brought the role of women and of female activities into focus (e.g. Ehrenberg 1989; Conkey and Spector 1984). In a study on the development of horticulture in the eastern woodlands of North America, women were declared to have been the promoters of plant domestication. The females were identified as conscious actors and innovative motors who furthered the cultivation of sunflower (*Helianthus annuus*) and sumpweed (*Iva annua*) outside their natural ranges by the first millennium BCE and made them full horticultural crops in North America via selection of specific traits (Watson and Kennedy 1998).

A more recent palaeo-ethnobotanical study on firewood collection and power relations in Late Classic Maya communities (Morehart and Helmke 2008) stresses the high degree of variability in labour organisation with respect to the plant economy. In contemporary Lakantun Maya communities, there is a broad range of responsibilities for firewood collection. Women, girls, and boys are mentioned in that context, although men are in charge of firewood collection where their ‘individual male kitchen’ is concerned. Further, agriculture and plant collection are deeply interwoven: the entire family jointly gathers firewood in tandem with agricultural activities, on the walk back from the arable field. For specific purposes, there are associations with particular social groups, but overall there exists a high degree of variability in the ascription of responsibilities for the different activities related to the plant economy (Morehart and Helmke 2008).

An analytical view on Neolithic gender relations was recently provided by John Robb and Oliver Harris (2017), who propose a ‘*contextual gender model*’. They make the point that gender in the Neolithic was qualitatively different from modern ascriptions, since relationships were defined through contextualised activities and practices rather than through personal identities. They contrast the Neolithic ‘contextual gender’ with the binary system, with stable, lifelong gendered individual identities, that emerges only from the Bronze Age onwards. For the Neolithic, they note that key icons of personal identities in burial or art are rare; that the evidence of personal identity mainly relates to differences in daily routines; and that gender, as this abstract classificatory principle, is not anchored in specific sexed bodies. Instead, they suggest, it is objects and practices in particular contexts or dimensions that can be symbolic of gender. Thus, in the Neolithic social sphere, the *doing* is the main identifier of a gendered being, instead of the *being*.

Extensive and intensive crop cultivation: Changing power relations in past societies

Neolithic cereal production included both extensive and intensive arable practices. The introduction of the ard and animal traction furthered extensive cultivation

strategies, as is suggested by the archaeobotanical record. This new agricultural strategy may have had far-reaching sociocultural implications, since the individual with the highly specialised knowledge and access to trained draught animals and to the ard was empowered as an individual operator of the team of cattle/oxen and ard. Such exposition and empowerment of the individual is one possible expression of patriarchal structures. This may have set the stage for a social stratification of Neolithic society in the north, even though extensive agriculture was still complemented by intensive horticulture as a collective cultivation strategy.

In any society or societal segment, gender relations are deeply interrelated with the distribution of power and wealth. Socioeconomic analyses on inequality in (premodern) societies representing different systems of production (hunter-gatherers, pastoralists, horticulturalists, and agriculturalists) may tell us how power relations changed in past societies, and how they changed on different scales. Three wealth classes are of importance for individual populations' wealth: embodied wealth (knowledge + skill), network/relational wealth, and material wealth (Fig. 7). Interestingly, horticulturalists (as well as hunter-gatherers) are identified as societies where embodied and relational wealth are the most important, while with agriculturalists, the material wealth is the most important (Smith *et al.* 2010).

These observations can, with caution, be linked with the differentiation between intensive and extensive arable farming. While return rates per capita are low for the kind of intensive farming commonly practiced by horticulturalists, they are high for the kind of extensive farming strategies followed by agriculturalists (Table 2). When we break this down to the materiality and the practices of farming, we see that the collective horticultural practice of hoeing can serve as one expression of embodied and relational wealth, while the highly individualised practice of ploughing the ground with the use of an ard and animal traction may be linked with a greater importance of material wealth.

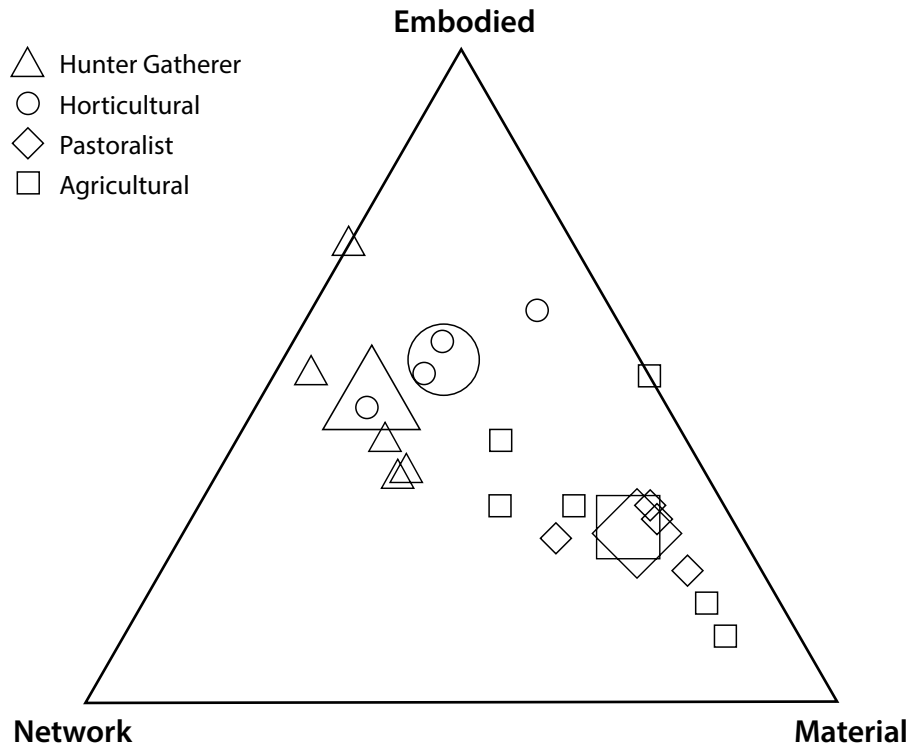


Figure 7. Relative importance of wealth classes for individual populations, averaged for each production system (after Smith *et al.* 2010).

Discussion and Conclusions

A model is suggested for the Neolithic plant economy in northern Germany whereby multiple plant use practices co-existed to a variable extent. The model discards evolutionary developments. It identifies farming and the gathering of plants as the main plant food-related activities and subdivides farming into extensive and intensive cultivation strategies. Archaeobotanical data indicate that extensive cultivation was accompanied by plant gathering and intensive crop cultivation bringing together diverse farming and foraging activities, the latter inscribed in the common memory possibly going as far back as to Mesolithic traditions. The Neolithic plant economy was therefore organised alongside a variety of daily routines. The introduction of the ard in the 4th millennium BCE enhanced extensive farming activities. This technological innovation would have resulted in the emergence of individuals with highly specialised knowledge and access to trained draught animals and to the ard, which might be in either communal or individual ownership. Thus, in the segment of extensive crop cultivation, a main social change occurs with the empowerment of the individual operator of the team of cattle/oxen and ard. This adds specialisation and potential hierarchy as new elements of labour organisation into the plant economy. With the implementation of the ard as a technological innovation, the social sphere of cereal production acquires a new facet. Collective and communal activities that characterise intensive cultivation or horticulture and plant gathering continue, but in the segment of extensive agriculture, with its focus on the individual person handling the ard and draught animals, the first notions of social and potentially gendered stratification arise. Likely accompanying the increase in surplus production, an increase in population, new social relations, and networks that allow for copper to be imported from the south-east and the Black Sea around 3700 BCE may account for the establishment of new power relations in society. These relations can be interpreted as the first beginnings of inequality, with a strong and public focus on particular individuals (Price and Gebauer 2017).

The technological innovation of the ard was possibly one important driver for social change bringing the activity of ploughing – as carried out by the individual – into a gender stratification context in the narrow socioeconomic segment of extensive agriculture. But societal spheres other than extensive cereal cultivation continued to further collective activity, be it in the other sectors of the plant economy, such as horticulture and plant gathering; in the change in settlement organisation from single farmsteads to villages; or in the building of megalithic tombs (Müller 2011b). I think it is unlikely that a change in just one segment of the plant economy could have been sufficiently far-reaching and rapid to have the power to drastically overturn the social organisation of an entire community. The emphasis on the individual, however, encourages the introduction of hierarchical patriarchal structures. To conclude: Northern Neolithic plant-based subsistence strategies did not consist of two separate, hierarchical worlds of either horticulture or agriculture. On the contrary, they encompassed a diversity of plant food acquisition strategies – plant gathering, horticulture, and extensive agriculture – which persisted side by side, in variable proportions, and which further ensured stability and security in plant food access. This diversity also allowed for the persistence of egalitarian structures and the involvement of different societal and age groups, offering options for the participation of women, men, and children, youngsters, adults, and elderly people. This observation is in line with the assumption by Robb and Harris (2017, 14) that *‘there is no visible standard, consensus, or consistently redundant pattern in representing or enacting gender in the Neolithic. What we observe is heterogeneity.’*

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References

- Andersen, Svend Th. 1993. Early and Middle Neolithic agriculture in Denmark: pollen spectra from soils in burial mounds of the Funnel Beaker Culture. *Journal of European Archaeology*, 1, 153-180.
- Barker, Graeme, and Janowski, Monica 2011 (eds). *Why cultivate? Anthropological and archaeological approaches to foraging-farming transitions in Southeast Asia*. Cambridge: McDonald Institute for Archaeological Research.
- Boserup, Ester 1965 (ed.). *The Conditions of Agricultural Growth. The Economics of Agrarian Change under Population Pressure*. London: Allen & Unwin.
- Brozio, Jan Piet, Müller, Johannes, Furholt, Martin, Kirleis, Wiebke, Dreibrodt, Stefan, Feeser, Ingo, Dörfler, Walter, Weinelt, Mara, Filipović, Dragana, Raese, Hendrik, and Bock, Anna-Lena 2019. Monuments and Economies: What Drove their Variability in the Middle Holocene Neolithic? *The Holocene*, 29. doi: <10.1177/0959683619857227> e-published: 25 June 2019.
- Breunig, Peter, and Neumann, Katharina 2002. From Hunters and Gatherers to Food Producers: New Archaeological and Archaeobotanical Evidence from the West African Sahel. In: Hassan, Fekri A. (ed.). *Droughts, Food and Culture*. Boston, MA: Springer, 123-155.
- Conkey, Margaret, and Spector, Janet D. 1984. Archaeology and the Study of Gender. *Advances in Archaeological Method and Theory*, 7, 1-38.
- Denham, Timothy P., Iriarte, Jose, and Vrydaghs, Luc 2007 (eds). *Rethinking Agriculture. Archaeological and Ethnoarchaeological Perspectives*. One World Archaeology 51. Walnut Creek: Left Coast.
- Dörfler, Walter, Feeser, Ingo, van den Bogaard, Christel, Dreibrodt, Stefan, Erlenkeuser, Helmut, Kleinmann, Angelika, Merkt, Josef, and Wiethold, Julian 2012. A high-quality annually laminated sequence from Lake Belau, Northern Germany: Revised chronology and its implications for palynological and tephrochronological studies. *The Holocene*, 22, 12, 1413-1426.
- Ehrenberg, Margaret 1989. *Women in prehistory*. London: British Museum.
- Feeser, Ingo, Dörfler, Walter, Averdieck, Fritz-Rudolf, and Wiethold, Julian 2012. New insight into regional and local land-use and vegetation patterns in eastern Schleswig-Holstein during the Neolithic. In: Hinz, Martin, and Müller, Johannes (eds). *Siedlung, Grabenwerk, Großsteingrab. Studien zu Gesellschaft, Wirtschaft und Umwelt der Trichterbechergruppen im nördlichen Mitteleuropa*. Frühe Monumentalität und Soziale Differenzierung 2. Bonn: Habelt, 159-190.
- Feeser, Ingo, and Dörfler, Walter 2015. The Early Neolithic in pollen diagrams from eastern Schleswig-Holstein and western Mecklenburg – evidence for a 1000 years cultural adaptive cycle? In: Kabaciński, Jacek, Hartz, Sönke, Raemaekers, Daan C. M., and Terberger, Thomas (eds). *The Dąbki site in Pomerania and the Neolithisation of the North-European lowlands (c. 5000-3000 cal BC)*. Archäologie im Ostseeraum 8. Rahden/Westfalen: Leidorf, 291-306.
- Fowler, Chris, Harding, Jan, and Hofmann, Daniela 2015. An Introduction. In: Fowler, Chris, Harding, Jan, and Hofmann, Daniela (eds). *The Oxford Handbook of Neolithic Europe*. Oxford: Oxford University Press, 3-26.

- Fries, Janine C. 1995. *Vor- und frühgeschichtliche Agrartechnik auf den Britischen Inseln und dem Kontinent. Eine vergleichende Studie*. Internationale Archäologie 26. Rahden/Westfalen: Leidorf.
- Fuller, Dorian Q., Stevens, Chris, and McClatchie, Meriel 2014. Routine activities, tertiary refuse, and labor organization: Social inferences from everyday archaeobotany. In: Madella, Marco, Lancelotti, Carla, and Savard, Manon (eds). *Ancient Plants and People: Contemporary Trends in Archaeobotany*. Tucson: University of Arizona Press, 174-217.
- Gronenborn, Detlef 2007. Beyond the models: Neolithisation in Central Europe. In: Whittle, Alasdair W.R. and Cummings, Vicki (eds). *Going over: the Mesolithic-neolithic transition in north-west Europe*. Proceedings of the British Academy 144. Oxford: Oxford University Press, 73-98.
- Harris, David R. and Hillman, Gordon C. 1989 (eds). *Foraging and farming: the evolution of plant exploitation*. One World Archaeology 13. London: Unwin Hyman.
- Huisman, Dirk J., and Raemaekers, Daan C. M. 2014. Systematic cultivation of the Swifterbant wetlands (The Netherlands). Evidence from Neolithic tillage marks (c. 4300-4000 cal. BC). *Journal of Archaeological Science*, 49, 572-584.
- Johannsen, Niels N. 2013. Draught cattle and the South Scandinavian economies of the 4th millennium BC. *Environmental Archaeology*, 11, 35-48.
- Kabaciński, Jacek, Hartz, Sönke, Raemaekers, Daan C. M., and Terberger, Thomas 2015 (eds). *The Dąbki site in Pomerania and the neolithisation of the North-European lowlands (c. 5000-3000 cal BC)*. Archäologie im Ostseeraum 8. Rahden/Westfalen: Leidorf.
- Kirleis, Wiebke, Kloß, Stefanie, Kroll, Helmut, and Müller, Johannes 2012. Crop growing and gathering in the northern German Neolithic: a review supplemented by first new results. *Vegetation History and Archaeobotany*, 21, 3, 221-242.
- Kirleis, Wiebke, and Fischer, Elske 2014. Neolithic cultivation of tetraploid free threshing wheat in Denmark and Northern Germany: implications for crop diversity and societal dynamics of the Funnel Beaker Culture. *Vegetation History and Archaeobotany*, 23, 81-96.
- Kirleis, Wiebke 2018. The cultural significance of plants. In: Haug, Annette, Käppel, Lutz and Müller, Johannes (eds). *Past Landscapes: The Dynamics of Interaction between Society, Landscape, and Culture*. Leiden: Sidestone, 169-182.
- Kirleis, Wiebke 2019. *Atlas of Neolithic plant remains from northern central Europe*. Groningen: Barkhuis Publishing.
- Mischka, Doris 2004. Aoristische Analyse in der Archäologie. *Archäologische Informationen*, 27, 233-243.
- Morehart, Christopher T., and Helmke, Christophe G. B. 2008. Situating power and locating knowledge: A palaeoethnobotanical perspective on Late Classic Maya gender and social relations. In: Robin, Cynthia, and Brumfiel, Elizabeth M. (eds). *Gender, households, and societies: unraveling the threads of the past and the present*. Archaeological Papers of the American Anthropological Association 18. Malden, MA: Wiley-Blackwell, 60-75.
- Müller, Johannes 2011a. *Megaliths and Funnel Beakers: Societies in Change 4100-2700 BC*. Kroon-Vordacht 33. Amsterdam: Stichting Nederlands Museum voor Anthropologie en Praehistorie.
- Müller, Johannes 2011b. Ritual Cooperation and Ritual Collectivity: The social structure of the middle and younger Funnel Beaker North Group (3500-2800 BC). In: Furholt, Martin, Lüth, Friedrich, and Müller, Johannes (eds). *Megaliths and Identities. Early monuments and Neolithic societies from the Atlantic to the Baltic: 3rd European Megalithic Studies Group Meeting, 13th – 15th of May 2010 at Kiel*. Frühe Monumentalität und soziale Differenzierung 1. Bonn: Habelt, 273-284.

- Müller, Johannes 2014. 4100-2700 B.C.: Monuments and Ideologies in the Neolithic Landscape. In: Osborne, J. F. (ed.). *Approaching monumentality in archaeology*. IEMA proceedings 3 Albany: State University of New York Press, 181-217.
- Piggott, Stuart 1954. *The Neolithic Cultures of the British Isles. A Study of the Stone-using Agricultural Communities of Britain in the Second Millennium B.C.* Cambridge: Cambridge University Press.
- Price, T. Douglas, and Gebauer, Anne B. 2017. The Emergence of Inequality in the Context of early Neolithic northern Europe. In: Hansen, Svend, and Müller, Johannes (eds). *Rebellion and Inequality in Archaeology*. Universitätsforschungen zur Prähistorischen Archäologie 308. Bonn: Habelt, 135-152.
- Ratcliffe, Jerry H. 2002. Aoristic Signatures and the Spatio-Temporal Analysis of High Volume Crime Patterns. *Journal of Quantitative Criminology*, 18, 1, 23-43.
- Robb, John, and Harris, Oliver J. T. 2017 (eds). Becoming Gendered in European Prehistory: Was Neolithic Gender Fundamentally Different? *American Antiquity*, 83, 128-147.
- Sahlins, Marshall D. 1963. Poor Man, Rich Man, Big-Man, Chief: Political Types in Melanesia and Polynesia. *Comparative Studies in Society and History*, 5, 285-303.
- Schier, Wolfram 2009. Extensiver Brandfeldbau und die Ausbreitung der neolithischen Wirtschaftsweise in Mitteleuropa und Südsandinavien am Ende des 5. Jahrtausends v. Chr. *Prähistorische Zeitschrift*, 84, 15-43.
- Sherratt, Andrew 1981. Plough and pastoralism: aspects of the secondary products revolution. In: Hodder, Ian, Isaac, Glynn, and Hammond, Norman (eds). *Pattern of the past: studies in honour of David Clarke*. Cambridge: Cambridge University Press, 261-305.
- Smith, Eric A., Borgerhoff Mulder, Monique, Bowles, Samuel, Gurven, Michael, Hertz, Tom, and Shenk, Mary K. 2010. Production systems, Inheritance and Inequality in Premodern Societies. Conclusions. *Current Anthropology*, 51, 1, 85-94.
- Sørensen, Lasse, and Karg, Sabine 2014. The expansion of agrarian societies towards the north – new evidence for agriculture during the Mesolithic/Neolithic transition in Southern Scandinavia. *Journal of Archaeological Science*, 51, 98-114.
- Sørensen, Marie Louise S. 2000. *Gender Archaeology*. Cambridge: Polity.
- Thomas, Julian 1991. *Rethinking the Neolithic*. New studies in archaeology. Cambridge: Cambridge University Press.
- Thomas, Julian 2003. Thoughts on the ‘Repacked’ Neolithic Revolution. *Antiquity*, 77, 295, 67-74.
- Van der Veen, Marijke 2005. Gardens and fields: the intensity and scale of food production. *World Archaeology*, 37, 157-163.
- Watson, Patty J., and Kennedy, Mary C. 1998. The Development of Horticulture in the eastern Woodlands of North America. In: Hay-Gilpin, Kelley, and Whitley, David S. (eds). *Reader in Gender Archaeology*. London: Routledge, 173-190.

The construction of space and gender in prehistory. An approach to the Chalcolithic walled enclosures of Iberia

Ana M. Vale

Abstract

This paper aims to talk about the relationships between gender and space. First, I examine the idea of material space relations and gender through the work of the architect Peg Rawes and the philosopher Luce Irigaray, before presenting examples from Portuguese Chalcolithic walled enclosures, where gender roles are dependent on the interpretations of the built space, and the specific case study of Castanheiro do Vento, to question the fragmented character of these constructed spaces. I also present some examples of human burials in walled enclosures and anthropomorphic representations from late prehistory to question the fragmentation of the body and the ambiguity of the images. Lastly, I finish by concluding that the recent approaches to construction, to the use of space, and to the materials and contexts, including burials and engravings, seem to be telling us something about the construction of collective identities in prehistory, namely the concepts of fragmentation and ambiguity. This paper tries to question and understand the relationships between space and gender and will approach how space can be constructed in prehistory as well as how gender can be constructed in our understanding of past architectures.

Keywords: *Chalcolithic, Iberian Peninsula, space, gender*

Space and gender – an introduction

The architect Peg Rawes, analysing the work of Luce Irigaray, says that the construction of space, meaning both its design and its use, is a dynamic process (Rawes 2007, 23), a process that emerges through an assemblage of relationships between human (different subjectivities) and other beings, as well as things. As Marie Louise Stig Sørensen has already pointed out, *'spatial structures and categories*

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are not stable and fixed but emerge from practice' (Sørensen 2000, 148). The architectural dynamic always produces different, heterogeneous spaces, which are often ambiguous. Spaces emerge during construction, through use, and through the different relationships that can shape the constructed environment and create new approaches to it. Even the most functionalist and ordered approaches cannot construct homogenous spaces that are experienced, used, and understood as the same throughout time. The dynamic processes of construction and reconstruction in Western culture construct, and are constructed by, gendered subjectivities (Raws 2007, 15). To talk about space and gender in prehistory is to inquire about the androcentric discourse about the construction of architecture in the past. This raises two questions: How is space related to gender in prehistoric contexts? Is it possible to relate space and gender in prehistory if both emerge through dynamic processes and are imminently relational?

For Irigaray (1993), the identity of gender is more than biological, and more than cultural or social. It is the way physicality is expressed. Identity is relational, between embodied subjects, and in-between things and other beings, as is the construction of space. In Western culture, the construction of space is dependent on gender constructions, and, as such, the construction of gender emerges both during construction and in the constructed environment. The construction of identity, in relation to the construction of space, is intimately connected to the perception of the body. In the modern Western world, according to Irigaray, gender and subjectivity construct the way we experience architecture. Time, space, and matter are read and expressed in different discursive and physical ways, and the different ways architecture is created, and its history is written, are dependent on the construction of gender and subjectivity. However, for Irigaray, 'women's experiences are consistently overlooked, repressed or removed from histories and theories in western culture' (Raws 2007, 15). Women are defined by the negative of the positive male characteristics in a hierarchical relationship between men and women. According to Irigaray, '*the female sexed subject – woman – does not yet actually exist in Western philosophy*' and, as a consequence, is connected with '*non-representational ideas (e.g. immaterial, theological or virtual ideas)*' (Raws 2007, 16). This has a strong influence on the way prehistoric archaeology is constructed, based on the assumption of universal and natural categories that define the bi-gender bias of Western culture.

The history of Western architecture is based upon binary structures, between man and woman, public and private, inclusion and exclusion, exclusion being, as noted by the architect Diana Agrest (1996, 542), repression. These binary structures, far from being universal and natural, have shaped the way architectural spaces are conceived. '*Logocentrism and anthropomorphism, in particular male anthropomorphism, have underlain the system of architecture ever since Vitruvius, read and rewritten in the Renaissance and through the Modern Movement*' (Agrest 1996, 542). The male body has been the scale and the metaphor of Western buildings and cities. In this sense, Western architecture, based on a male anthropomorphic model, has relegated the construction of positive spaces to male architects. And the architect is above all a male figure. Agrest argued that the female body, absent or, better said, excluded from Western architecture, is only brought into the architectural narrative for her procreative qualities; however, motherhood is projected into and replaced by the male body of the architect. It is the male architect who creates (gives birth) to the new building(s).

In modern architecture, especially according to Le Corbusier (e.g. 2009 [1923]), constructed spaces should be functional, and the form should inform us about the function. A space with a particular form should have a specific function, and, likewise, each function should be performed by men or women. The interior of the house, the domestic space, was (is) connected with women. The idea of the universal house, as family housing, as a domesticated – safe and predictable – space is immi-

nently associated with the Western patriarchal model. The projection of the present in the past naturalises and validates idealised Western ways of being. Feminist approaches tried to rewrite prehistory with women performing different activities and in different spaces; however, in some, gender is still understood as a natural and unchanging feature. Virginia Woolf said, ‘*women had sat indoors all these millions of years*’ (Woolf 1998 [1929], 105). Women were trapped inside the house for the past centuries in the Western world, and they still are in traditional approaches to the archaeological contexts that I would like to discuss here, the Chalcolithic walled enclosures of the Iberian Peninsula. I will argue that this image of the past is not seen in the archaeological record but is instead based on the Western patriarchal model that shapes the discourses of the past. In order to address different relationships between space and gender, I will pay special attention to the architectural detail of a particular walled enclosure and also reference multiple assemblages from burial contexts and anthropomorphic representations (both traditionally seen to shed significant light on questions of gender), to try to understand how space is constructed and to analyse how gender could be addressed in Prehistory.

Iberian Chalcolithic walled enclosures

The traditional explanation – as fortified settlements

The Iberian walled enclosures are in most cases located on the top of prominent hills and are characterised by one or several foundation stone walls with a circular tendency that define an inner precinct. In some cases, these walls are intercepted by what have been called bastions and by several passages. They began to be built around 2900 BCE, and some sites were still in use by the end of the 3rd millenni-

Figure 1. Map of the Iberian Peninsula showing the location of the archaeological sites mentioned in the text:

- 1 Castanheiro do Vento;
 - 2 Castelo Velho de Freixo de Numão;
 - 3 Vale da Casa (Côa Valley Archaeological Park);
 - 4 Vila Nova de São Pedro;
 - 5 Zambujal;
 - 6 Leceia;
 - 7 Perdigões;
 - 8 Los Millares
- (drawing: João Madureira).



um BCE, most of them having a long duration of construction and use. They are generically contemporary with the Iberian ditched enclosures, although the later seem to have begun to appear earlier, in the middle of the 4th millennium BCE, and were abandoned by the middle of the following millennium.

Since the late 19th century, Chalcolithic walled enclosures have been interpreted as fortified settlements. Los Millares (Almeria, Spain) and Vila Nova de São Pedro (Conc. Azambuja, Portugal) (Fig. 1) gave rise to a type of site in which a particular function was attached to a particular form (*e.g.* Soares 2013), and it was understood that the function had been established prior to their construction. Fortified settlements carry in their name their function – inhabited places protected by walls – but also their form – concentric stone walls intercepted by bastions. And the recognition of the same form in different places allowed the identification of similar functions (as already discussed in Vale 2017).

In this way, the concept of ‘architecture’ refers to the constructed building. The use of space, or the occupation, is understood as a phase posterior to construction, and the architecture is the scenario in which different activities were performed by women and men. Women are represented inside walls, in the domestic and private space, linked to specific objects, such as grinding stones or loom weights; meanwhile, men perform the activities that give identity to the Iberian Chalcolithic itself: construction of the walls, protection, the production of stone tools, metallurgy, and activities that took place outside the walls, such as farming or hunting.

Although these images are, most of the time, implicit in the archaeological narrative, they became visible in representations of the past created specifically with the general public as their target audience. It is possible to read male and female bodies performing several tasks at Los Millares (Almeria, Spain; Molina and Cámara 2005, 73; 74) or Leceia (Conc. Oeiras, Portugal; Cardoso 1997, 65; 94) and in museum displays in Sabugal or Fundão (Portugal), for example. In these images, men are represented as metal workers, hunters, and warriors and women are represented mainly as potters. It must be highlighted that metallurgy and war are, according to the traditional narrative, two of the main features that characterise the 3rd millennium in the Iberian Peninsula. Ceramic pots are, in the other hand, connected to what persisted. The male *activities* are creative and involve risk; meanwhile, the female *tasks*¹ are linked to tradition and can be undertaken inside the settlement, within walls, near the house. The definition of woman as a mother is visible in the interpretation of the iconography contemporary to the walled enclosures; the female physical attributes, sometimes just inferred by the presence of triangles, are interpreted as representations of the Goddess, meaning fertility and motherhood, (*e.g.* Gomes 2005; Gonçalves 2004). In these cases, the binary gender categories, dependent on the two biological sexes, each one with intrinsic specific activities and tasks, were used without reflexion. Binary gender categories, understood in this vein as universal and natural, have also been linked to static approaches to architecture, to the unquestioned relationship between form and function. In traditional archaeological narratives, the linear correspondence between biological sex and gender is implicit, and the definition of being a woman in the past corresponded to the bourgeois ideal of Western culture. The female body was linked to the private space, excluded from the creative spaces that constructed the Iberian Chalcolithic; female bodies were repressed in past narratives.

1 Margaret Conkey and Janet Spector (1984) differentiated tasks from activities, the former being attributed to women and the latter to men. Male activities tend to be described in more detail and considered more active.

New approaches – walled enclosures and monumentalised hills

Explanations of walled enclosures as fortified settlements, although still very common in Iberian archaeology, have been challenged in large part due to the impossibility to limit the study of walled enclosures to the functional spaces that they enclose. This type of architecture is being thought of as a collective place, as a gathering place for a community or different groups, during the construction and use of the constructed environment, as part of the process of the monumentalisation of the landscape in the 3rd millennium BCE; as places that both participated in the construction of social organisation and promoted social cohesion (e.g. Jorge *et al.* 2006; Jorge 2005; Sanches 2008; Vale 2011; Valera 2013); as assemblages or assemblies that put different things in relation to each other and promoted different relationships.

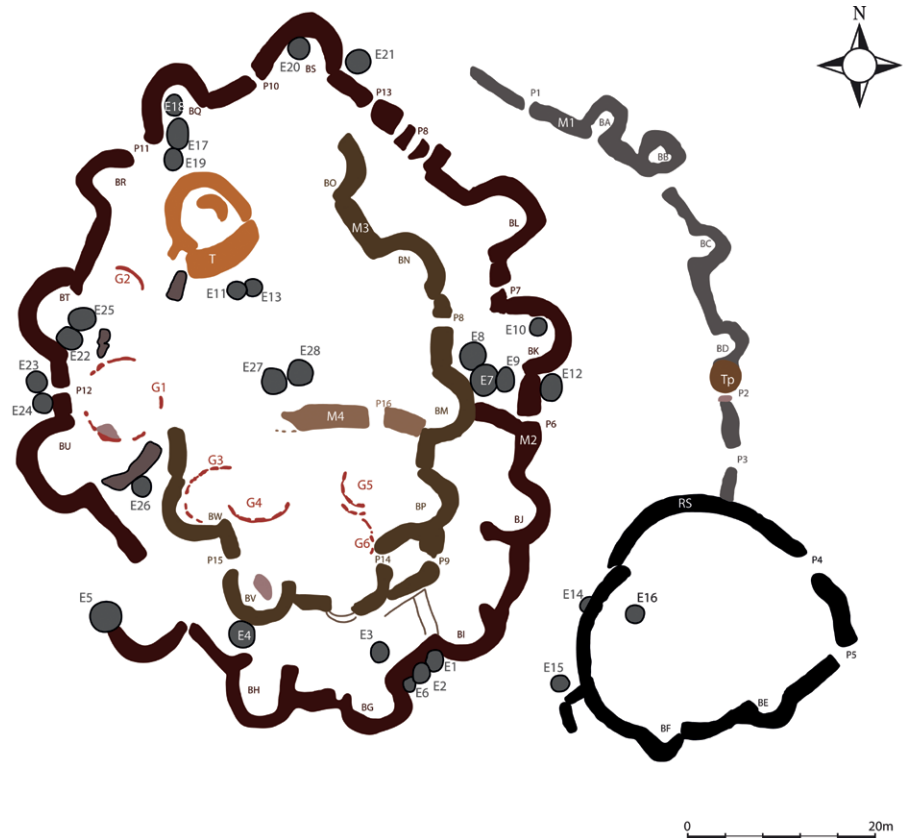
The traditional approach to separate construction and occupation phases has been called into question by the apparent continuous construction of the space; each archaeological plan of the walled enclosures seems to be an image of the successive construction of segments of walls and structures that are built during the use of the enclosure. Successive additions of sections of wall did not necessarily have to be built consecutively, making the architectural space an ongoing process of multiple actions (see Cardoso 2007 and Díaz-del-Río 2008). Construction in segments has been noted in other European enclosures (e.g. Evans 1988), revealing the continuous construction of the space during the long duration of the occupation. This raises questions about the idea of planning and of the project and, in that way, the very possibility of the comparison of sites with a similar archaeological general plan.

Walled enclosures have come to be called monumentalised hills (e.g. Jorge *et al.* 2006; Jorge 2005; Sanches 2008), a change in terminology that stripped these sites from their function; as monumentalised hills, they are not settlements or fortifications any more. The name *monumentalised hill* aims to highlight the link between the site and the surroundings, as well as with the process of monumentalisation of the landscape that was in motion in the 3rd millennium BCE in the Iberian Peninsula. However, the name, although referring to the practice of monumentalisation, carries the word *monument*, which could be understood as referring to the exceptional character and size of a static building. The walled enclosures are, in fact, buildings that visibly marked the landscape, and the stone foundation walls can define precincts with several hectares. But above all they are buildings that last, that were constructed over centuries by several generations and groups, that were part of their collective identity, part of their lives, as a memory, a tradition, and an opportunity and a future to come, and it is precisely these ideas that the change of the name aims to underline. In this paper, however, I have been using the term *walled enclosures*, as it does not pretend to be neutral but is a way to recognise the possibility of an architectural type or category based on the continuous, complex, and heterogeneous practices identified in these sites. It is a base from which to open up the discourse to new (other) interpretations.

The walled enclosure of Castanheiro do Vento: A case study

I am currently engaged in studying one particular walled enclosure, Castanheiro do Vento (Conc. Vila Nova de Foz Côa, Portugal; Fig. 2). The site was in use for hundreds of years, its construction beginning in the first centuries of the 3rd millennium BCE, and it was still in use in the transition to the 2nd millennium (although maybe according to different understandings of the site or landscape). It was constructed in segments (of segments of stone walls and bastions; Cardoso 2007). The long

Figure 2. Castanheiro do Vento (Conc. Vila Nova de Foz Côa, Portugal). Sketch of the site. In this general plan, the three concentric walls that define a main precinct are represented, intercepted by semi/subcircular structures (called bastions) and entrances. Inside the walls, 31 round structures (< 2 m in diameter) and seven larger round structures (approximately 8 m in diameter) were identified (Vale 2011, 31 Fig. 2.1).



diachrony and the modular character of its construction and use does not allow us to assume the general plan as seen by us as the plan/project for the building; it is instead a set of features that probably were contemporaneous at some point. The long duration of the site, and the multiple uses that each feature could have had, also raise questions about the linear association between form and function as it has been understood in the traditional explanation of the Iberian walled enclosures.

Here I would like to describe two contexts from Castanheiro do Vento, paying attention to the detail. It is through the description and analysis of the detail that the understanding of the construction and use of space in the site can be approached, and it is through the detail that the very nature of Castanheiro do Vento can emerge and collective identities can be questioned.

In a round structure with a diameter of 8 m, a small structure was identified through the relationship between four slabs of schist and 41 fragments of pottery, a fragment of bovine horn, fish bones, a loom weight, and a quartz chip and core (Fig. 3). These things invoke different spaces, different times, and different rhythms. The fish species identified – the shad (*Alosa sp.*) – lives in the sea but swims up freshwater rivers to spawn, during spring. These fragments, collected during a specific time of the year, are by their very nature fragile. As such, deposition probably occurred shortly after the shad was caught. The fish that is only present in the river once a year was brought together with a fragment of a bovine, an animal that could have lived with this community for years. And they were placed there together with fragments of pottery with preserved edges and surfaces, which indicates that the time between breakage and deposition was short². These fragments were probably no longer related to the specific animal or pot; they carried different stories that,

2 The fragmentation study was undertaken as part of my PhD dissertation (Vale 2011), following the work of L. McFadyen (e.g. 2016).



Figure 3. Castanheiro do Vento (Conc. Vila Nova de Foz Côa, Portugal). Structure with four slabs of schist and 41 pottery fragments, a fragment of bovine horn, fish bones, a loom weight, and a quartz chip and a quartz core, located within a small enclosure – big round structure 1 (Vale 2011, 298, Fig.10.2.13).



Figure 4. Castanheiro do Vento (Conc. Vila Nova de Foz Côa, Portugal). Context defined by eight grinding stones in granite and ceramic fragments. It is located in the main precinct (Vale 2011, 57, Fig. 2.19).

when assembled, allowed the possibility for new stories to emerge. They were also accompanied by stone slabs, presumably quarried in the area. All these different times and spaces were embodied in material and the different rhythms and life cycles were enclosed together; space was closed.

The second context (Fig. 4) is an assemblage of eight grinding stones, all fragmented, and pottery sherds, namely, two large fragments from two different pots, placed side by side, with fresh edges and preserved surfaces. This assemblage put together elements that probably were part of the everyday life of these communities and that could have been connected to the transformation and consumption of food. The fragmented grinding stones and the fragments of pottery could be related to a set of things that were used prior to them being incorporated in the construction

of this small structure. This assemblage, which contains unremarkable elements, is exceptional in the way its parts were assembled. Everyday things were put in relation in a specific way, altering functions, rhythms, and spaces, and, in the end, constructing new or other spaces.

These two examples, although only briefly described here, try to explore the detail of architecture, of the intermingled deposition of several things that make space. Following Tringham (1991), it is the detailed study of contextual relationships in architecture, which could be understood as space made through construction and use (of walls and ‘small things’), that allows us to talk about other relationships and tensions. Castanheiro do Vento encloses heterogeneous places made of fragmented things that had different roles, functions, and relationships throughout time and space. It was a collective space, and by putting beings and things in different relationships, collective identities were constructed and reinforced. Architecture cannot be understood as a stage upon which different activities take place. It is the materiality, the experience, the construction, it is the place, the problem, and a process (after Mendes 2008). The fragmented character of the things deposited at Castanheiro do Vento, the continuous construction of the place by the addition of segments of walls, and the long duration of the site, which was used by different generations and groups, indicate non-fixed images or explanations about the site.

These assembly places, walled enclosures as much as ditched enclosures, were fluid pieces of architecture because they were both lived in and used (*e.g.* Valera 2016). The construction of the meaning of these sites is sometimes ambiguous, because the meaning of any space is activated by the construction or by the assembly of different (fragmented) things. But what do these characteristics of architecture tell us about the collective and gender identities?

Gender identity is dependent on relational social constructions, and the fixed nature of the binary gender ideal of the Western world seems to contradict how the world was understood by the prehistoric communities that built and used Castanheiro do Vento – a heterogeneous, fluid, collective space made from fragmented things. With this question in mind, it is necessary to look at the contexts connected to the Portuguese enclosures in which the human body is present and represented.

The fragmented human body and the ambiguous anthropomorphic representations in the Portuguese Chalcolithic

Some walled enclosures also contain burial contexts and are associated with iconographic elements. The study of these contexts grants us a privileged view of identification processes; however, they are based on the physicality of the human body and the biased view of dual sexual categories. This could raise the problem of the starting point always being the two biological sexes – female and male – which can erroneously lead to a linear identification between biological sex and gender category, without questioning gender as a relational social construction, as has been done, more often than not, by traditional approaches. The immediate association between sex and gender tends to happen mainly in the analysis of individual burial contexts; however, in the 3rd millennium BCE in the Iberian Peninsula, burials are mainly collective and feature disarticulated remains, which raises other problems and ambiguities, as seen below³.

The presence of human bones inside walls was identified in the walled enclosure of Castelo Velho de Freixo de Numão (Conc. Vila Nova de Foz Côa, Portugal; Jorge 1998; 2014), located just 11 km from Castanheiro do Vento, and in Zambujal (Conc. Torres Vedras, Portugal; Kunst *et al.* 2014). In both, secondary depositions of disartic-

3 This topic was also explored in Vale 2015.



Figure 5. Perdigões (Conc. Reguengos de Monsaraz, Portugal). An anthropomorphic figure in ivory found at the ditched enclosure (Valera and Evangelista 2014, 290; photograph: A. C. Valera).

ulated human bones, with no differentiation in relation to age or sex, were identified in contexts with a variety of other material. In the case of Castelo Velho, Lopes (Jorge 1998; 2014) interpreted this context as a deposition of things: a deposition of human bones, animal bones, pottery sherds, and loom weights. Secondary depositions of disarticulated human bodies in relation to multiple other things seemed to be present in other contexts, such as in the funerary contexts of the ditched enclosure of Perdigões (Conc. Reguengos de Monsaraz, Portugal). A recent study (Silva *et al.* 2017) of tomb 2 revealed a minimum number of 56 individuals with a high level of fragmentation, indicating several different mortuary practices during the time of use. Both sexes and all age groups are represented, although individuals younger than five years old are under-represented.

In these three contexts – Castelo Velho, Zambujal, and Perdigões – the human body is treated in many different ways, often disarticulated and fragmented, and there is no concrete relationship between burial goods and particular individuals. These contexts do not indicate gender, age, or social differences. Human remains were deposited along with other things, and the fragmented character of the human bone assemblages is reinforced by the fragmentation of other materials. These human bones are in relation with other things, mainly fragmented, such as pottery



Figure 6. Vale da Casa (Côa Valley, Conc. Vila Nova de Foz Côa, Portugal). Rock carvings of anthropomorphic, ambiguous figures, dating to late prehistory (Baptista 1983; figure: Côa Valley Archaeological Park).

sherds, animal bones, and – in the case of Perdigões – anthropomorphic (Fig. 5) and zoomorphic representations.

In the Iberian Peninsula, anthropomorphic figures are found with and without the representation of the biological sex. Until recently in Portugal, anthropomorphic figurines and zoomorphic representations were interpreted as relating to a Mother Goddess and fertility cults (e.g. Cardoso 1995; Gonçalves 2004). Female representations have been mainly interpreted referring to transcendent ‘female’ qualities – the fertility of the human body and the earth, and the reproduction and creation of new beings. Male representations tend to be associated with the individual, with male dominance, with the representation of individuality and individual characteristics. The female sexual attributes, the triangles and zigzags dating from the Late Neolithic/Chalcolithic, were explained as female fertility representations; meanwhile, the engravings of belts, crosiers, and weapons were interpreted as representations of a male warrior ideology (although in most cases the sex of the individual is not represented) that could be related to a male chief/warrior, or of lineages, but always connected with power inserted in a growing movement toward individual (and male) leadership, effective during the Late Bronze Age (end of the 2nd and beginning of the 1st millennium BCE; see Díaz-Guadarmino 2011).

The anthropomorphic representations found at Perdigões, some of which have sexual attributes represented and some of which have none at all, have been interpreted as ambiguous representations, with multiple possibilities of interpretation, always contextually dependent, that highlight the exceptionality not only of the representation itself but also of the material of which it is made, which in most cases is a rare and exogenous raw material, such as ivory (Valera and Evangelista 2014). Concretely, the examples found at Perdigões with explicit male sexual attributes (Fig. 5) could be related to ‘*real individuals, specific social positions, or supernatural beings*’ (Valera and Evangelista 2014, 298).

At Perdigões, the figurines identified in funerary contexts were found with zoomorphic representations, which also seem to be ambiguous figures – they could have been actual beings, or representations of physical features, ‘*revealing a fluid world of permeable categories where people still engage with nature in strong animistic terms*’ (Valera and Evangelista 2014, 37). In these funerary contexts, human bones occurred alongside animal bones, to which ‘*a similar treatment*’ was given (Valera et al. 2014, 36). Anthropomorphic representations seem often to be (con)fused with animal features or representations. Close to the walled enclosures of Castanheiro do Vento and Castelo Velho de Freixo de Numão are the Côa Valley prehistoric open-air rock art sites, where anthropomorphic engravings and paintings from the 4th to the end of the 2nd millennium BCE are executed schematically (Fig. 6; Baptista 1983), ‘*with horns pointing up, a trace representing the body, two semicircles for the limbs and a line prolonging the body*’ that ‘*can be seen as a tail, if we interpret these figures as bovines, or a phallus, if we see them as humans*’ (Luís 2009, 138). They are ambiguous figures.

Conclusion – space and gender in prehistory

The architecture of walled enclosures seems to imply heterogeneity, fragmentation, ambiguity, fluidity, collectiveness, and transformation, and burial contexts and anthropomorphic representations seem to indicate plurality, ambiguity, and fragmentation. As such, maybe these words should be taken more seriously in the study of the construction of identities during the 3rd millennium BCE in the Iberian Peninsula. In this particular context, sexed bodies are not related to specific items that allow us to talk about the construction of male or female gender.

Gender is contextual, as Robb and Harris (2017) have recently argued, and it is always relational. Collective identities constructed in relation to the group, as it has been studied by Hernando (2002), also emerge through the construction and experience of space. According to this author, identity in prehistory was constructed in relation to the group, established by the relationships, the acts that are performed, by the material culture that is shared, and by the way the body is understood. Identity was collective. According to Hernando (2016), archaeologists recognise and study different political, economic, and social strategies but do not consider that all these processes were performed by human beings who understood the world and themselves differently and had different identity strategies. It is exactly for this reason that women and men, as they are defined by the traditional Western world, are projected into prehistory and inserted into societies that, although recognised as different, are filled with modern identity categories, validating and naturalising the established way of things.

Architecture is constructed and experienced differently by women and men in the Western world, as Irigaray has argued (Rawes 2007). Prehistoric architecture has been explained, and so constructed, mainly by male hands, and that is why women have been locked in the shadow of the domestic space, chained to modern Western stereotypes of house and family. And the androcentric discourse is visible not just in the roles and spaces given to men and women, but also in the way the past is constructed. As Montón-Subías and Hernando have recently noted, *'the type of historicity privileged is far from universal'* (Montón-Subías and Hernando 2017, 10) and the values of *'change, individuality, reason, and, with them, power, self-control, violence (exercised as a means to obtain, wield, or regain power), technical progress, or economic growth'* were values that constructed *'men's identities in the seventeenth century'* (Montón-Subías and Hernando 2017, 4), although used as universal goals by archaeology and history in the interpretation of past societies⁴.

The androcentric discourse is hierarchical and binary, but the archaeology of gender is a way to question the patriarchal conceptualisation that guarantees male privilege and sets the norm for a particular type of being a man. Following Gorsz (2007), feminist theory has to think about and work on new concepts to transform, reinvent, and challenge the ideas of masculinity, male privilege, feminism, social subordination, and sexual difference, and to think about a future to come or new worlds to come. Gender archaeology is a way to construct a new discourse, non-hierarchical and more inclusive, with new questions, new relations, and new practices, or, as has been argued recently by Montón-Subías and Meyer (2018), engendered archaeologies have to *'recognize and act against'* the *'inequalities and injustices'*, within the archaeological past narratives and within the practice of archaeologists, in the field and in the office (Montón-Subías and Meyer 2018, 9). It is necessary to take women from the passive space and the margins of the archaeological narratives and to think of human beings as active members in the construction of space, as living beings; as Irigaray put it, *'the first ecological gesture is to live and situate ourselves as living beings among other living beings in an environment that allows life to exist and develop'* (Irigaray 2015, 101), however, effort has to be put to think what is to be a woman (to what past are we constructing).

Prehistoric spaces need to be more inclusive if we want to see other ways of constructing the world. As Sørensen has said, *'[w]ith an increased attention towards gender as a process, as a difference maintained through practice and as negotiated contracts about rights and obligations, the intersection between space and gender cannot any more be approached in terms of how the former correspond to or reflects the latter'* (Sørensen 2000, 166). Places such as the walled enclosure of Castanheiro do Vento emerge through the assembly of living beings and things (mainly fragmented

4 For this topic, see also, for example, Díaz-Andreu and Sørensen 1998.

things). It is assembly that puts together and brings together, and by putting and bringing together, it creates spaces (after Butler 2015) – ambiguous spaces, made through dynamic processes of construction and use, with fragmented things. Walled enclosures endured and allowed the group to endure, but by their own durability set the conditions by which more or other things, other relationships, could take place, or could be gathered. '[G]athering itself signifies persistence and resistance' (Butler 2015, 23), creation and destruction, construction and abandonment, reinvention and subversion. The construction of walled enclosures as collective spaces, with fragmented things, points to ambiguous and fluid uses, and the treatment and representation of the human body indicate ambiguous collective identities in which contextual and relational gender would have been constructed and understood in relation to the construction and use of the space. The words that emerge from the archaeological study of this prehistoric architecture are, once again, *collectiveness*, *ambiguity*, and *fragmentation*.

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References

- Agrest, Diana, 1996. Architecture from Without. Body, Logic, and Sex. In: Nesbit, Kate (ed.). *Theorizing a new agenda for architecture. An Anthology of Architectural Theory 1965-1995*. New York: Princeton Architectural Press, 542-553.
- Baptista, António M. 1983. O complexo de gravuras rupestres do Vale da Casa (Vila Nova de Foz Côa). *Arqueologia*, 8, 57-69.
- Butler, Judith 2015. *Notes Toward a Performative Theory of Assembly*. Cambridge: Harvard University Press.
- Cardoso, J. Muralha 2007. *Castanheiro do Vento (Horta do Douro, Vila Nova de Foz Côa – Um Recinto Monumental do IIIº e IIº milénio a.C. Problemática do Sítio e das suas Estruturas à Escala Regional* [PhD thesis, University of Porto].
- Cardoso, João L. 1995. Os Ídolos Falange do Povoado Pré-Histórico de Leceia (Oeiras). Estudo Comparado. *Estudos Arqueológicos de Oeiras*, 5, 213-232.
- Cardoso, João L. 1997. *O Povado de Leceia. Sentinela do Tejo no terceiro milénio antes de Cristo*. Oeiras: Câmara Municipal de Oeiras.
- Conkey, Margaret, and Spector, Janet 1984. Archaeology and the study of gender. *Advances in Archaeological Method and Theory*, 7, 1-38.
- Díaz-Andreu, Margarita, and Sørensen, Marie Louise S. (eds) 1998. *Excavating women. A history of women in European archaeology*. Oxford: Routledge.
- Díaz-del-Río, Pedro 2008. El contexto social de las agregaciones de población durante el Calcolítico Peninsular. *Era Arqueología*, 8, 128-137.
- Díaz-Guadarmino, Marta 2011. Iconografía, lugares y relaciones sociales: Reflexiones en torno a las estelas y estatuas-menhir atribuidas a la Edad del Bronce en la Península

- Ibérica. In: Vilaça, Raquel (ed.). *Estelas e estátuas-menires da Pré à Protohistória. Actas IV Jornadas Raianas (Sabugal, 2009)*. Sabugal: Câmara Municipal, 63-88.
- Evans, Chris 1988. Acts of enclosure: a consideration of concentrically-organized causewayed enclosures. In: Barrett, John, and Kinnes, I. (eds). *The Archaeology of Context in the Neolithic and Bronze Age*. Recent Trends series 3. Sheffield: Department of Archaeology and Prehistory, University of Sheffield, 85-96.
- Gomes, Mário V. 2005. O sagrado em Vila Nova de São Pedro. Antigas e novas perspectivas. In: Arnaud, José M., and Fernandes, Carla V. (eds). *Construindo a Memória. As Coleções do Museu Arqueológico do Carmo*. Lisboa: Associação dos Arqueólogos Portugueses, 165-178.
- Gonçalves, Victor 2004. Manifestações do Sagrado na Pré-história do Ocidente Peninsular 5. O explícito e o implícito. Breve dissertação, invocando os limites fluidos do figurativo, a propósito do significado das placas de xisto gravadas do terceiro milénio a.n.e. *Revista Arqueologia*, 7, 166-183.
- Gorsz, Elisabeth 2007. Video 'Keynote Presentation'. In: *First Annual Feminist Theory Workshop, Duke University, Durham, NC, 23-24 March 2007*. <gendersexualityfeminist.duke.edu/conferences/first-annual-feminist-theory-workshop>, e-published 27 May 2010, retrieved 22 February 2019.
- Hernando, Almudena 2002. *Arqueología de la identidad*. Madrid: Akal.
- Hernando, Almudena 2016. Sobre Identidad/Alteridad y el Estudio del Passado. Una Introducción. *Revista ArkeoGazte*, 6, 29-36.
- Irigaray, Luce 1993. *Je, Tu, Nous*. New York, London: Routledge.
- Irigaray, Luce 2015 Starting from Ourselves as Living Beings. *The Journal of the British Society for Phenomenology*, 46, 2, 101-108.
- Jorge, Susana O. 1998. Castelo Velho de Freixo de Numão (Vila Nova de Foz Côa): breve genealogia de uma interpretação. *Revista Estudos Pré-Históricos*, 6, 279-293.
- Jorge, Susana O. 2005. *O Passado é Redondo. Dialogando com os Sentidos dos Primeiros Recintos Monumentais*. Bibliotheca de arqueologia 2. Porto: Edições Afrontamento.
- Jorge, Susana O. 2014. Enclosures and Funerary Practices. About an Archaeology in Search for the Symbolic Dimension of Social Relations. In: De Valera, António C. (ed.). *Recent Prehistoric Enclosures and Funerary Practices in Europe. proceedings of the international meeting held at the Gulbenkian Foundation (Lisbon, Portugal, november 2012)*. BAR International Series 2676. Oxford: Archaeopress, 71-82.
- Jorge, Vítor O., Cardoso, J. Muralha, Vale, Ana, Velho, G. Leite, and Pereira, L. Sousa (2006). Cooper Age "monumentalized hills" of Iberia: the shift from positivistic ideas to interpretative ones. New perspectives on old techniques of transforming place and space as results of a research experience in the NE of Portugal. *Journal of Iberian Archaeology*, 8, 203-264.
- Kunst, Michael, Cardoso, J. Luís, and Waterman, A. 2014. Human Bones from Chalcolithic Walled Enclosures of Portuguese Estremadura: The Examples of Zambujal and Leceia. In: De Valera, António C. (ed.). *Recent Prehistoric Enclosures and Funerary Practices in Europe. proceedings of the international meeting held at the Gulbenkian Foundation (Lisbon, Portugal, november 2012)*. BAR International Series 2676. Oxford: Archaeopress, 83-98.
- Le Corbusier 2009 (1923). *Por uma Arquitectura*. São Paulo: Perspectiva.
- Luís, Luís 2009. Rock Art as Land Art. A Diachronic View of the Côa Valley (NE Portugal) Post-Paleolithic Rock Art. In: De Balbín Behrmann, Rodrigo, Bueno Ramirez, Primitiva, González Antón, Rafael, and Del Arco Aguilar, Carmen (eds). *Grabados Rupestres de la Fachada Atlântica Europea y Africana [Rock Carvings of the European and African Atlantic and African Atlantic Façade]*. BAR International Series 2043. Oxford: Archaeopress 129-147.
- McFadyen, Lesley 2016. Actions in Time: After the breakage of pottery and before the construction of walls at the site of Castelo Velho de Freixo de Numão. *Estudos do Quaternário*, 15, 71-90.

- Mendes, Manuel 2008. terra quanto a vejas, casa quanto baste. In: Alves Costa, Alexandre (ed.). *Só Nós e Santa Tecla. A casa de Caminha de Sergio Fernandez*. Equações de arquitectura 71. Porto: Dafne, 101-147.
- Molina, Fernando, and Cámara, Juan A. 2005. *Guía del yacimiento arqueológico Los Millares*. Sevilla: Junta de Andalucía, Consejería de Cultura.
- Montón-Subías, Sandra, and Hernando, Almudena 2017. Modern Colonialism, Eurocentrism and Historical Archaeology: Some Engendered Thoughts. *European Journal of Archaeology*, 21, 1-17.
- Montón-Subías, Sandra, and Meyer, Will 2018. Engendered Archaeologies. In: Smith, Claire (ed.). *Encyclopedia of Global Archaeology*. New York: Springer, Cham.
- Raws, Peg 2007. *Irigaray for Architects*. London, New York: Routledge.
- Robb, John and Harris, Oliver J. T. 2018. Becoming Gendered In European Prehistory: Was Neolithic Gender Fundamentally Different? *American Antiquity*, 83, 128-147.
- Sanches, Maria de Jesus 2008. *O Crasto de Palheiros. Fragada do Castro. Murça, Portugal*. Murça: Município de Murça.
- Silva, Ana M., Garcia, Mariana, Leandro, Inês, Evangelista, Lucy Shaw, Rodrigues, Tatiana and Valera, António Carlos 2017. Mortuary practices in Perdigões (Reguengos de Monsaraz, Portugal): Bio-anthropological approach to tomb 2. *Menga. Revista de Prehistoria de Andalucía*, 8, 71-86.
- Soares, Joaquina 2013. *Transformações Sociais Durante o III Milénio AC no Sul de Portugal. O Povoado do Porto das Carretas*. Memórias d'Odiana. Estudos Arqueológicos do Alqueva 5. Setúbal: EDIA.
- Sørensen, Marie Louse S. 2000. *Gender Archaeology*. Cambridge: Polity.
- Tringham, Ruth E. 1991. Households with Faces: The Challenge of Gender in Prehistoric Architectural Remains. In: Gero, Joan, and Conkey, Margaret W. (eds). *Engendering archaeology. Women and Prehistory*. Oxford: Blackwell, 93-131.
- Vale, Ana 2011. *Modalidades de Produção de Espaços no Contexto de uma Colina Monumentalizada: o sítio pré-histórico de Castanheiro do Vento, em Vila Nova de Foz Côa* [PhD thesis, University of Porto].
- Vale, Ana 2015. A Mulher e a Pré-história. Alguns apontamentos para questionar a tradição e a tradução da mulher-mãe e mulher-deusa na Arqueologia Pré-histórica. *Revista Conimbriga*, 54, 5-25.
- Vale, Ana 2017. Comparing the incomparable. The Chalcolithic walled enclosures of the Iberia Peninsula and beyond. In: Vale, Ana, Alves-Ferreira, Joana, and Garcia-Rovira, Irene (eds). *Rethinking Comparison in Archaeology*. Newcastle: Cambridge Scholars, 90-107.
- Valera, António C. 2013. Recintos de fossos da Pré-História Recente em Portugal: investigação, discursos, salvaguarda e divulgação. *Al-Madan*, 18, 93-110.
- Valera, António C. 2016. *Prehistoric enclosures of Southwest Iberia: tangible expressions of Neolithic immateriality*. Paper presented at the meeting 'Enclosing Worlds. Comparative approaches to enclosure phenomena'. Reguengos de Monsaraz, Portugal, October 2016. <www.academia.edu/29174545/Prehistoric_enclosures_of_Southwest_Iberia_tangible_expressions_of_Neolithic_immateriality>, retrieved 22 February 2019.
- Valera, António C., and Evangelista, Lucy S. 2014. Anthropomorphic Figurines at Perdigões Enclosure: Naturalism, Body Proportion and Canonical Posture as Forms of Ideological Language. *European Journal of Archaeology*, 17, 286-300.
- Valera, António C., Evangelista, Lucy S., and Castanheira, Patrícia 2014. Zoomorphic figurines and the problem of human-animal relationship in the Neolithic and Chalcolithic southwest Iberia. *Menga. Revista de Prehistoria de Andalucía*, 5, 15-41.
- Wolf, Virginia, 1998 (1929). *A Room of One's Own and Three Guineas*. Oxford: Oxford University Press.

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Volume 8

Detecting and explaining technological innovation in prehistory

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GENDER TRANSFORMATIONS in Prehistoric and Archaic Societies

In which chronological, spatial, and social contexts is gender a relevant social category that is noticeable in the archaeological material? How can transformations in social gender relations and identity be recognized archaeologically? Is the identity of prehistoric people defined by gender? If so, what is the accompanying cultural context? What about gender equality among the scientists working in archaeology? In what degree are research teams, as well as their scientific approaches, biased today?

These and other burning questions are intensively discussed in this volume, which comprises 25 contributions presented at the international workshop 'Gender Transformations in Prehistoric and Archaic Societies', organised by the Collaborative Research Centre 1266 of Kiel University funded by the German Research Foundation (DFG). The workshop offered a platform to discuss a broad range of approaches on the inter-dependencies between gender relations and socio-environmental transformation processes.

Beyond a focus on the archaeology of women, gender archaeology offers a variety of possibilities to reconstruct the contribution of social groups differentiated e.g. by age, gender, and activities related to cultural transformation, based on the archaeological material. Thus, this volume includes papers dealing with different socio-economic units, from south-western Europe to Central Asia, between 15,000 and 1 BCE, paying particular attention to the scale of social reach. Since gender archaeology, and in particular feminist archaeology, also addresses the issue of scientific objectivity or bias, parts of this volume are dedicated to equal opportunity matters in archaeological academia across the globe. This is realised by bringing together feminist and female experiences from a range of countries, each with its own specific individual, cultural, and social perspectives and traditions.

The papers are organised along three central topics: 'Gendering fieldwork', 'Tracing gender transformations', and 'Gendering and shaping the environment'. By gendering the archaeological discussion on transformation processes, the contributions aim to more firmly embed gender-sensitive research in the archaeological agenda, not just in Europe, but world-wide.



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