

## SESSION A2

### REINDEER HUNTING AS PART OF CIRCUMPOLAR HISTORY AGAINST THE WIDER BACKGROUND OF HUNTING IN CENTRAL AND NORTHERN EUROPE

**Organisers:** David George Anderson, Ingrid Sommerseth (University of Tromsø, Norway), Ulrich Schmölcke (Centre for Baltic and Scandinavian Archaeology, Germany) and John Olsen (Vest-Agder Museum and “Wild Reindeer as Added Value”, Norway)

This first aim of this session is to initiate interdisciplinary discussions about reindeer hunting as a part of circumpolar history in the long term. Across the circumpolar north in both Eurasia and North America, the wild reindeer/caribou hunt and domestic reindeer husbandry have played and still play an important role in the economy and identity of indigenous and other societies. Strategies designed to encounter migratory reindeer, whether to hunt or to domesticate them, involve an understanding of the landscape. The predictable nature of this embedded knowledge made it practical to establish stationary hunting facilities in alpine tundras or at river crossings. Furthermore, ethnographic work with contemporary reindeer herding societies demonstrate how the knowledge of holding domestic reindeer in certain landscapes mirrors the knowledge of the behaviour of wild reindeer. Also, some societies have a still living hunting tradition with knowledge of how the reindeers use the landscape. The focus will be on the presentation and discussion of ongoing research projects related to hunting and trapping wild reindeer and their cultural heritage; on discussion of interdisciplinary analytical approaches to the study of human–reindeer relations (genetic research, landscape archaeology, ethnography), the comparison of stationary reindeer hunting facilities to those of other large mammals and how the reindeer relationships are exploited commercially today and what opportunities and challenges this brings. The second aim is to take an overall view on hunting in Northern and Central Europe. Hunting wild game has been a constant in European history even after the often noted Neolithic traditions. Hunting involves many facets such as diverse hunting weapons, techniques, animals, preys and the development of the fauna or single species. Hunting can often be linked to social status or religious beliefs or, in a society of farmers, to the protection of the agricultural landscape. The papers will focus on various types of hunting specifically in northern or central Europe from the Palaeolithic up to recent times. Here we welcome an emphasis on game animals other than rangifer, and this includes reflections on multiple regions and with multiple methods to guide us to a view on hunting over the long term. More generally, the role of hunting in social dynamics, hierarchies, burial customs and symbolism is worth discussing. The session's synthesis is meant to draw a picture of the history of hunting in northern and central Europe, with a certain emphasis on reindeer hunting, but also by assuming a more general approach. In addition, future perspectives of hunting-related research shall be outlined, in particular fields of research which yield high potentials but were not adequately addressed so far.

#### Beyond Wild and Tame: Sentient Ecologies in Eurasia

David G. Anderson (University of Aberdeen, United Kingdom)

Using ethnographic and archaeological data from eastern Siberia, this paper gives a theoretical overview of assumptions made about reindeer hunting vs. reindeer herding. The paper will review cases of the interrelationship of taiga and tundra dwellers on both so called wild and tame stocks and suggest that metaphors of attention and collaboration better capture the archaeological and ethnographic record. The paper will also review models of socialization wherein relationships with rangifer are keyed to those of other species.

#### Hunting in Central and Northern Europe in the First Millennium AD – Some Overall Topics, Some Overall Questions

Ulrich Schmölcke (Centre for Baltic and Scandinavian Archaeology, Germany)

It is a widely held view that hunting was rather unimportant in the 1st millennium AD, as many studies of animal bones in settlement contexts indicate. However, a closer and interdisciplinary look shows that this impression might be misleading. As regards burials, there were hundreds in the north

and centre of Europe the furnishings of which related to hunting: from graves with bear skins and bear claws to those with birds of prey and hounds. Burials of women played a role too in that respect, and some of them were quite outstanding. When it comes to settlements, the centre of power in Tissø on western Zealand, for example, may point towards hunting products used for feasts in the local hall whereas there were specialized hunting stations in other areas. Offerings of animal bones are also worth considering with regards to the amount of bones of wild animals (e.g. Oberdorla in eastern Germany, Frösö/Jämtland in Sweden), and to give an interdisciplinary example, some continental place names which pre-date AD 1000 had a relation to royal hunting and hunting districts with restricted access. At its very end, the present contribution will try to sketch some overall topics and overall questions which may yield high potential for the future.

#### Reindeer Hunting among Sámi Reindeer Herders – Techniques and Beliefs

Kjell-Åke Aronsson, Isse Israelsson and Yngve Ryd (Åjtte – Swedish Mountain and Sámi Museum, Sweden)

The transition from reindeer hunting to reindeer herding is often described just as a response to a scarcity of game. However reindeer hunting and trapping were combined with reindeer herding during many hundreds of years. Probably tame reindeer were first introduced in the hunting economy for the means of transportation. A number of ancient hunting and trapping methods will be examined as well as some beliefs related to them. Information from old Sámi reindeer herders through new light on reindeer hunt on snow patches in the high mountains. The role of domesticated reindeer as draught animals in reindeer hunting will be discussed against a background of traditional knowledge. Archaeological finds such as arrows, bows and sledges are interpreted in relation to traditional techniques.

#### Hunting Rituals: Hunting Facilities, Graves and Sámi Circular Offering Sites

Marte Spangen (University of Stockholm, Sweden)

In previous research, Sámi circular offering sites have been associated with large reindeer hunting facilities and graves, primarily based on studies in eastern Finnmark, Norway. The offering sites have thus been interpreted as sites for rituals connected to hunting and burials, and it has been suggested that such rituals may have been interrelated, as both situations involve dealing with death. In a new PhD project I examine circular offering sites and similar structures in Sámi areas throughout Norway and Sweden. Surveys aim to establish, among other things, the relation between these sites and other archaeological sites and monuments in a broader perspective. Are the circular offering sites in fact generally related to reindeer hunting facilities and/or graves, and if so, what was their role in these contexts?

#### Mass Trapping of Reindeer in Southern Norway

Runar Hole (Norwegian Institute Nature Research, Norway)

NINA (Norwegian Institute Nature Research) has a survey of old hunting and trapping sites for reindeer, to better understand the earlier migration routes of these animals through southern Norway. The project has discovered a number of previously unknown sites, especially in mountain areas, and greatly increased knowledge of the subject in a number of ways. Of the trapping sites, the most impressive are those where herds of reindeer were deliberately trapped. At least twenty examples of this type of site have been found in the past decades in southern Norway, including one discovered by the author last summer. Mass trapping seemed to be organized by many people, and the profits were certainly high, when the stock of reindeer was good. We believe this was almost like an industry, and that it was organised and supervised by the king or local chieftains. The reason of catching so many reindeer at the same time in one place was clearly to get valuable products to use in trade. Skin and antler were popular products in Europe. Dried meat and fat from the animals could also be exported.

### Fallen from Sight: Exploring the Use of Reindeer Hunting Systems by the Norwegian Fjords

Per Christian Burhol (University of Bergen, Norway)

In Sogn and Fjordane County, located in the western part of Norway by the Nærøyfjord fjord, lies the shrinking Fresvik glacier. This area contains a variety of hunting systems including not only clusters of archery positions and trapping pits, but also of highly interesting drive walls. During my field work, I realized that the hunting system made up of the tall drive walls could have funnelled panicking reindeer towards and over the cliffs' edges. This may indicate that the reindeer could indeed have been chased off the cliffs rather than being killed by archers. Each cliff is about 60 m tall, and ends in sloping mounds of gravel and rounded rocky outcrops making them ideal for killing reindeer without overly damaging their bodies and their meat value. So far, few believe that reindeer jumps were used in Norway, because they have not been researched in Norway before. Hopefully, this Master thesis may therefore represent an "original" first step for furthering studies of the use of reindeer jumps as a hunting practice in Norway.

### Wild Reindeer Skills and Reindeer Luck – the Dynamics of the Northern Landscape

Ingrid Sommerseth (University of Tromsø, Norway)

This paper discusses reindeer knowledge (the Sámi term *boazulikku*) in light of a holistic anthropological–humanistic approach that links archaeological remains and landscape management to oral and ethnographical sources. The wild reindeer hunting landscape in the North has undergone temporal adjustments and changes, as we can see from the first hunting scenes in the rock art from Alta at 5000 BC, later becoming visible in the hunting pits and pit fall systems for wild reindeer established around 2500 BC. There is a rich source material on wild reindeer hunting in the circumpolar area, and many stories are recorded from oral traditions. Common to these stories are the mutual understandings in the use of landscape and how people nurtured their relationships with certain places. Although the circumpolar geographical distances are large, there are strong similarities in the organisation of wild reindeer hunting which manifest themselves in archaeological remains on the landscape. Even if the domestication of wild reindeer in northern Fennoscandia during the late Medieval Period resulted in changed landscape relations, the pastoral skills practiced today still entail a human–animal relation containing past reindeer knowledge formulated in the concept of reindeer luck.

### Reindeer and Reindeer Hunting in Northern European Stone Age Rock Art

Jan Magne Gjerde (Tromsø University Museum, Norway)

This paper discusses hunting in northern European rock art from the Stone Age. It focus on reindeer hunting but also relate to hunting in general based on Stone Age rock art, e.g. bear hunting, elk hunting and whale hunting. Geographical and ethnographical sources suggest animals cannot be removed from "hunter-gatherer landscapes" and animals are therefore references to areas, landscapes and seasonality. The earliest known rock art in northern Europe dating to about 11000 BC seems to be situated at, and reflect favourable places for large game such as reindeer and reindeer hunting. Later, about 5000 BC there are hunting scenes, such as the reindeer hunt from Alta, northern Norway, including reindeer corrals. The large rock art concentrations in Fennoscandia dating to about 5000 BC relates to favourable geographical nodes or ecological niches such as the red deer of Vingen in western Norway, the reindeer hunting at Alta, northern Norway, the elk hunting at Nämforsen in northern Sweden or the whale hunting of Vyg in NW Russia. At some places the rock art, by the placing of figures and the relation between figures and the natural background, may refer to the physical geography indicating the background of the hunt and the wider landscape.

### Rákkočearru – An Early Mesolithic Reindeer Hunting Blind system in Eastern Finnmark, Norway

Jan Ingolf Kleppe (Finnmark County Authority, Norway)

During a survey in late summer 2011 a hunting blind system was found on the Rákkočearru plateau in Berlevåg County. Situated at over 400 meters above sea level, the system consists of hunting blinds and caches. Lithic material in the form of a single edge point, cores and flakes of quartz was also

found in context within two of the hunting blinds. The layout of the system clearly suggests hunting of reindeer moving inland from Berlevåg. The lithic material as well as contextual information regarding known habitation and hunting related sites in the area point to an Early Mesolithic dating of the system: Rákkočearru is quite possibly the oldest known reindeer hunting blind system in Fennoscandia.

### Reindeer Migration Routes and Distribution in the Late Glacial in Eastern Baltic Region

Algirdas Girininkas and Linas Daugnora (Klaipeda University, Lithuania)

During the late Glacial in the territory of East Baltic region after retreat of the glaciers, the main hunting object was reindeer (*Rangifer tarandus* L.). Baltic region specimens would considerably help in the reconstruction of the origin and migration routes of the extant wild reindeer populations in northern Europe. Proposed migration routes for the subspecies of the wild reindeer from Uznemune and Kaliningrad district in two directions: northwards and north-east crossing the Lithuanian rivers reaches near already existent wades and shoals formed by the Nemunas River scouring out through moraine hills and backward. On both sides of the Nemunas River, at the shoals, most campsites and finding places of the mainly Swiderian cultures occurred. In 16 localities of the territory of Lithuania and radiocarbon dates from antlers of reindeer between 12085 and 10435 BP were collected. The majority of radiocarbon dating results show that reindeers colonized the eastern Baltic region quite rapidly and possibly all at once – 13400–12300 BP. The results of cosmogenic dating of boulders indicate that the ice sheet which covered a large East Baltic area melted at almost the same time – about 13500–13000 BP.

### Wild Reindeer as Added Value – Challenges in Connection with the Use and Conservation of Cultural Heritage and Protected Natural Areas

John Olsen and Anne Lise Fløttum (Wild reindeer as Added Value, Norway)

The project "Wild Reindeer as Added Value" is located to the mountain area in the northern part of South Norway. It is part of the national programme "Natural Heritage as Added Value". The project is based on the unique position of wild reindeer. The close relationship between wild reindeer and man has resulted in a large number of hunting and trapping sites – a cultural heritage spanning a wide range of dates. "Natural Heritage as Added Value" is a project whose main goal is to make the protected areas and other valuable natural areas an important resource in the development of communities. Keywords: "use" and "conservation". The Norwegian Directorate for Nature Management is responsible for the programme, which is a collaboration between two ministries. Finding a balance between "use" and "conservation" is a challenge in an area still inhabited by shy, wild reindeer, where nature and the cultural heritage are subject to wear and erosion from traffic, but where they are also the most important resources for tourism and economic development in the area. The project will contribute to sustainable adaptation of cultural and natural heritage sites. What challenges do we face and how can they be addressed?

### POSTERS

#### Pits for Hunting in Protohistoric Temperate Europe?

Nathalie Achard-Corompt, Cyril Marcigny, Vincent Riquier (INRAP – Institut National de Recherches Archéologiques Préventives, France) and Jan Vanmoerkerke (Service Régional de l'Archéologie Champagne, France)

The development of preventive archaeology has increased the findings of such pits in France, Germany, the Netherlands – well-known at the beginning of the 20th century as Schlitzgruben. Characterized by an elongated plan, it has a V-, Y-, W-shaped section and is up to 3 m deep. As the filling is lacking of any artefact, radiocarbon dates have been conducted and showed that the pits were used between 4600 and 700 BC. These analyses were managed within the framework of an INRAP research project in Champagne–Ardenne where hundreds of pits have been identified. This led in 2010 to a round table bringing together about sixty European archaeologists. Many functions were

proposed (tanning, retting, weaving, hunting, production of vegetal tar, food storage, ritual and religious practices) and discussed during this meeting, but the hypothesis of trap pits for large wild herbivores seems actually to be the best argued.

#### **Reindeer Hunting as World Heritage**

John Olsen (Vest-Agder Museum and “Wild Reindeer as Added Value”, Norway)

Parts of the southern Norwegian mountains have been proposed as a candidate for Norway’s tentative list for UNESCO’s World Heritage List. The proposal concerns parts of the three national parks: Dovrefjell–Sunndalsfjella, Rondane and Reinheimen, all with pertaining landscape protection areas. The background to the proposal is the amount and variety of cultural heritage sites relating to the hunting and trapping of wild reindeer, and the fact that there are still wild reindeer in the area. The reasons also include the fact that hunting is still a living and active tradition, and, finally, the great natural value of the landscape. Together, these five points represent a cultural landscape that is unique in the global context. The poster will describe and illustrate the scientific justification for the proposal and give a short introduction to cultural landscape of reindeer hunting in the northern part of the southern Norwegian mountain areas.

## **SESSION A3**

### **THE MICHELBERG CULTURE – TERRITORIES, RESOURCES AND SOCIOPOLITICAL COMPLEXITY?**

**Organisers:** Detlef Gronenborn (Römisch-Germanisches Zentralmuseum Mainz, Germany), Laurence Manolakis (CNRS – Centre National de la Recherche Scientifique, France) and Bart Vanmontfort (Eenheid prehistorische archeologie, Belgium)

From 4500 cal BC onwards, one millennium after the introduction of agriculture, the Neolithic in north-western Europe is characterized by major economical and technological transformations, but also by a growing socio-political complexity. During this period, the Michelsberg Culture (4200–3500 cal BC) developed in the Paris Basin and in the Rhineland. From this core region it expanded eastwards, southwards, and northwards. Michelsberg is characterized by a distinctive multi-tiered settlement pattern centred on complex enclosures and hill forts. Some burials indicate the existence of elites. The communities were active participants in elaborate networks of production and exchange of flint, both as raw material and as finished goods, but possibly also salt. Jade axes of Alpine provenience constituted objects of wealth and power. The session will present recent research, particularly from current projects in Germany, Belgium and France, focusing on links between territories, resources and socio-political complexity. The objective of the session is to discuss the causes for the observed transformations and its consequences. The result of this discussion is of interest to a much larger audience than the French–German MK community. The papers will be edited for publication and are planned to be published in 2013/2014 as a product of an ongoing MK project.

#### **Mairy (dept Ardennes, France): Settlement, Monumentality and Sociocultural Complexity in the Meuse Valley at the Turn of the 5th and 4th Millenium BC**

Christophe Laurelut (INRAP – Institut National de Recherches en Archéologie Préventive, France)

West of the Rhine basin, Mairy is until now the only Michelsberg site with both a monumental (25–30 ha) enclosure and dense, complex and enduring traces of an inside occupation, including numerous houses and huge quantities of refuse material. However, the interpretation of those remains as straightforward settlement traces seems quite questionable. Most of the material found (especially animal bones and ceramics) clearly cannot result from a “normal” domestic consumption; the cylindrical pits containing most of those remains show features inconsistent with (former) storage; and the monumentality of some buildings clearly exceed what could be considered a standard house at the time. All these features suggest some kind of social differentiation, related to ceremonial/cultural

activities, associated – or not? – with a permanent settlement. Mairy may be a classic case for a regional central place. The analysis of the pottery shows the long-lasting coexistence of different stylistic traditions, going back to different regions of the Michelsberg area. A clue to the supra-regional dimension of the site, that also relate to the level of social complexity in the Michelsberg culture/complex as a whole.

#### **Territories and Lithic Resources in the Michelsberg and Chasséen septentrional (Northern France)**

Laurence Manolakis (CNRS – Centre National de la Recherche Scientifique, France), Françoise Bostyn (INRAP – Institut National de Recherches en Archéologie Préventive, France) and François Giligny (Université de Paris 1, France)

Archaeological data from Middle Neolithic sites (Chasséen septentrional and Michelsberg cultures) are now quite abundant. The on-going French–German project “MK Projekt: The Emergence of Social Complexity. Enclosures, Resources and Territoriality in the Neolithic. The French–German Research Project on the Michelsberg Culture”, will enable us to analyse the relationships between procurement sites, workshops, and consumer’s sites – including open settlements or enclosures. The aim of our paper is to present different modes of production in order to reconstruct the networks of raw materials procurement, and the circulation of half-finished and finished products. We discuss the organisation of territories and the role of specialised sites in the production of blanks, blades, tools and polished axes, by confronting the location of the raw material deposits and the composition of lithic assemblages in the settlements. These models will be described at different scales, from local to supra-regional. In order to achieve this, we focused on several case studies from the different valleys of the Paris Basin, such as the Aisne, the Oise, the Meauldre, the Marne valleys. Our studies show a very clear difference in the size of lithic acquisition territories between the Chasséen septentrional and the Michelsberg cultures.

#### **Territorial Organization and Regional Models around 4000 BC in North-western Europe: An Overview and Michelsberg Case Study**

Claire Lietar, François Giligny (Université Paris 1, France) and Olivier Weller (CNRS – Centre National de la Recherche Scientifique, France)

The principal aim of the French (ANR) and German (DFG) MK Projekt was to study territories in a large area between France and Germany from 4200 to 3600 BC. Through qualitative and quantitative analysis of a site database we propose to model settlement patterns for the Paris Basin Michelsberg culture. This model ranks the sites in a hierarchy and includes knowledge on subsistence strategy, resources acquisition and circulation. Such models have been described for Michelsberg culture in Germany, but also for contemporary neighboring cultures, as “Chasséen septentrional”, southern Chassean or “Néolithique Moyen Bourguignon”. The model includes different site functions, such as enclosures, flint mines and salt springs exploitations. At a larger scale, settlement models were built for the TRB culture in northern Europe. We present preliminary results on settlement models for the Paris Basin and an overview of the pre-existing models for other Neolithic cultures in north-west Europe around 4000 BC.

#### **Fauna and Bone Tools in Michelsberg Enclosures**

Lamys Hachem (INRAP – Institut National de Recherches en Archéologie Préventive, France), Yolaine Maigrot (CNRS – Centre National de la Recherche Scientifique, France) and Lisandre Bedault (Maison de l’Archéologie et de l’Ethnologie, France)

Our paper is a synthesis of separate studies: fauna and bone tools from two monumental enclosures located in northern France: Bazoches (Aisne) and Carvin (Nord). This paper is divided into two parts. The first compares the animals consumed and the animals used for making bone tools. The main result here is that the faunal spectrum for bone tool production is quite the opposite to consumption, showing a rather different management of animals in each case. The second part focuses on the spatial analysis of this evidence. There are two trends, one involving domestic discard (meat, broken tools and waste), the other unusual deposition (bucrania and complete antlers).

### **Redefining Archaeological Heritage**

Johanna Enqvist (University of Helsinki, Finland)

How could we involve citizens to take an interest, recognize, appreciate and protect our common cultural heritage? In order to solve that out, we must first of all make clear to ourselves, what is the cultural heritage we are talking about. Archaeological heritage is a real-world entity, but it is also a social and conceptual construction. Concepts of archaeological heritage and protected archaeological sites are historically evolved and constantly redefined and re-evaluated. This is not a conscious or controlled process in its entirety, but happens every time we interact with our research objects or each other and communicate referring to archaeological heritage. In my multidisciplinary PhD dissertation concepts, meanings, perceptions and values attached to archaeological heritage will be explored in the fields of Finnish cultural heritage management and academic archaeology, but also amongst common people. Making cultural heritage genuinely public property demands defining it together. Important aspect according to this is to provide information by making for example all the research documentation available as Open Data. Open Data requires adequate machine readable metadata, which can be produced with semantic web ontologies: formalized vocabularies of terms. As part of my study I will create ontology of archaeological heritage.

### **Kalevala Jewelry**

Mari Kotka (Kalevala Jewelry, Finland)

The Finnish jewelry design house Kalevala Jewelry has been producing high quality jewelry for over 75 years. The design is strongly based on Finnish and Scandinavian cultures combining historical heritage with modern life. Since the 1940s, Kalevala Jewelry collections have featured both ancient and contemporary designs. The Classic collection of bronze, silver and gold jewelry draws its inspiration from early Finnish history. Many of the pieces are replicas of archeological finds dating back to the early years AD, the Viking era and more recent times. The pieces are deeply rooted in Finnish culture, which for centuries has combined influences from east and west. The rich ornamental world of the museum pieces has also inspired attractive jewelry adaptations. The jewelry replicas of ancient treasures have often been designed in cooperation with archaeologists. Every piece of Kalevala Jewelry is accompanied by a tiny leaflet telling the story of the piece: its theme, origins and symbolism. Kalevala Jewelry conveys Finnish cultural heritage. The Helsinki based Kalevala Koru Oy (Kalevala Jewelry) is one of the largest jewelry manufacturers in northern Europe. The company is fully owned by the Finnish Kalevala Women's Association, established in 1935 to preserve and promote our national cultural heritage. The company manufactures all jewelry in Finland and favors materials of Finnish origin. In an extensive Finnish brand research Kalevala Jewelry was ranked the 10th most appreciated brand in 2010 (Marmai 2010).

## **SESSION C14**

### **ANIMAL AGENCY?**

**Organisers:** Kristin Armstrong Oma (University of Oslo, Norway) and Gala Argent (Eastern Kentucky University, USA)

Archaeology by definition centralizes the human within its realm of study. As within broader Western socio-cultural constructs, archaeological studies most often marginalize nonhuman animals as containers for human symbolism or as economic strategies, or segment them into abstract categories of inert variables. In a philosophical sense, ontologically the nature of being is the nature of human being; the nature of action is of human action. Animals are more than cultural abstractions. There is growing interdisciplinary recognition that many animals possess characteristics such as intelligence, emotion and awareness that vary from humans by degree rather than kind. Animals are alive, active participants in their worlds, and the spaces where those worlds intersect and enmesh with humans are often messy and difficult to divide into clean compartments. In addition to how humans use them, animals often take part in subjectified relationships with humans that are impactful for both

species at various levels of scale. But while particular lines of archaeological inquiry have focused upon attributing objects and landscapes with agential abilities – while leaving it tacitly understood that this kind of agency is secondary to the type of agency humans apply to their worlds – with few notable exceptions animals have been left out of this type of discourse. This session aspires to be one such exception, by addressing the question of animal agency. With these considerations in mind, this session is open to contributions that specifically address – or reformulate – the question of animal agency within archaeological studies. Questions might include: Do animals have agency, and if so, what type(s)? Do animals hold a middle ground between agential humans and inert material culture? How might animals be seen to have impacted particular societies and cultures, beyond their use? Can a consideration of animals as themselves, and as they live and interact with humans within shared worlds, assist with understanding the human cultures which lived or live with them? How does animal agency challenge the paradigm of human centrality within archaeological studies? How might the manner in which conventional archaeological narratives construct animals be expanded? Can fresh theoretical or methodological approaches be incorporated beneficially into archaeological studies which include animals? What are the ethical implications of animal agency for archaeologies which approach them as objects? Contributors are also invited to address the relevance for archaeological studies of recent advances in human-animal studies, posthumanist and feminist research.

### **Agency of the Animate: Coming Back to Life in the Discipline of Things?**

Niels Johannsen (University of Aarhus, Denmark)

As noted by the session organizers, many recent discussions of agency in archaeology have focused on the relationship between inanimate things and human beings, all the while ignoring the ontological significance of other, non-human living organisms. I shall argue that the patent lack of attention to non-human organisms is not a random by-product of the recent rush to grant agency to inanimate materiality but, rather, a logical consequence of the specific character that this trend has taken. I suggest that neither the framing of the question of agency associated with what we might call the “Inanimate Agency Proposition” (Johannsen 2012) nor the resultant detachment from non-human – and human – biology is very attractive to archaeology. Using the example of past and present working partnerships between humans and cattle, I discuss a range of ways in which we may think about the agencies involved when humans and animals act and co-act. While not necessarily partnerships of equality, such relations none the less involve significant mutual dependencies and expose not only differences but also similarities between the causal roles and qualities of humans and other animals.

### **Living Materiality: The Osteobiographies of Humans and Other Animals**

Emma Hite (University of Chicago, USA)

As archaeology begins to seriously consider that nonhuman animals were persons or agents in past social networks, the material nature of the relationships between humans and animals that constituted and were constituted by past social worlds requires close attention. “Living materiality” is the accumulation of human and animal osteobiographies that results from these relationships throughout life and on into death, which archaeology is uniquely situated to explore. The osteobiographies of humans and other animals emerge through complex material interactions throughout their lifetimes. The osteobiographical approach to human-animal relationships deploys the relational model of materiality over lifetimes (and even generations), which means that biological and social events and processes at disparate temporal scales are captured in the bone, teeth, and other durable matter of humans and animal. The assemblage of osteobiographies in space along with other materials constitutes the material dimension of a past social world. “Living materiality” can be used to explore remains in diverse archaeological contexts through a straightforward methodological apparatus tightly linked to a robust theoretical framework. This paper will examine the intersection between materiality studies and literature on human-animal relationships in an effort to build upon current directions in zooarchaeological research from a theoretical perspective.

### **Being Specific and Particular: A New Social Zooarchaeology**

Nick Overton (University of Manchester, United Kingdom) and Yannis Hamilakis (University of Southampton, United Kingdom)

The recent rejection of Cartesian schemes of past human-animal interactions, revolving around the exploitation of homogenised animal populations, allow the articulation of explicitly non-anthropocentric archaeological narratives. The challenge now facing archaeology is progressing from generic theoretical acknowledgments of animals' agentic potential, to considerations of the significance of particular human-nonhuman engagements. As a study of animals that existed alongside humans over the last 2.5 million years, zooarchaeology occupies a potentially privileged position as an appropriate field to discuss past interspecies interactions. However, zooarchaeology's latent ability to contribute is heavily limited by firm footings within dichotomous, anthropocentric ontologies, reductionist epistemologies and problematic methodological assumptions. Here we advocate a new social zooarchaeology, one that not only considers alternative zoontologies, reinstating non-human animals as sentient and autonomous, but also foregrounds embodied and sensuous engagements, through which humans and non-humans co-shape one another's existences. Using this framework, we present a case study exploring human-whooper swan interactions in the Danish Mesolithic. We use zooarchaeological analysis to trace engagements between humans and swans, demonstrating how peoples' understanding of swans as beings homologous to humans developed through specific daily encounters with them. This understanding in turn, shaped future treatments of swans and of archaeologically detected swan remains.

### **"Das Ding an sich". Animal Identities and Animal–Human Mergings, Extra-ordinary Phenomena or Based on Experiences of Actual Animal Agency?**

Torill Christine Lindstrøm (University of Bergen, Norway)

Humans, their activities and artefacts are the stuff that archaeology is made of (I'm paraphrasing Shakespeare). Interpretations of whatever people had, made, or were surrounded by, focus on functional and economic properties (processualism), or on symbolism and meanings (post-processualism). Although being antagonistic, these theoretical perspectives share a profound anthropocentrism: "What was in it for us?" "Uses" and "meanings" of animals are accentuated, to the point where "das Ding an sich" (Kant 1783), characteristics of animals in themselves, are repressed. There are theoretical reasons for this. Fortunately, newer theoretical developments in archaeology propose trans-theoretical paradigms. Modern research has published astonishing results regarding animals. Much is "old news" for people interacting closely with animals; and much must have been experienced also by people of former times. – Animals have agency. Animals are not only acted upon, they act on, and interact with, people. Therefore, we do not only construct our conceptualizations of animals according to our culture, we are also affected by them according to their nature. On this background, I present cases from various cultural contexts where the archaeological record can only be adequately interpreted if animals' agency is taken into consideration: recognition of animals' identities, and animal–human merging phenomena (hybridity).

### **Animal Pragmatism?**

Marko Marila (University of Helsinki, Finland)

Much of modern European philosophy has for hundreds of years centralized the human individual as the rational and autonomous thinker. This approach in turn has had a huge impact on how people relate themselves to other animals, and things for that matter, and how we as modern humans conceive past human–nonhuman relationships. During the recent ten years or so, many archaeologists have become concerned with anthropocentrism and asymmetry between things and humans. While certain approaches, such as symmetrical archaeology, have been able to regain some of that symmetry, relatively little time has been devoted to the study of human–animal relationships in archaeology. What would a more symmetrical and non-anthropocentric human–animal relationship look like? Are we able to discard the brute dualistic distinction between humans and nonhumans? Criticizing the rationalist philosophies, I propose that a pragmatistic approach should be adopted in the study of human–animal relationships and more emphasis placed on the importance of emotions and intuition. Similarly, following Charles Peirce's (1839–1914) idea of continuity, I propose that clear distinctions between species are more characteristic of the so-called analytical philosophy of the modern age and most likely differ from those of many premodern peoples.

## **Synchronies: Relationship Stages, Domestication and Social Mimicry in Iron Age Eurasia**

Gala Argent (Eastern Kentucky University, USA)

All living creatures exist in relationships – biological, psychological and/or social – that at some level affect their neighbours. Furthermore, many people who live with and write about nonhuman animals acknowledge that humans and animals can participate in “interpersonal” relationships and that, at least to some degree and with some animals, the human–animal interface can be conceptualized as mutually understood and enacted interdependencies between individual actors. Despite these realities, anthropological and archaeological approaches which consider animals as beings with agential qualities capable of impacting human social spheres are still rare. This is highly apparent in unilinear models of the human domestication of horses, which are heavily reliant on assumptions of human “exploitation”; humans are the actors and horses are acted upon. This paper examines whether larger-scale stages of the “relationship” developed between humans and horses through the process of domestication in Eurasia as evidenced archaeologically might be coherently mapped onto smaller-scale models of human interpersonal relationships – specifically the sequencing and stages of relationship development. From this framework, I suggest that the reciprocities and synchronies of human–horse social exchange led to degrees of social mimicry, where human social structures mirrored those of the horses with whom they interacted.

## **On the Nature of Mesolithic Animals**

Tove Hjørungdal (University of Gothenburg, Sweden)

Something interesting is emerging to Mesolithic animals, and they are more active than ever. Inspiration from posthumanist and current feminist approaches is obvious and welcome in this effort, as they embrace more than one subject in their notions of the making of life, community and the world. New animal subjects are found in Dommasnes’ issue of the Mesolithic from the dog’s viewpoint, while Chantal Conneller has shed new light on red deer and humans at Star Carr. Such ventures have inspired my own revisit to Mullerup, Denmark, the first site to recognize the Mesolithic in situ. Georg Sarauw, the excavator and interpreter, reported humans, dogs, 30 different Boreal animals, birds and fish, together with composite tools made of flint with animals’ bones and antler. Of special interest is Sarauw’s account of roe deer frontlets with horn (compare red deer frontlets at Star Carr), and a badger’s face. A key in my project “On the Nature of Maglemose” is the changing notion of ontology of the Mesolithic. Its origin is in Mullerup, but has been of a changing character. One hundred years ago, Sarauw classified the find materials according to The History of Humans and their tools as contrasting with the History of the Soils, the Animals, and the Plants. This is an explicit archaeological model of an ontological divide made through organization of the find materials themselves. In this model, animals and Nature are explicit others while humans are the subjects. Now, are the animals of Mullerup ready to get animate by current theoretical advances? Archaeology’s encounters with current feminist frameworks developed by Haraway and Barad, prospect a move on how to reach the animals a human paw. The approach of meetings between intra-actors broadens our notion of alternative subjects and ontologies in the Early Mesolithic. Questions in the tune of the scholars at issue are, Who is a queer co-worker in Mullerup? Is it the dog? The badger? The roe deer? What about the nature cultures of antler and flint tools? Attention to the character of distant past subjects and ontologies is an area of expertise to archaeology. Possibilities of recognizing intra-actions with our “others” and the outcomes of these meetings are significant to our interpretations of social formations.

## **Animals and Humans in a Cold Climate: Animals as Active Agents in Viking Age North Atlantic Society**

Lara Hogg (Cardiff University, United Kingdom)

It is increasingly recognized that the study of human–animal relationships provides vital insights into the structure and transformation of societies. Within the North Atlantic, Viking Age animal-based research has been largely restricted to economic roles and ethnic affiliation, particularly in the case of fish. However, animals were socially and symbolically important in Scandinavian society as demonstrated through their prominence in Old Norse mythology. They are often affiliated with particular gods such as, Odin’s horse, Thor’s goats, Freyr’s boar, Freyja’s cats and Heimdall’s ram. Animals,



notably “domestic” animals, can be seen to play a strong symbolic role and often act as metaphors for particular character traits. This was a period of great change and it witnessed a significant transformation within society. Therefore, the active roles of animals in human relationships are especially useful in the interpretation of Viking Age society and social identities. Moving beyond economic and ethnic approaches to the use of fauna, this poster considers the agency of animals in human relationships and assesses their role in the emergence of new identities and activities. This is achieved by integrating evidence from faunal remains with other categories of material culture and interdisciplinary forms of evidence, in particular literary sources and place-names.

### **Lend Me Your Eyes, Your Ears, Your Perspective: The Usage of Animal Body Parts in Human Burials in the Mesolithic–Neolithic Danube Gorges**

Ivana Zivaljevic (University of Belgrade, Serbia)

In recent years, humanities have brought forward the idea of non-human agency; either in the form of meanings bestowed upon objects, animals and natural phenomena, or through deconstruction of ontological differences between “people” and “things”. In case of the former, it has been argued that non-human agents have the power to act as “participants” in social action (e.g. the agential power of material properties of things, or of animal behaviour). In this paper, I discuss the practice of placing animal body parts alongside human bodies in the Mesolithic–Neolithic Danube Gorges, by using the concept of perspectivism as a theoretical framework. The choice of species and their body parts varied, but was by no means accidental. Rather, it reflected certain culturally specific taxonomies, which were based on animal properties: how they look, move, feel or what they do. Common examples include red deer antlers, which have the power to “regenerate” each year, or dog mandibles (physical remains of “mouths”) which have the power to “communicate” (i.e. bark). The aim of the paper is to explore how various aspects of animal corporeality, associated with certain ways of seeing and experiencing the world, could be “borrowed” by humans utilizing animal body parts.

### **Dogs, Diets and Animal Agency in the Baikal Region of Siberia**

Robert Losey (University of Alberta, Canada)

Historic accounts and the archaeological record indicate that humans and dogs often have been tablemates. This commonly has been understood to indicate that humans provisioned dogs, or at the very least, that dogs were scavenging upon our leftovers. Ethnographic accounts show a more complex relationship, one in which dogs in some settings were feeding humans, and that these animals can self-provision, often in unexpected ways. This paper examines dog dietary choices using the Holocene archaeological record of the Baikal region of Siberia. Specifically, by employing stable carbon and nitrogen isotopes, it will be demonstrated that dog diets in the Baikal region largely mirrored those of local humans, but also are offset from them in a patterned way that indicates some self-provisioning. Previously, dog diets have been studied in archaeology only because they were deemed useful as proxies for food consumption patterns among humans. The data presented here point to the need for reconsidering this perspective and indicate the interpretive potential of compiling osteobiographies for dogs and their humans. This approach should help highlight the agency and individuality of these animals and allow us to better understand their complex engagements with humans.

### **Who Controls Who? World Rangifer and its Hunters**

Bryan Gordon (Canadian Museum of Civilization and Carleton University, Canada)

Humans have been so accustomed to controlling animals as pets, beasts of burden and in stockyards and ranches that it seems inconceivable that this role was reversed in the past. World Rangifer (reindeer and caribou) was the most important single game animal in the history of hunter-gatherers. It surpassed bison, horse, antelope, the Proboscideans and members of the deer family in its human utility. Yet its movements and herd size determined the location and size of hunting camps, the growth of hunting bands through the fertility and conception timing of women via its seasonal differences in fat content, toolkits, clothing and accommodation. This is documented in my book “People of Sunlight; People of Starlight”, a description of which is on the internet.



### **Reindeer Agency – A Focus on Animal Sacrifice on Sámi Sacrificial Sites in Northern Finland**

Anna-Kaisa Salmi (University of Oulu, Finland)

Seidi sites are Sámi sacred sites – usually natural formations such as stones. Animal bones, crania, antlers, meat, metal objects, alcohol and other things were sacrificed at these sites to ensure future hunting luck and success in other endeavours. In a recent research project, we excavated several seidi sites located in northern Finland. Animal bones, especially those of reindeer, were the most common finds on these sites. The peak in reindeer sacrifice seems to have occurred in around 15th and 16th centuries, although there were indications of continuing traditions even up to modern times. Animal sacrifices are often seen as a dialogue and exchange between humans and supernatural forces, where animals are mute objects of exchange, a mere currency used by humans to get what they need from the gods. In this paper, I will discuss the reindeer sacrifice that took place on seidi sites and examine what kind of agency, if any, reindeer had in the sacrificial situation. Were reindeer just currency in the exchange between humans and the supernatural forces? Or did they have an active role in the proceedings and act as a third party in the conversation? How did the characteristics of (particular individual) reindeer affect the sacrificial situation?

### **Framing the Neolithic Animality. Animal Agency and Beyond**

Arkadiusz Marciniak (University of Poznań, Poland)

The topos of animality adopted by zooarchaeology originates from modern zoology and has been directly inherited from the Linnaean tradition. In the paper I intend to challenge the universality of this contemporary perception of animal in relation to the Neolithic. Thanks to recent developments of social zooarchaeology, indicators questioning relevance of this model are now abundant. These include recognition of idiosyncratic practices of food eating, feasting, and depositing, among others. As these are intrinsically epiphenomenal, it is now required to ontologize the nature of Neolithic animality. Conceptualizing its different facets constitutes then a new agenda of Neolithic zooarchaeology. This work has already begun by examining non-Linnaean taxonomies. Accordingly, the paper aims to explore some of its other dimensions, such as ipseity and sovereignty of an animal, its emotional and psychological feeling, speciesism, and animal as property plus. The paper shall then provide some preliminary conclusions what did it mean to be animal in the Neolithic of the Near East and Europe.

### **Agencies of Assemblages: Flocks, Herds, Households**

Dimitrij Mlekuž (University of Ljubljana, Slovenia)

Our view of agency is over determined by an Enlightenment model of rational choice and conscious decision making. As such it is acknowledged in humans and denied to others: animals, plants, things, etc. But there are other kinds of agencies, a whole “spectrum” of “agentic capabilities”, housed sometimes in individual persons, sometimes in unconscious psychological processes or motor intentionality or sometimes arising from intersubjective networks of action and causation. It is often hard to grasp the sources of agency and that ungraspability might be an essential aspect of agency. As such it is not the hallmark of humans only. This paper addresses agency as an effect arising from networks of action and causation in heterogeneous assemblages of actants, rather than a simple product of individual (human) choice. The productive that produced an effect will turn out to be a heterogeneous assemblage of human and non-human animal bodies, stuff, smells, sounds, smells and other foreign materialities that emerged during the process of “domestication”, explore the emergent effect of relations between members themselves as they undergo internal alteration by forming new sets of allies and relations. The agency of assemblages is not the strong autonomous kind of agency, but more porous, tenuous and indirect.

### **Sheep, Dog and Man: The Agency of Animals in Learning to Become together with Other Creatures**

Kristin Armstrong Oma (University of Oslo, Norway)

In northern Europe a transition from building two-aisled to three-aisled longhouses occurred in the Early Bronze Age. In Norway and Denmark this transition took place around Montelius period I–II. This paper argues that this architectural change happened as the result of intensified human–sheep

relationships, born from greater proximity to facilitate habituation and engagement needed to utilise secondary products from sheep, notably wool. Intensified textile production is attested for by the woven wool costumes preserved in the Danish oak-coffin graves. This paper draws on the early Bronze Age in the regions of Jæren and Rogaland. Evidence of land-use by way of eco-systems and landscape development, as well as settlements, mortuary practices and rock art are superimposed to gain an in-depth understanding of the life-world of Bronze Age people and the choices they made. A rock art panel portraying sheep, man and dog is found in the heartland of the region, demonstrating that not only were flocks grazing the land, and thus partaking in the development of mutually constituting husbandry practices, further these agents of different kinds were entangled in the choreography known as sheep-herding.

## SESSION C15

### ENTANGLED COLONIALISM: CHANGES IN MATERIAL CULTURE AND SPACE IN THE LATE MEDIEVAL THROUGH TO THE MODERN PERIOD

**Organisers:** Jonathan Finch (University of York, United Kingdom), Magdalena Naum (University of Cambridge, United Kingdom) and Jonas M. Nordin (National Historical Museum, Sweden)

Early modern European colonialism with a legacy from the Reconquista in late 15th century Portugal and Spain meant vast changes in material culture, global migrations and the rise of modes of production, use of space, etc. This session aims to discuss archaeological aspects of colonialism and the colonial world, detectable in material culture and text in Europe and overseas. Moreover, the session aims to provide a broader perspective on colonialism and its outcomes mingling the experiences of relatively peripheral and small time agents, such as Denmark/Norway and Sweden/Finland with those of the major agents, such as England, France, The Netherlands, Portugal and Spain. Although the archaeological studies of colonialism currently are in a vital stage and are conducted worldwide, more general for a addressing both the empirical as well as the theoretical issues are still lacking. This session intends to create a platform for archaeologists dealing with questions of colonialism and related subjects of power, domination, creolization and hybridization in the colonial periods from the late middle ages to the modern period. The session welcomes a wide range of papers dealing with research on material culture, buildings, art and texts in the context of the rise of colonialism.

#### Colonial Policies and Practices in Late Medieval Estonia

Magdalena Naum (University of Cambridge, United Kingdom)

Ideology of *terra nullius*, discourse of native barbarity and colonizers' civility and injustice based on racial dogmas are well known aspects of early modern and modern colonialism. Similar language and processes were part of Medieval expansion in the Baltic Sea area. This paper focuses on the political, social and cultural changes brought by Northern Crusades (1198–1224), Danish conquest (1219–1346) and Livonian Order rule (1346–1559) in Estonia. Analyzing key historical sources and material culture excavated in Tallinn (Reval) and its rural surroundings, this paper discusses colonial character of the late Medieval Estonia. It pays attention to the racial divisions and discriminatory politics of exclusion introduced in the country, ambivalence and hybridity and resistance manifested in material practices.

#### Different Crosses, Burials and Names – Contesting Medieval Northern Fennoscandia

Titta Kallio-Seppä, Timo Ylimaunu, Sami Lakomäki, Paul R. Mullins, James Symonds, Annemari Tranberg, Markku Kuorilehto and Terhi Tanska (University of Oulu, Finland)

Excavated Medieval graveyards in the coastal area of the Bothnian Gulf show complex material culture and burial patterns. Our aim is to discuss this complexity of archaeological finds, e.g. a Russian Orthodox cross find from Ii, and burial patterns in Hietaniemi, northern Sweden, and Kemi northern Finland. Evidence from these sites suggests that a diversity of religious beliefs may have persisted and co-existed in the area that had been “Christianized” by the Roman Catholic Church in the early