Session 3

Starting where they stopped to rest

_Transformation of Stone Age burial practices between the Baltic and the Urals_

(Session organizers: A. Khramtsova, H. Lübke, H. Piezonka)
Index

Finnish Stone Age hunter-gatherer burials and the material culture death................................. 3
The long and short of it: the temporality of burial in the large cemeteries of Lake Baikal and northeast Europe ........................................................................................................................................ 4
Stone Age Companions: Human-animal relationship expressions at hunter-gatherer cemeteries in the Eastern Baltic and Central Russia ........................................................................................................ 5
Dating prehistoric burials in the north-east forest zone ............................................................................ 6
What's left after death... Taphonomic processes within a mesolithic burial from the Oder Valley and their archaeological interpretation .................................................................................................. 7
Perched on the edge of eternity: Fish and funerary rites at Rīņņukalns, Latvia ............................................ 8
Stone-Age Burials in the Environ of Lake Biržulis. New Data................................................................. 10
The Rīņņukalns shell midden, Latvia: the new excavation and discovery of further burials ............... 11
Burials with red ochre of the Neolithic - Eneolithic on the territory of Karelia ........................................ 13
Late Mesolithic - Early Neolithic Burials in the North of West Siberia ...................................................... 15
“Ritualized” technology?: blade arrowheads in the Late Mesolithic contexts of Karelia and Karelian Isthmus ........................................................................................................................................ 17
Trans-Ural Neolithic-Eneolithic burial complexes ...................................................................................... 19
Microarchaeological analysis of soil samples - a new method to study the uses of birds in Mesolithic burial practices ..................................................................................................................................... 21
Filling the old gaps: rediscovery of the Early Neolithic burials in the territory of the East European Plain forest zone ........................................................................................................................................ 22
Tradition or transition? The Mesolithic cemetery of Groß Fredenwalde and the first farmers in NE-Germany .......................................................................................................................................... 24
Anthropological examination of the two new Stone Age burials 2017/01 and 2018/01 at Rīņņukalns, Latvia ................................................................................................................................................ 25
The Rīņņukalns shell midden, Latvia: Research history 1873 – 2016 ...................................................... 26
Neolithic burial customs on the territory of the Upper Sukhona, Northwest Russia ............................. 28
The Zvejnieki burial ground over the millennia ......................................................................................... 29
Kits for afterlife. The evolution of burial assemblages from the Mesolithic to the Early Metal Age between the Baltic and the Urals ........................................................................................................ 30
Corded Ware Warriorhood – a „pan-European” monolith or a set of local traditions? ......................... 31
Emerging diversity. Hunter-gatherer mortuary practices in Eastern Baltic 7th to 3rd millennia cal. BC ............................................................................................................................................. 33
New burials from the sphere of Estonian Corded Ware ............................................................................ 34
Poster-Presentations .................................................................................................................................. 35
Burials with weaponry in Neolithic-Eneolithic burial grounds of the Upper Don River region (poster) .................................................................................................................................................. 35
Finnish Stone Age hunter-gatherer burials and the material culture death

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Finnish territory lies at the northern fringe of the European boreal zone. Although nearly 200 Mesolithic and Neolithic hunter-gatherer burials have been excavated from this area, the material is still largely unknown outside the Finnish borders. In contrast with the well-preserved burials of neighboring areas, Finnish Mesolithic and Neolithic hunter-gatherer burials are a challenge for archaeological research because perishable materials – including human remains – are generally not preserved. However, even if the burials lack perishable materials, they nevertheless contain large numbers of burial objects made of unperishable materials. In this presentation, I will give an overlook on the Finnish Stone Age hunter-gatherer burials and focus especially on the preserved material culture of death. Aside observing the burial objects from the angles of change and continuation, I will also set my gaze on how and why certain materials and artefact types were used – or not used – in the mortuary practices of these ancient hunter-gatherers.
The long and short of it: the temporality of burial in the large cemeteries of Lake Baikal and northeast Europe

Rick Schulting (School of Archaeology, University of Oxford)

The systematic use of AMS radiocarbon dating directly on human bone from Stone Age burials is providing the potential – once reservoir effects are taken into account – for increasingly high precision chronologies. Cemeteries in particular provide excellent opportunities to explore the temporality of burial. Recent work in the Baikal region of southern Siberia demonstrates the considerable variability in the temporal density of burials made at sites including Shamanka II, Lokomotiv, Khuzhir-Nuge XIV and Fofanovo. These results may be compared with those from the large Stone Age cemeteries of Zvejnieki and Olenii Ostrov in northeast Europe. Such an exercise clearly demonstrates the very different histories of these sites, even though the end result may look superficially similar, i.e., a large burial ground with a variety of burial forms and grave offerings, etc. This paper first addresses some of the difficulties encountered in constructing high precision chronologies, before comparing the temporality of Stone Age burials across two regions within the vast expanse of northern Eurasia.
Stone Age Companions: Human-animal relationship expressions at hunter-gatherer cemeteries in the Eastern Baltic and Central Russia

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The hunter-gatherer cemeteries around the Baltic Sea reveal complex burial practices. Animal remains, particularly animal teeth (mainly incisors and canines) have been extensively used for personal adornments at hunter-gatherer cemeteries around the Baltic Sea. However, other body parts, like jaws, phalanx, astragalus, antlers, claws have also been found within hunter-gatherer burials. This presentation focuses on new, interdisciplinary research of animal remains discovered in hunter-gatherer burials at Sakhtysh cemeteries (central Russia), Zvejnieki cemetery (northern Latvia) and Skateholm (southern Sweden). New analysis of animal tooth pendants discovered in hunter-gatherer burials at Sakhtysh cemeteries in the Upper Volga region of central Russia will be presented in more detail, along with some additional examples from Zvejnieki and Skateholm. The variation in the burial practices, and the role animal remains play in them, serves as a departure for a discussion about hunter-gatherer cultural encounters and their expressions, especially in the eastern part of the Baltic, where Latvia is situated in cultural crossroads, where influences from south as well as north and east are melted and expressed with some local variations. This study is part of the dissertation project that investigates the Holocene hunter-gatherer relationship with the animal world and surrounding environment, how animal and human worlds co-existed, confronted, affected and used one another during the Stone Age. The theoretical framework of this project is anchored in the growing field of environmental humanities and related theoretical approaches including posthumanism, relational ontologies, which all in different ways aim to decentralize human dominance and assign more active roles to other participants of the multi-layered relations between humans and animals.
Dating prehistoric burials in the north-east forest zone

John Meadows (Centre for Baltic and Scandinavian Archaeology (ZBSA) and Leibniz-Labor für Altersbestimmung und Isotopenforschung, CAU)

Intact burials, and even loose human bones, are perhaps our richest sources of information about past human life. Whatever aspect we are interested in (e.g. diet, mobility, health, mortuary practice, etc.), accurate dating can transform our understanding of the archaeological record, revealing temporal trends in practices or contemporaneous diversity, and allowing possible linkages to other regions and external events to be investigated. Wherever possible, therefore, we sample prehistoric human remains for AMS 14C dating. Obtaining a 14C age from a bone or tooth is seldom sufficient, however, particularly when dealing with prehistoric hunter-gatherer-fisher populations in north-eastern Europe. The risk of spuriously old dates due to dietary reservoir effects is now well-known, and contrasting approaches to mitigating this risk will be compared, using published examples. Secondly, the use of Bayesian chronological modelling to improve the dating of single graves, cemeteries and archaeological phenomena (such as mortuary practices) will be demonstrated. Finally, the issue of what dating precision is actually useful will be considered, again using case studies, to see where better precision is essential, and where it might be redundant.
What's left after death... Taphonomic processes within a mesolithic burial from the Oder Valley and their archaeological interpretation.

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The discovery of a late Mesolithic burial on the north-western edge of the Oder Valley near Rathsdorf (Märkisch-Oderland, Brandenburg) was a particular stroke of luck for the study of Mesolithic burial customs. The feature was partly excavated on site before the complete grave was lifted as a block. The grave contained a half-sitting/lying individual who had been buried, together with a single bone tool, three flint artefacts and numerous animal teeth, in a reddish sediment. The grave goods were relatively well-preserved, whereas the skeletal remains were mostly in such a poor that they could not be simply removed from the feature. For this reason, and in order to thoroughly investigate the burial, it was decided to continue excavation in the laboratory. Thanks to funds from the German Research Foundation, it has been possible to “reverse excavate” the grave from below. This paper presents the first results of this innovative work and describes the taphonomic processes within the feature in more detail.
Perched on the edge of eternity: Fish and funerary rites at Riņņukalns, Latvia

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The famous freshwater mussel shellmidden at Riņņukalns, Latvia continues to reveal life in the Stone Age of the eastern Baltic. A long history of excavation beginning already in 1874 has revealed two Stone Age burials as well evidence for the lives of those interred and others who lived at the locality. Recent investigations beginning in 2010 have sought to clarify the research history of the site and led to a three-year project aiming for a more complete understanding of what occurred there using modern scientific archaeological methodology funded by the German Research Council (DFG), enabling a comprehensive investigation of this classic Stone Age site by the Centre for Baltic and Scandinavian Archaeology (Germany) in collaboration with the University of Latvia. Two additional burials were discovered during excavations in 2017 and 2018 and, intriguingly, one of them appears to have been accompanied by a grave offering of fish comprised almost exclusively of numerous very small individuals from the perch family (number of identified specimens = 1534, including at least 11 individuals of perch, Perca fluviatilis; and 23 ruffe, Gymnocephalus cernua from a matrix sample totaling just 0.12 liters). Although analysis is ongoing, preliminary results suggest both that small fish were an important component of the overall subsistence regime during the site’s occupation – and that this particular deposit is unusual because of the overwhelming predominance of very young fish and the preeminence of the perch family. Interpreting this deposition accompanying the grave is challenging, not least because fish remains are seldom recovered in funerary contexts in the Stone Age. Zvejnieki, Latvia; Skateholm, Sweden; and Popovo, Russia are some notable exceptions where fish are a part of the mortuary process itself (Grünberg 2013, Zagorski
2004). Our investigations at Riņņukalns emphasize the role of fishing in life and death for these prehistoric hunter-gatherers.

Literature:


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The excavations of Donkalnis and Spiginas burial sites in the surroundings of Lake Biržulis in the western part of Lithuania which took place from 1981 to 1986 revealed 17 Mesolithic and Neolithic graves. The materials associated with these excavations were published between 2012 and 2016. The research continue to this day. Twenty-three radiocarbon dates have been established. A use-wear analysis of flint objects found in the graves have been performed. Also, biotechnological analyses of animal teeth from the burials were carried out. The bone material found in Donkalnis grave 1 has been re-evaluated: traces of the bones of a 7.5-8 month fetus have been identified. Genetic analyses of the graves have been carried out. The latest study performed is a micro-archaeological analysis of the ochre from Donkalnis grave 2.

All this data contributes greatly to our understanding of the mortuary practices that took place in the surroundings of Lake Biržulis.
The Rinnukalns shell midden, Latvia: the new excavation and discovery of further burials

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Following a very long interruption, research on the unique Rinnukalns freshwater shell midden in northern Latvia resumed in 2010–2011, and has continued since 2017 within the frame of a three-year interdisciplinary project funded by the German Research Council (DFG), enabling a comprehensive investigation of this classic Stone Age site by the Centre for Baltic and Scandinavian Archaeology (Germany) in collaboration with the Institute of Latvian History, University of Latvia. This research has not only given a new picture of subsistence activities and hunter-fisher lifeways at the shore of Lake Burtnieks – it has also led to the discovery of further burials, providing new opportunities for comprehensive study of human remains and burial practices. Following two seasons of excavation in 2017 and 2018, a wide-ranging assessment is being undertaken of the newly recovered and previous material from this site. The paper offers an overview of the results obtained so far, providing a background to discussion of the burial evidence, and proceeds to examine the newly discovered burials. In the course of the new excavation, a 15 m long trench was placed across the midden; detailed photogrammetric recording allowed the individual midden layers to be traced systematically. Within the area already excavated in the 1870s the midden itself had largely been removed, whereas the organic-rich deposit underneath had survived largely undisturbed, and excavation of this deposit has shed light on the site’s earlier history of occupation. The major programme of flotation and wet sieving has yielded an extensive corpus of fish and mammal remains, mollusc shell and plant macrofossils, contributing a wealth of new information to the current picture of Stone Age subsistence in the region. In addition to the two confirmed Stone Age burials unearthed by Sievers in the 19th century, the new excavation revealed a further two intact graves: an adult male burial associated with a hearth as well as remains of an unusual funerary structure, and, in a different part of the trench, an infant burial. Both interments were revealed...
directly underneath the lowermost midden layers. Separate human bones in and under the midden represent a number of additional individuals for analysis. Also pertinent to the discussion of Stone Age burials is the plentiful evidence for ochre processing – a previously unexplored dimension of the site.
Burials with red ochre of the Neolithic - Eneolithic on the territory of Karelia

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In Karelia, burials with red ochre of the Neolithic-Eneolithic Time are known. These monuments are attributed as burial complexes according to the following features: depressions in sandy soil of a sub-square or square form, coinciding in size with grave ones, 0.15 - 0.25 m deep, depressions filling with red ochre-colored sand, which occur most often under a layer of turf and podzol with a thickness of 0.1 - 0.15 m. In most of them fragments of human skeletons were not found perhaps due to poor preservation of organic materials in the sandy soils of Karelia. In this regard, at the present time there is an acute problem of identifying criteria by which we can attribute such objects as human burial grounds. For the Neolithic period of Karelia, seven sites of the Sperrings Culture, identified by Karelian researcher G.A. Pankrushev as burial grounds are known: Pidostrov, Viynavolok XIII, Sandermokha, Kochnavolok, Uya, Sheltozero I, III and only one that belongs to the Pit-Comb ceramics culture - the burial ground at Cape Kladovets Nos near the Onega petroglyphs. Fragments of calcified human bones were found in the burial grounds of Sandermokha and Kladovets Nos. Two sites with asbestos ceramics culture are known in the Eneolithic of Karelia: the Lebnavolok and the Bukolnikov burial sites, where the same finds were discovered. The difficulties of identifying the burials with red ochre is due to 2 circumstances: the almost complete absence of fragments of human skeletons (they are recorded only in three graves from 107 on Sandermoh, and also in the Kladovets, Lebnavolok and Bukolnikov burial grounds) and the location of the burials on the territory of the Neolithic and Early Metal sites, which explains the presence of finds related to the sites complexes - ceramics fragments and stone production waste, and contradicts the explanations of some Karelian authors that it was a kind of custom to replace the whole object or fragmentation of the things included in the grave inventory (Pankrushev 1978, Melnikov, 1998). The closest analogues to the described objects are represented in the Neolithic burial grounds of Zveinieki and Lyalovo complexes, in the late Neolithic and Eneolithic sites of Repishche, Konchanskoe, in the Volosovo burial grounds, Tudozero V site and also in Finland. All of them do not contain ceramic fragments, flakes of stone industry or stone tools fragments. It is much more difficult to decide whether the pits filled with red ochre sand without any human
bones were burials. In this case, according to the authors, phosphate or paleomagnetic analysis is necessary, which can give some definite results. Thus, during the experiment at the Finnish Khartikka burial ground in Lauka, there was found out that the biggest concentration of phosphates and elevated values of the geomagnetic field induction are observed at the places of people and animal burials.
Late Mesolithic - Early Neolithic Burials in the North of West Siberia

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The study is devoted to the burial practices and mortuary rites adopted by the population of the North of Western Siberia in the Late Mesolithic – Early Neolithic periods (ca. 8200–4200 cal BC). As of 2018, 126 burial sites have been investigated. All of them are located near the Konda tributaries, whose basin covers the south-western part of the northern areas. Several individual burials of the Late Mesolithic period were found right in the ancient encampments. For example, one was discovered under the floor of a dugout shelter in Leushi 9 settlement. It was a rectangular pit with the dimensions of 0,96×0,3×0,2 m, and N-S orientation. A skull of an adult male was buried in it. Based on radiocarbon dating (14C), the burial time was 7590±80BP. In Satyga XVI burial ground, the ancient cremation burial rites were studied. There were three bone clusters lying at the depth of up to 0.34 m and forming a circle or ovals with the dimensions of 1.6×1.2 m and N-S and SE-SW orientation. Stone and bone artifacts with the traces of thermal desquamation and burnt animal bones were found among the human cremated bones. 3 burials were excavated in Bolshaya Umytya 100 necropolis. Based on radiocarbon dating (14C), the estimated ages of two of them were 8600 ± 150BP and 8123 ± 150BP, respectively. The dead were buried in circular pits Ø – 1.2 m, 1.5-1.7 m deep. In two graves ochre traces were found. A stone scraper was discovered in one of the burials. 103 burials in Bolshaya Umytya 100 necropolis date back to the Early Neolithic period. Their estimated ages calculated by radiocarbon dating (14C) were 7090±60BP, 6079±70BP and 6050±80BP. The grave pits were rectangular or oval, with a depth of 0.15-1.9 m, oriented SE-NW, E-W and SW-NE. Ocher was used in burials. Human remains and grave goods were found in 31 burials. If the deceased was inhumed, the body was laid in a pit in the extended position, face up or down. The head was placed at the northeast, northwest or west end of the grave. The body was lying flat with arms and legs straight. Cremation of a dead body was carried out at a temperature exceeding 500°C. Then the bones were laid mainly in the pit center. The grave goods were usually placed near the head (polished adzes, scraper), but sometimes near the waist (small bifaces). A cylindrical bead necklace made of resin produced by conifer trees
was found in one of the graves close to the deceased\'s neck. There were not many ceramic items: in one burial a whole vessel was found, while 48 different fragments of pottery were scattered among the other graves. Extensive studies conducted in other early Neolithic cemeteries were targeted at investigating cremation and inhumation rituals. In the Late Mesolithic – Early Neolithic periods the dead were buried either within the limits of the settlement they had lived in, or in the burial grounds. There were two principal modes of interment: inhumation and cremation. The ancient necropolises were located on river terraces. The burial pits were oriented north or N-W. Ocher was used as part of the burial ritual. It is possible that the bodies were shrouded. The cremated remains were also buried in pits. The grave goods were represented by tools used in everyday life. In the Konda basin, similar burial rites were prevalent practices until the second half of the 3rd millennium BC.
“Ritualized” technology?: blade arrowheads in the Late Mesolithic contexts of Karelia and Karelian Isthmus.

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Tanged arrowheads on flint blades were wide-spread in Eastern Europe forest zone in Preboreal and Boreal time, during the Early Mesolithic period. Some after 8000 BC the interregional communication network that previously existed on those territories disintegrated, and in the territories with no natural flint sources (Eastern Fennoscandia and Karelia) lithic industries transformed in raw-material strategy, so they become to be based on use of local and easily accessible lithic materials – mainly quartz and slate. This consequently changed the lithic technology – mainly bipolar knapping was used for quartz processing. Flint artefacts including blade tanged arrowheads are practically not presented in the Late Mesolithic contexts in Finland and Karelia. This situation produced a hypothesis that the Late Mesolithic population of Karelia “forgot” or “lost” certain technological knowledge, and even was considered as an evidence of “cultural regression” in comparing to the Early Mesolithic period. Only during the last two decades new discoveries on Karelian Isthmus revealed materials that are evidence of surviving of blade and microblade production technology in the Late Mesolithic traditions of the discussing territories. But those finds are presented by technological waste, and there are practically no completely made artefacts from the settlement contexts. At the same time a large collection of tanged arrowheads on flint blades, as well as microblades, presented in materials of the famous Late Mesolithic burial ground on Yuzhny Oleniy Ostrov in the Onega Lake, Karelia. The composition of the artefact assemblage from the burial ground is very different from the surrounding contemporaneous archaeological contexts – which can be explained by the site specific function. Also the activity related with blade and microblade production is documented for contexts of Oleniy Ostrov 1 and 2 sites next to the burial ground, which were considered as funeral crew camps. One of the rear finds of a tanged arrowhead on a flint blade came from Raisala Joksemajarvi W site on Karelian Isthmus. Late Mesolithic context was discovered there on a former shoreline, and a flint tanged point was penetrated in sub-vertical position to the surface some 2-3 meters below the shoreline, that was covered by water during the time when the Mesolithic settlement was functioning. So it can be supposed that someone shut an “exotic” arrow made of rear imported flint to the air under the water. This hardly can be a result of fish shooting – otherwise such finds will be presented more often in
the Late Mesolithic contexts. More probably here we have a result of some “offering”. Those
cases are evidence that flint tanged arrowheads are known in the Late Mesolithic tradition in
Karelia and Karelian Isthmus. But the use of these “exotic” tools was more probably related
not with day-by-day activities, but with certain ritual practice. This talk was prepared within
the project “Bioarkeologiset menetelmät esihistoriallisen yhteisön maailmankuvan ja ihmisen
ja eläinten suhteiden tutkimisessa – pilottitutkimuksena Olenij ostrovin kivikautisen kalmiston
löytöaineisto” supported by Kone Foundation.
Trans-Ural Neolithic-Eneolithic burial complexes

Nataliia Chairkina (Institute of History and Archaeology, Ural Branch of the RAS (Russia, Ekaterinburg))

The burial complexes of the Neolithic-Eneolithic located in the Trans-Ural, in the forest-steppe zone of the Lower Tobol region; and in the taiga zone of the North of Western Siberia despite certain variations had a number of characteristics in common, which, in all probability, were associated with the cultural specifics of the societies which left those interments. Spatial localization Single and joint interments of the Trans-Ural region were located in the territory of or outside the settlements area, on ritual sites, in rock shelters and caves. The burial sites were positioned on lake islands and river banks. The surface structures were not numerous and consisted of flooring, stone piles or intentionally arranged stones beds; and a stone "box". The shape of the graves was oval or sub-rectangular, rarely boat-shaped and, same as in case of the grave size, any variations were insignificant. Only several interments had significantly larger dimensions or pit depth. The predominant orientations of the grave pits were NE-SW, NW-SE; the bodies orientation was heads to the NE and NW with some bias to the W or the E. Another characteristic attribute was a partial or practically full cremation on site or outside of the burial area with a subsequent burial. There were no traces of fire in the interments in rock shelters or caves. In a significant number of interments it was difficult to reconstruct the position of the bodies because of the poor preservation of the remains. The dominating types were the "stretched on the back" position, occasionally – a crouched position. Both in the single and the joint interments there were bodies deposited in an anatomical position, the skeletons without skulls, and finds of isolated skulls and human bones. The poorly preserved bone remains were found in the caves and cremated interments; in the burials of the Tyumen Tobol regions and the North of Western Siberia where organic matter decayed easily, which made it impossible to state confidently whether the bone remains integrity was disturbed intentionally or accidentally. Ochre was present in practically all complexes. The interments contained the bodies of the children and the adults, male and female belonging to the sub-Ural anthropological type. The accompanying grave goods were represented with stone items: flakes, blades, scrapers, chopping tools, arrowheads; bone and stone drop-shaped pendants; rarely – bone tools and decorations, animal teeth and shells pendants; no vessels. The similarity of the main characteristics of the burial rituals, which reflected the form and the structure
of the social organization of the forest cultures population of the Volga–Ural region, the North-West of Russia, the Baltic region, the taiga and the forest-steppe parts of Western Siberia, given the existence of certain differences and variations, was manifested in the scarcity of burial complexes and the practice of burial in shallow pits or at the ancient horizon level; the dominant stretched on the back position; the use of ochre and the fire cult, as well as in the nature of the accompanying grave goods. These parallels could be a result of either the common genetic components or of the existence of stable permanent contacts between the populations of those territories during the Neolithic–Eneolithic.
Microarchaeological analysis of soil samples - a new method to study the uses of birds in Mesolithic burial practices

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Co-author Tuija Kirkinen (Osteoarchaeological Research Laboratory, Stockholm University)

Stone Age burial sites in various parts of Europe have revealed rich materials of animal bones, teeth and antlers and artefacts derived of them. Such material provides extremely important information about uses of animals in the burial practices and human-animal relationships. These are macrofinds that in suitable circumstances (e.g., calcium rich soils) can have a very good preservation. However, very little evidence of uses of soft organic materials like fur, hide and feather have been reported in Mesolithic burials. In fact, hair, feathers and plant fibers belong to the “missing majority”, which is absent in archaeological record but which we can assume to have once been of importance. For example, uses of feathers in paraphernalia and ritual costumes and everyday clothing are described in various ethnographic and anthropological sources. We also know that feathers were loaded with meanings, for example, for the Tuva shaman, a headgear decorated with feathers and plumes symbolized the shaman’s ability to journey to the upper world. Such uses may have a complete wing attached, or they may consist of just the feathers. In archaeological contexts the use of feathers or wings has been revealed through the wing bones, either found in burials and used as part of the ornamentation, or as part of bone assemblages. However, the evidence of the prehistoric uses of feathers is still extremely scarce. In this paper, we present preliminary results from the animal originated fibers and feathers from Mesolithic burials in northern Europe. Our research is based on microscopical analysis of soil samples from prehistoric burials. We suggest that microarchaeology can bring new evidence, for example of the materials used for wrapping the bodies or feather used in paraphernalia or ceremonial dresses.
Filling the old gaps: rediscovery of the Early Neolithic burials in the territory of the East European Plain forest zone

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Notwithstanding the fact, that over 100 Stone Age single burials and burial sites have been excavated on the extensive territory of the East European Plain, the chronology of hunter-gatherers’ mortuary sites still includes a voluminous hiatus in the form of Early Neolithic burials (6th–5th millennia BC). Multiple factors such as the multilayered character of almost all sites, poor preservation of organic materials, taphonomic processes at some sites, lack of both the burial goods and grave pits’ contours, along with the absence of absolute dating, are the cause of this hiatus. All these issues have substantially complicated the process of identifying the chronological and cultural attribution of graves in this particular period. The given millennia are of great research interest from a different perspective, being the era of first ceramics appearance and dissemination all over the forest zone along with the increase of sedentarism and associated population growth. Also, in the beginning of the 5th millennium the general change of ceramic traditions together with the replacement of blade by the flake and the bifacial technology took place. The explanation of obvious lifestyles shift only in terms of Atlantic climate conditions doesn’t seem ample. These processes could have had some deeper reasons, which might be hidden in ritual life of Early Neolithic communities as well. The results of AMS C14 dating coupled with a new precise analysis of body positioning as well as burial goods, bioarchaeological research, and stratigraphical observations made on the basis of field recordings and published data let us to assume the Early Neolithic age of some burials which used to be treated as more resent graves. Within the talk, we will argue that a combination of different aspects, including grave orientation along the river, seldom but stable occurrence of body prone position with hands under the pelvis as well as more usual extended position on the back, the close arrangement of bones as if a body was tightly wrapped, making of grave pits in intact soil alongside the intentional fragmentation of burial goods, might be considered as the Early Neolithic burials’ indicator. The obtained results will be particularly useful for analysing the material from burial grounds that were used in long time span, searching for potential parallels within the Baltic region, and tracing further the evolution of hunters-gatherers-fishers’ mortuary rites in the territory of the East European Plain. Moreover, these results raise
the wider discussion on communication networks in time and space, being presumably the driving force of shifts, reflected so distinctly in the material culture of the Neolithic Eastern European forest zone.
Tradition or transition? The Mesolithic cemetery of Groß Fredenwalde and the first farmers in NE-Germany

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Discovered in 1962, the multiple burial of Groß Fredenwalde in the Uckermark region of northeastern Germany has long been neglected. It was not before the late 1980s that the detection of the Mesolithic burial of Strøby Egede on Zealand, Denmark, raised more attention also on the site, leading to a detailed publication by B. Gramsch and U. Schoknecht in 2003. New research since 2012 has yielded evidence for a unique set of Mesolithic burial traditions, and today Groß Fredenwalde is suggested to be the oldest cemetery in Germany. Most of the graves date to the early Atlantic period and are definitely related to late hunter-gatherers (c. 6.500 to 5.900 calBC). The grave of a young man who was probably buried in an upright position is dated about 1000 years younger (c. 4.900 calBC), indicating that this individual had been living side by side with the early LBK farming communities of the Uckermark. Up until now, at least ten individuals from the site are known, originating from at least five graves in an area only covering a few square meters on top of a morainic hill. It is expected that more graves are preserved on the site, including those covering the period of neolithization. The well preserved human skeletons make the Groß Fredenwalde assemblage one of the most important series of Mesolithic individuals of Central Europe. There are four adult and 6 infant individuals, among them a baby burial found in 2014. They provide the opportunity to gain new insights in the late Mesolithic population and its lifeways, especially with the health status of children being most sensitive to the living conditions. In 2019 a new project financially supported by the Deutsche Forschungsgemeinschaft starts to further investigate the extension of the burial site. Already by now there is preliminary evidence of at least one more grave. The setting of the cemetery in the landscape is another important aspect which will be addressed by pollen analysis within a novel interdisciplinary approach. The well-preserved skeletons provide excellent conditions for isotope studies to better understand the economic and spatial context of the population, and aDNA-studies will help to characterize the Mesolithic population before and after the advent of the first farmers in the region. The talk will present the outstanding insights and potentials of research at the Groß Fredenwalde site including the better understanding of the territoriality and mindset of a late hunter-gatherer community witnessing the change of their world.
Anthropological examination of the two new Stone Age burials 2017/01 and 2018/01 at Riņņukalns, Latvia.

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An interdisciplinary research project, financially supported by the Deutsche Forschungsgemeinschaft (German Research Foundation) since 2017, has engaged in the excavation and analysis of the Riņņukalns freshwater shell midden in northern Latvia. The ongoing research by the Centre for Baltic and Scandinavian Archaeology (Germany) and the University of Latvia has uncovered two new burials, allowing intensive interdisciplinary investigations of the human remains and providing new insights into the burial practices. The burials are that of an adult man in crouched position and that of a newborn, which was buried in prone position. The nature of the burials is primary. The skeletons were found basically in anatomically correct position and almost completely preserved, even though the skulls were fragmented. However, there are indicators of minor dislocation of bones due to the decomposition process as well as of displacement of bones due to bioturbation. One focus of the paper is on the grave features, recovery and documentation of the skeletons on site, including first results of the archaeothanatology of the graves. Further, an overview of the ongoing anthropological research on the human remains and the results of the 3D reconstruction of the adult skull based on 3D and micro CT scans are presented.
The Riņņukalns shell midden, Latvia: Research history 1873 – 2016

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Riņņukalns, in northern Latvia, is unique in the context of Baltic Sea region prehistory. Discovered and first investigated by Count Carl Georg Sievers in the 1870s, it is the only well-stratified Stone Age shell midden in the East Baltic and one of the few middens formed of freshwater mussel species. The artefacts recovered include ceramics, bone tools and some art objects. Of special importance were at least four human burials, with some bone and stone grave goods, which were found under apparently intact layers of the shell midden, which could be dated to the Neolithic by pottery sherds. Consequently Sievers considered these human remains, in contrast to other early modern burials found in the topsoil, as the first Stone Age graves found in the Eastern Baltic. However, this interpretation was contradicted by then leading Baltic prehistorians and the age of the presumed Stone Age graves remained in dispute. New research on this important site started in 2011 in a close cooperation between the Institute of Latvian History, Latvia, and the Centre for Baltic and Scandinavian Archaeology, Germany. Excavations demonstrated that significant parts of the midden were still preserved intact, despite extensive excavations during the 19th and early-mid 20th centuries. In addition it was possible to re-identify the human remains excavated by Sievers at Riņņukalns. He gave them to the famous German researcher Rudolf Virchow for his anthropological collection in Berlin, where they survived the chequered history of the 20th century until today. New osteological, stable isotope and radiocarbon investigations on these remains resolved the old research dispute. It is proven now that at least two burials were of Prehistoric age. They belong according to the East European Terminology to the Eastern Baltic Middle Neolithic. Nevertheless, stable isotope δ13C and δ15N values show that these people were still fishermen, hunters
and gatherers and not farmers. The paper will give an overview of the most important results before the start of the new research project in 2017.
Neolithic burial customs on the territory of the Upper Sukhona, Northwest Russia

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The investigation of burial sites in the 1990s and 2000s in the basins of the River Sukhona and Lake Kubenskoe in Northwest Russia led to a number of important new insights which enhanced our understanding of the burial traditions present in this region during the Stone Age. The evidence indicates that in this territory, the dissection of corpses prior to burial formed part of the funerary rituals. In the course of the investigation of the multi-period stratified settlement site of Veksa located in the upper Sukhona basin c. 4 km north-west of the mouth of River Vologda in Vologda region, two separate Stone Age burial complexes of the 4th and 3th millennia cal BC were discovered at the site subsections Veksa 1 and Veksa 3. In the cemetery at Veksa 1, inhumation burials were present alongside burials of body parts, including graves with several human skulls arranged in a row. In the burial complex at Veksa 3, the skeletal remains show evidence of intentional dismemberment. Such an extensive prevalence of disarticulation of the anatomical entity within Stone Age burial complexes as recorded at Veksa is the current that has parallels in this region on the Minino monument on Lake Kubenskoe.

The paper will present this evidence and discuss it against on backgrounds the other of Late Stone Age burial traditions in the Northwest Russian forest zone.
The Zvejnieki burial ground over the millennia

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The Zvejnieki archaeological complex – a burial ground and two settlement sites, partly contemporaneous with it, are well known in Stone Age research history. Excavations by F. Zagorskis at 1960s and 1970s (Zagorskis, 2004), as well as by L. Larsson, I. Zagorska and V. Bērziņš in 2005-09 (Larsson et al, 2017), gave an extraordinary rich archaeological and anthropological assemblage, investigated by a wide range of specialists (Back to origin, 2006). Research on this material has continued in recent years (L. Nilsson-Stutz, L. Larsson, J. Meadows, I. Zagorska), giving insights into ancient hunters-gatherers’ attitude to their environment, their way of life and mortuary practices over a long period, spanning much of the Mesolithic and Neolithic (approximately 7500-2600 cal BC). To understand the structure and development of burial ground over the millennia more profoundly, to show continuity or changes in a mortuary practices and world views of ancient people, we will focus on the chronological division of the graves, following earlier studies on radiocarbon freshwater reservoir effects in this material (Meadows at al, 2016, 2018). We will discuss long-term trends in the incidence of burials, their locations, in mortuary practices and associated material culture. As most of the 325 burials have not yet been dated directly, these are still tentative suggestions rather than robust patterns, but our presentation will provide some indication of the potential value of such a rich and continuous archive to understanding Stone Age burials in a Northern European context.
Kits for afterlife. The evolution of burial assemblages from the Mesolithic to the Early Metal Age between the Baltic and the Urals

Anastasia Khramtsova (Graduate School "Human Development in Landscapes", Kiel, Germany), PhD student

Grave assemblages as an essential material testimony of burial rites can mirror a wide spectrum of socio-cultural and economic aspects of past communities. In the East European forest zone, the Early and Middle Holocene period is characterized by the persistence of hunter-gatherer-fisher communities. The entangled environmental, technological, and cultural changes over this period are to some extent also reflected in the transformation of mortuary ritual. Material evidence for this is provided by the burial kit in terms of its contents, arrangements, and ways of representation. Tracking changing patterns in the burial assemblages in a broader spatial, diachronic perspective can provide us with keys for understanding tendencies in the development of mortuary rites. Such a broad assessment can also help to identify the chronological and cultural attributions of the graves through a range of relevant characteristics. To date, no comprehensive analysis of Stone Age burial assemblages from the territory in question has been conducted, neither in a wider temporal and geographical scale nor in a complex way. The comparative analysis of various parameters such as the morphology of artifacts, their location within the graves and their association with other features such as ochre distribution, fireplaces, pits and platforms, and the placement of the human remains themselves, therefore, is an important desideratum in current Stone Age archaeology of Northeast Europe. This paper presents the first results of a diachronic, comparative study on the Mesolithic to Early Metal Age hunter-gatherer burial assemblages in the East European forest zone. Although the uneven quality of field methodology and a dispersed and heterogeneous storage of collections and archives sometimes complicates the research process, a thorough assessment of the original field recordings, an analysis of burial goods from a technological perspective and the application of multivariate statistics provide valuable new insights which already at this stage help to better define the relative chronology of the burials and to better understand the socio-cultural developments forming and transforming the late forager societies of the Northeast European forest zone.
Corded Ware Warriorhood – a „pan-European” monolith or a set of local traditions?

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The recent archaeological comeback of the concept of late-Neolithic migration from the East raises many new-old questions about the nature of interaction between past communities representing old, agrarian and new, pastoral-oriented way of life at the turn of the 4th and 3rd millennium BC. The appearance of a new cultural phenomenon – the Corded Ware Culture – and quickly growing number of single graves of male individuals buried with their weapons, marked a major change in conceptualisation of violence. According to H. Vandkilde (2006), the inclusion of weaponry into funerary rituals was a result of institutionalization of war and its main actors, i.e. – warriors. At the beginning, Corded Ware warriorhood was symbolised by a shaft-hole battle axe made of stone. It became a status object and most probably also a primary shock weapon used by Corded Ware people. But was it the only one? The aim of this article is to present results of comparative analysis of the so-called warrior graves in different CWC regional groups. Preliminary results of author’s research have shown that communities from different parts of the CWC oikumene did not share a universal concept of warriorhood, but instead followed their own, local patterns of warring and commemorating idealized warrior identities. In total, 228 graves from Lesser Poland, Carpathian Foothils, Sokal Ridge, Lublin Upland and Greater Poland – Kujavia Plain were examined using statistical tools. Conducted analyses included variables such as: differences in grave structure, sex and age of deceased, arrangement of lower and upper limbs, body orientation, types and quantity of weaponry and other grave goods, as well as their location in the burial pit. The last trait was assessed according to the scheme published by Bourgeois and Kroon (2017), which allowed comparisons with their results for the Corded Ware communities from Bohemia, Germany, Netherlands and Denmark. By assessing the level of correspondence between abovementioned features, it was possible to determine main types of female and male burials, presumably reflecting real-life identities of the CWC community members. As a general remark, it needs to be stressed that CWC warriorhood was a strictly male-oriented social identity. By observing the development of a “warrior” construct in various provinces of the CWC from diachronic perspective, several observations could be attained. The dominant symbolism of battle-axes had had been a common cultural trait in the first half of the 3rd millennium BC, but shortly after its significance
began to wane, especially among eastern CWC communities, which adapted more steppe-like way of fighting with bows. Nevertheless the tradition of close-range combat “survived” and even flourished in the west, especially in Bohemia and Moravia, where additional types of shock weapons, such as stone maces, were deposited in graves.
Emerging diversity. Hunter-gatherer mortuary practices in Eastern Baltic 7th to 3rd millennia cal. BC

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Traditionally, hunter-gatherer mortuary rituals are described homogenous with only primary inhumation in the repertoire. Recently, however, different studies have presented more diverse and complex picture regarding the ways of depositing the dead in the Eastern Baltic and beyond. Among others this paper unravels these diverse ways by re-examining old excavation data – both intact skeletons and loose human bones – from present-day Estonia. Mortuary practices were observed through the lens of post-excavational archaeothanatology. It is demonstrated that primary inhumation was not the only way of handling the dead among and within hunter-gatherer communities. On the contrary, a range of practices was present. Does the diversity emerge due to temporal differences as 4 millennia or 160 generations are represented in the sample? Do we see variability due to the fact that mortuary practices differed among hunter-gatherer communities? Could the diverse practices still reflect common underlying values or norms shared by hunter-gatherers in the Eastern Baltic region?
New burials from the sphere of Estonian Corded Ware

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Corded Ware burials have been known in Estonia for more than 100 years. However, most of them have been excavated before the 1950s. The only exception are the two graves investigated at the Narva-Jõesuu IIb site (north-eastern Estonia) in 2013–2014. Unfortunately, due to the local soil conditions no bones were preserved. Still, the size of the structures and the unearthed artefacts (battle axes, beakers, an amber pendant, etc.), as well as some tooth enamel found in the graves give grounds to propose that one of the graves was a double burial of an adult and a juvenile, whereas the other one was apparently a singular burial. This presentation will introduce these newly-discovered burials and explore them in the context of burials known in the area of the so-called Estonian Corded Ware (northern Latvia, Estonia, southern and south-eastern Finland, as well as western Leningrad Oblast in Russia). Furthermore, as the grave goods from Narva-Jõesuu indicate similarities and contacts not only to the south, but rather to the east and south-east, the position of the burials and their material culture on the transitional east-west-axis is also discussed.
Burials with weaponry in Neolithic-Eneolithic burial grounds of the Upper Don River region (poster)

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Burials occur quite rare at the territory of the forest-steppe Don River region. In the Don River basin only six Neolithic-Eneolithic sites contained burials. At three of them single graves (Glinische, Lobovskaya, Universitetskaya 3), and at three more -- burial grounds (Ksizovo 6, Vasilyevskiy Kordon 17 and 27) were found. From the total of 51 graves only in 16 weaponry artifacts are present. The burial grounds are situated either at floodplain outliers or at extremities of low fluvial terraces above floodplain. At the Lobovskaya site a single burial was made in oval pit of 15 cm depth and contained human bones. According to the report of A.T. Sinyuk, the large bone barbed point was in it, the pit was surrounded by middle size sandstone boulders and contained red ochre remains. At Ksizovo 6 seventeen skeletons (six men, five women and six children) from fifteen graves were discovered. The burial ground with inhumations contained graves of two cultures -- Lyalovo (dated the first quarter of the Vth mill. cal BC) and Srednestogovskaya (mid IVth mill. cal BC). Weaponry objects were found only in five graves, two of a child and the rest of adult men aged more than 45 years old. In all three burials sandstone boulders and bone weapons of different kind were detected, and also one flint spear point. At Vasilyevskiy Kordon 17 site weaponry objects were discovered in four single burials and in the collective one, where bodies were placed extended or crouched on the back in oval pits. One flint spear point and seven flint arrowheads were found there. Collective burial (№2) contained three skeletons placed in the round pit dated the first half of IVth mill. BC. At Vasilyevskiy Kordon 27 site four burials were discovered. In two of them the projectile weaponry objects were found. In the first one two arrowheads made of quarzite and flint were put together with 138 ceramic beads and one of copper, in the second burial (dated mid IVth mill. BC) -- the fragmented flint arrowhead. The typological diversity of all these bone and stone weaponry objects points at the multidimensional economics of Neolithic-Eneolithic communities of of the forest-steppe Don River region. Weaponry had seemingly not only utilitarian function (hunt, war) but also the spiritual one. Intact flint spear points and arrowheads
were put into burials, probably reflecting the high social rank of buried persons. Weaponry objects in the child burial may witness the inherited social rank of the diseased.