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Mesolithic Art – Abstraction, Decoration, Messages

Mesolithische Kunst – Abstraktion, Dekoration, Botschaften

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667 Programme of the international and interdisciplinary conference on »Mesolithic Art – Abstraction, Decoration, Messages«, Halle (Saale), Germany, 19th–21st September 2019

Judith M. Grünberg, Bernhard Gramsch, Erik Brinch Petersen, Tomasz Płonka and Harald Meller

What do we know about Mesolithic art? In contrast to the many contributions about Ice Age art, the number of publications on Mesolithic art is very limited. Currently, at least 1500 to 2000 pieces of portable art, some stationary stone and wooden sculptures as well as hundreds of rock art sites from a minimum of 26 European countries are assigned to the early postglacial hunter-fisher-gatherers. Reason enough to organise the first international and interdisciplinary conference on this topic, designed to summarise and to examine the extensive and diverse data.

From 19th-21st September 2019, the conference entitled »Mesolithic art – Abstraction, Decoration, Messages« was held at the State Museum of Prehistory in Halle (Saale), Germany. Central Germany has a rich archaeological record from the Mesolithic period in all parts of the country consisting of numerous settlement sites leaving thousands of lithic artefacts, graves – Bad Dürrenberg, Bottendorf, Coswig, Unseburg – and stray finds including a few decorated or artistically shaped objects. Many of the human remains and artefacts are on display in the permanent exhibition in Halle and in other museums in Saxony-Anhalt.

It was the third specialist conference in Halle focusing on the Mesolithic period. The first was organised from 3rd-6th March 2011 as the 20th annual meeting of the German Mesolithic Research Group with participants from six European countries. The second was held from 18th-21st September 2013, entitled »Mesolithic burials – Rites, symbols and social organisation of early postglacial communities« with a wider international and interdisciplinary participation of archaeologists, anthropologists and archaeozoologists. In 2019 a total of 80 colleagues from 19 countries (Europe, USA and Canada) accepted the invitation to present and to discuss the new research results on Mesolithic art.

The proceedings include 38 contributions from the lectures and posters of the conference, as well as some additional contributions kindly written by colleagues not able to join us in Halle to add to our knowledge base. The articles are arranged according to the age of the Mesolithic art and its geographic location, starting in Western Europe, then moving to Northern, Central, Eastern, South-Eastern and Southern Europe. The contributions demonstrate the great variety of Mesolithic art, the regional differences, connections and chronological changes. But they also illustrate Late Palaeolithic influences and reflect Mesolithic traditions persisting in the Neolithic period. One chapter gives an overview of the structure of the ornaments and outlines the graphic signs. The last two articles present some ethnographic data looking at the meaning and function of bead ornaments among the Siberian Evenk as well as at the rock art and message sticks of the Australian Aborigines. The proceedings end with a summary of features characterising Mesolithic art in Europe.

Our thanks go to the German Research Foundation (Deutsche Forschungsgemeinschaft) in Bonn and the Association for the Advancement of the State Museum of Prehistory in Halle for financial support which made the conference possible. We are also indebted to staff members of the State Office for Heritage Management and Archaeology -State Museum of Prehistory - as well as students of the Martin-Luther-University Halle-Wittenberg and the Friedrich-Schiller-University Jena who provided assistance and support, helping to organise the conference. We are very grateful to all participants of the conference and contributors to the proceedings. We would like to thank all those who helped to get these proceedings into print. They include above all Manuela Schwarz, Brigitte Parsche, Bettina Weber and Mario Wiegmann from our editorial and graphic departments. We are also deeply obliged to several volunteers -Christine Eichhorn-Berndt, Rosel Reichelt, Alexander Häusler and Louis D. Nebelsick - for their invaluable assistance during the editorial process. Alison Wilson (Cambridge) undertook the enormous and meticulous work of straightening out the texts of the non-native English writers and proofreading all the manuscripts. Andrea Hörentrup (LDA Saxony-Anhalt), Ulrike Kleeberg (Helmholtz-Zentrum Hereon, Geesthacht), Stephen Langman (Clare, South-Australia), Yves Martin (Gouy), Patrick Paillet (Muséum National d'Histoire Naturelle, Paris), Inna Regentova (The State Hermitage Museum, Saint Petersburg) and Rikke Søgaard (The National Museum of Denmark, Copenhagen) contributed new photographs and maps. Thank you to Yves Mérian (GERSAR, Paris) for presenting films on the decorated rock shelters of the Fontainebleau Massif on the first day of our meeting.

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Mesolithic art – Abstraction, Decoration, Messages

Erik Brinch Petersen and Judith M. Grünberg

Mesolithic art was created by the last hunter-fisher-gatherer cultures in Europe, living in the early Holocene. In Northern Europe, this period is dated between c. 9700 and c. 3800 cal BC. It comprises rock art, stationary (monumental) and portable art. Almost all kinds of materials (amber, antler, bone, stone, teeth, tinder, turtle carapace, wood) were utilised, but decorated artefacts are relatively few. The motifs on mobiliary objects are predominantly abstract geometric in style, consisting of linear signs in variations and combinations. Sometimes they form very complex ornaments. Most decorations were engraved or cut and less often drilled or painted. Similar motifs are already found on Late Palaeolithic artefacts. The »root-signs« may even originate in the Upper Palaeolithic. In the Mesolithic, the motifs were found throughout Europe and were perhaps meaningful inscriptions with messages.

The question is, why art changed so fundamentally after c. 40 000 years of highly naturalistic graphic and plastic depictions, including large-formatted, polychrome illustrations of beasts and full-figured females, to increasingly geometric art after the Late Glacial Maximum? This major shift in style and iconography seems to coincide with the beginning of the drastic climatic and environmental changes caused by the deglaciation from 15 000 to 14 500 BC onwards. At this time, the global sea level rose by more than 120 m - with an average rate of about 1 m per century - until c. 6000 years ago, when the Mesolithic period ended in Northern Europe. Between 10600 and 8300 BC glacial meltwater had formed the Baltic Ice Lake, eventually resulting in the modern Baltic Sea c. 4000 years ago. The removal of the enormous weight of the ice sheets led to a rise of land masses opening new regions for settlement, especially in Northern Europe. But it also led to the submersion of landscapes due to the isostatic adjustment. Settlement sites were flooded and had to be moved to higher ground. The Ice Age cultures, each prevailing in large parts of Europe, broke up. The changing living conditions resulted in a repeated shifting of hunter-fisher-gatherer groups, spreading people of different genetic origins and cultural traditions across Europe.

Two more dramatic events occurred in the Mesolithic period. The so-called »8.2 ka cold event« brought a decrease in temperatures of 1 to 5 °C for a total duration of about 200 years, which can be globally recognised. Thermophilous tree taxa, e.g. *Corylus, Ulmus* and *Alnus,* abruptly declined south of the 61st parallel north. In addition, between 6225 and 6170 cal BC, a multi-phase massive submarine landslide – the *Storegga* (Norwegian: Great Edge) Slides – of an estimated 290 km length of coastal shelf in Norway triggered large tsunamis in the North Atlantic Ocean. Coastlines of west Norway, Scotland, and around the southern North Sea

basin were inundated, which led to further loss of former Mesolithic settlement areas (e.g. Doggerland). Britain and Ireland became islands.

Material culture

With the rising temperatures in the Postglacial, life now took place in the open, although rock shelters and caves were still used. Woods re-appeared, providing the most important raw material for daily life (housing, dugout canoes, tools, and containers) and the disposal of the dead (pyres, biers, coffins, grave chambers). Floors of dwellings were insulated with birch bark (Duvensee) and mollusc shells (North Sea/Atlantic coast).

The excavation of Mesolithic sites often yields large lithic assemblages. The artefacts are much smaller than those from the Palaeolithic. They were also made from more varied raw material originating from different geological sources. Amber was largely collected at the coasts in Northern Europe and shaped into figurines and pendants. Since the Late Palaeolithic, the main hunting implement was the bow and arrow (Hardinxveld-Giessendam, Polderweg; Holmegård Mose; Tybrind Vig; Vis I). Different techniques of lithic preparation were developed. The new weapons were mostly composites, made of wooden shafts with inserted geometric microliths (triangles, trapezes etc.) which were usually fixated with birch bark pitch. Around 7000 cal BC, in Jutland and northern Germany, the microlithic inventory was changed due to the introduction of the so-called »handle core technique« probably originating from Finland or Arctic Russia. Paddles, fish weirs, nets and bridges were manufactured (Flynderhage; Møllegabet II; Tybrind Vig). A variety of fish spears and hooks, harpoons, mattock heads, axes and other tools and instruments were made of antler, bone, stone, turtle carapaces and other materials (Friesack 4; Star Carr). In addition, there were seemingly status and ritual tools (perforated shafts, elk-head staves) frequently of large size, but also sculptures and cobble stones, which had been engraved, painted, shaped or otherwise modified. Some of the Mesolithic material culture is depicted in rock art in Fennoscandia and on the Iberian Peninsula, but also occasionally on portable art in Scandinavia.

Subsistence strategy

The Mesolithic populations intensively exploited coastal areas and the sea but also high mountains with altitudes of more than 2000 m (Mondeval de Sora). Big game predominantly consisted now of cervids, bovids and wild boar (Poulton-le-Fylde, Potsdam-Schlaatz, Prejlerup), and in Southern Europe included caprids (Los Canes). The dog was still the only domesticated species. Streams, rivers, lakes and marshes inland, as well as lagoons, saltmarshes and mudflats at the coasts additionally provided rich hunting, fowling and fishing grounds. Molluscs were consumed in great quantities especially on the coast. Vegetable food, berries, nuts and honey were largely collected; the last was also illustrated in rock art on the Iberian Peninsula. Hazelnuts were roasted in the fire for preservation.

The special relationship of the hunter-fisher-gatherers with animals continued in all aspects of life – art, appearance (clothing, personal ornaments) and rituals, but now with considerable regional differences. The pictorial motifs dominate in rock art, mostly comprising hunting scenes and animals. As in the Ice Age, large game is represented but also smaller species: birds, fish, reptiles, and insects. The images are usually simple line drawings, small, monochrome, and largely stylised. Portable art with graphic or plastic depictions of animals is rare.

Incisors from cervids, aurochs, wild boar and beaver were worn as necklaces or dress ornaments in Northern, Central and Eastern Europe, while red deer canines (*Grandeln*) were favoured in Western and Southern Europe. Along the Atlantic and Mediterranean coasts personal jewellery was made of various marine mollusc shells, while inland (Germany, Poland) pond and river mollusc shells were sometimes taken. Cyprinid pharyngeal teeth were used in large quantities along the Danube River to the Black Sea and up the Dnieper (Dnipro) River. In addition, human teeth and pendants made of bones from different animal species (mammal, fish and bird) but also from humans were included in the personal ornaments, perhaps as amulets.

Religious beliefs

Some rock art images seem to depict death processes, rituals or shaman dreams. About 280 Mesolithic burial sites with more than 2200 individuals are known, a multiple of those known from the Ice Age hunter-gatherers. Single burials dominate. About 30 % are funerary places with more than two grave structures. But there are also larger cemeteries now; some with more than a hundred individuals (Moita do Sebastião; Olenij Ostrov; Vlasac; Zvejnieki). Burials were primarily excavated at open-air sites, including shell middens, but several graves were also found in caves and under rock shelters as in the Ice Age. Most graves and graveyards were excavated near settlements. Others were located at a distance, on elevated sites or on an island (Olenij Ostrov). The disposal methods for the dead were manifold, reflecting a belief in an afterlife. Inhumations dominate, but cremations and partial burials of body or skeletal parts [head, skull, mandible, long bone] were also documented, sometimes even placed together in the same pit (Dudka; Vlasac). There are primary and secondary burials, but also many »loose« human bones which could be the remains of tree, scaffold or destroyed burials. Some of the bones show traces of scalping. A few graves were re-opened to remove or add individual bones or a body, sometimes repeatedly (Grotte Margaux; Téviec). The position of the deceased in the grave (stretched supine, crouched sideways, seated upright or prone) varied even in the same burial ground. Some dogs and exceptionally also other mammals, such as a roe deer fawn, were buried like humans (Cabeço das Amoreiras; Dudka; Hardinxveld-Giessendam, Polderweg; Nederst; Popovo; Skateholm I, II; Szczepanki; Vedbæk, Gøngehusvej 7). Red ochre, fire, food for the afterlife and different kinds of offerings including body or skeletal parts of different animals were often part of the burial ritual. At the Atlantic coast in France, in Zealand and Scania, a few inhumations were placed on red deer antlers or were enclosed with them. Several graves had been covered with stones and a few with a wooden construction, which was sometimes set on fire.

As in the Upper Palaeolithic, there are several humananimal-hybrid figures, figurines and sculptures (Lepenski Vir; Olenij Ostrov) indicating animalistic religious conceptions. Perforated headdresses made of red deer antlers (Bedburg-Königshoven; Hohen Viecheln; Star Carr) as well as bone and antler masks (Veretye I) found at settlement sites were presumably used in rituals. A female shaman might have worn a lighter roe deer antler (Bad Dürrenberg). Abstract graphic depictions of »horned shamans« are documented on bone and antler tools as well as on rock panels. A few illustrations seem to show masked humans (Grotta dell'Addaura). Some figures with raised arms and bent legs found on rock panels or portable items could depict ritual dancing, others perhaps worshippers. Sometimes stylised anthropomorphic and zoomorphic motifs were integrated in ornamental patterns, not known from the Palaeolithic.

Ritual places and sanctuaries could be the hut structures excavated on burial grounds (Moita do Sebastião; Skateholm I) and other exceptional constructions in or of settlements (Bolków; Lepenski Vir). The colour red had an important meaning in funerary and other rituals. In the Iron Gates, the floors of the Late Mesolithic trapezoidal houses were covered with a plaster made of a muddy reddish clay (Lepenski Vir). A wooden, presumably cult sculpture of monumental size was found by the shore of a former lake (Shigir Idol). Wooden stakes mounted with human and animal skulls had been erected on a stone platform in the centre of a small lake (Motala-Kanaljorden). Lakes, rivers and possibly also the sea probably received ritual offerings as implied by several animal bone deposits and the many finds of decorated artefacts in water (Lundby Mose; cf. in the present volume).

Social structure

People usually lived in small mobile groups inland and in larger concentrations along the coasts, larger rivers and lakes (Iron Gates; Zvejnieki). The size of the groups may have varied seasonally and locally. Images of humans and scenic pictures increased in the Mesolithic. They are found on rock panels and mobile items. Men were now predominantly illustrated, but also together with women as a couple or in groups, often in a rather asexual manner. Adults were mostly buried singly, but also in double and group burials with up to 12 individuals (Dudka; Groß Fredenwalde; Grotte Margaux; Strøby Egede). Graves of men dominate, while those of women and children were rarer and, on several smaller burial sites, even absent. Children were mostly buried together with adults or other infants. More than half of the double graves of adults contained the skeletal remains of a man and a women.

At places where grave goods were found, the deceased could be distinguished by the grave goods. Presumably, this differentiation depended on age, sex and status as well as the circumstances of the death, pointing to structured Mesolithic societies. The number of items ranged from none to very elaborate assemblages, but only some individuals had more than two tools and ten personal ornaments. Very few burials contained decorated objects or figurines. Ornamented antler axes were only found in burials of males. Some animal bones or sculpted animals in burials might represent the totem animal of the family of the deceased (Olenij Ostrov). A rich burial furnishment was often associated with an adult to mature man, but also with a few adult women (Bad Dürrenberg; Rathsdorf; Skateholm II). After the age of 40 years the grave furnishings significantly decreased. Individuals over sixty were rarely found with any burial goods.

Biology and health

The people were smaller than in the Upper Palaeolithic. Women measured mostly between about 1.50 and 1.55 m, in South-Eastern and Eastern Europe up to about 1.66 m. Women frequently had a rather robust skull but a delicate postcranial skeleton. The men had a body height between c. 1.60 and 1.75 m. But a few adults were smaller or taller, and especially the latter seem to have had a different status. Judging from available DNA analyses the western hunter-gatherers possibly had darker skin and lighter eyes (blue, green). In contrast, the eastern hunter-gatherers seem to have had lighter skin and darker eye colour. Strontium analyses indicate some mobility of individual males and females coming from outside into the groups. Repeatedly occurring skeletal morphological anomalies also show a certain degree of incest (Téviec). Osteoarthritis and Paget's disease appear to have been widespread. High incidences of dental caries and use-wear, not known in the Ice Age, indicate a high intake of a sugary diet (honey, sweet fruits). Teeth seem to have been used as tools in daily work. Moreover, the different use-wear points to largely specialised work for men and women.

Infant mortality was high. About 40 % of the infants in the burials had died in the first 12 months of their lives. Some individuals show signs of malnutrition in their early childhood. Tombs of older children and juveniles are rare. Most of the adults were between 20 to 40 years old. More men than women reached mature age. Combat scenes are known from Levantine art and a possible headhunting scene from a Danish amber pendant (Sindalgård). Male skeletons with trauma are numerous, but few female skeletons also exhibit it. Men often suffered from frontal attacks, women rather from attacks coming from behind (Motala-Kanaljorden; Vedbæk, Gøngehusvej 7). Broken arms or other bones, presumably caused by accidents or in combat, were twice as frequent in men as in women.

End of the Mesolithic

Around 8300 cal BC the first Neolithic communities from the Near East reached Turkey and Cyprus, progressively moving into Europe. They fundamentally changed the landscape and introduced new cultural traditions. The Mesolithic foraging groups partly survived as »Para-Neolithic« in regions not dominated by the agrarian societies. Pottery and other techniques became part of their material culture.

Mesolithic studies used to be a *jeu* with microliths, but from now on the Mesolithic must be considered as a dynamic period with many new inventions. Finally we demonstrate that these hunter-fisher-gatherer societies produced the extraordinary and fascinating art which will be presented in the following papers.