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Nature in Society: Reflections over a Mesolithic Sculpture of a Fossilised Shell

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The paper presents a sculpture made of a fossilised shell. It was found during an excavation at the site Torpum 9b in Østfold, south-eastern Norway. The site and thereby the figure are dated to the late Mesolithic period. The sculpture is interpreted as an essence of female attributes, that is the hips and pelvis of a female human with the genitalia marked. This interpretation requires a discussion of the relations between general principles and actual historical situations. The interest in fossils is presumable universal, but the specific culture-historical interpretation of the sculpture from Østfold must take the local Mesolithic context as its framework. Through an examination of fossils in folklore and prehistory, and a presentation of the particular fossil's geological origin and context, the universal and non-historical meaning of the sculpture is presented. This perspective is then discussed in the context of the east Norwegian Mesolithic.

INTRODUCTION

Most people have one time or another picked up a remarkable stone from the beach or the field to discover that the stone is a fossilised animal or plant. Everyone is fascinated by fossils because of their age – tokens of a distant past, their strange beauty, or their ability to provoke fantasy. In them the world of representations is mirrored and explored. In Sweden, for instance, the fossilised sea anemones are called 'tomtemösse', or 'goblins hat', where the characteristic shape of the anemone is interpreted as the hat of small, enchanted goblins.

The interest in fossils is thus presumably almost universal in the present world. From the medieval period there exist written sources demonstrating this interest at least 1000 years back in time (Oakly 1978), and there is no reason to believe that the Middle Age represents the starting point of the fascination for fossils. In Iron Age graves fossilised sea urchins are among the grave inventory (e g Resi 1986), as they are in Neolithic tombs. Fossils are also present at Mesolithic and Paleolithic sites (Oakly 1978).

This interest touches upon a famous problem in the theory of science; i.e. the relation between nomology and idiography. Fossils may be of universal human interest, but their meaning and the framework for their interpretation may not be of the same universal order. The example from Sweden mentioned above demonstrates how the local social and cultural setting gives the fossils

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their particular meaning. The fossils can thus be ascribed a universal appeal to mankind, but the actual realisation of this appeal must be understood in a specific and historical setting.

We wish to explore this subject further by an interdisciplinary case study of a fossil from a Mesolithic site from the Oslo Fjord area in south-eastern Norway. A fossilised shell was found which had been carved to make already present features in the fossil even more visible. The rather intuitive interpretation of the sculpture is that it represents an essence of female attributes, that is the hips and pelvis of a female human with the genitalia especially highlighted. This interpretation is rather obvious to modern human beings – perhaps because of the sexualisation of public life in our time. But there are reasons to believe that the sculptured fossil was also interpreted this way in the Mesolithic, but for quite different reasons. To make our point clear we want to present the specific context of the find – the site and the figure's geological origins. But we also want to present a more culture historical frame of interpretation, fragments of a general ethos of late Mesolithic society in southern Norway. Parts of this ethos can be given universal meaning to hunters and gatherers, as can the interest of fossils in most societies, but parts of it can only be detected by a close examination of the late Mesolithic in south Norway. In centre of social life was the understanding of society and nature as mingled: cultural products that resemble nature and biology were by this given extra strength and power. Nature as part of a cultural construction was one of the main locus for social power.

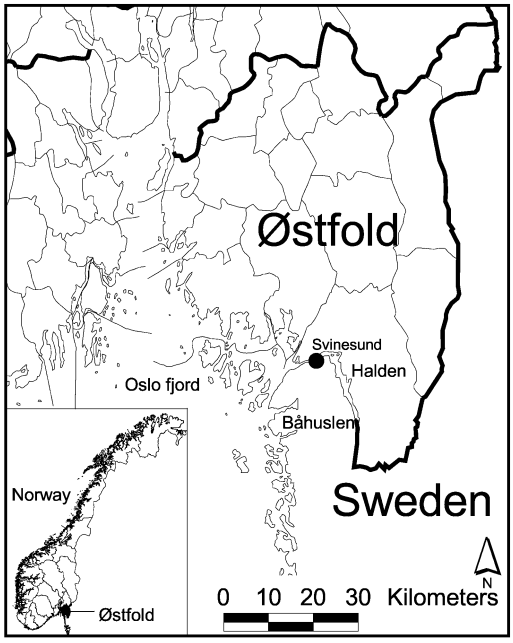

Fig. 1. *Svinesund is situated at the border between Norway and Sweden in Halden municipality, Østfold County.*

THE STONE AGE AT SVINESUND, IN ØSTFOLD, NORWAY

From 2001 to 2003 the Museum of Cultural Heritage, University of Oslo, conducted extensive Stone Age excavations at Svinesund, Halden municipality, Østfold County (Glørstad 2002a, 2003, 2004a, b). The excavations were initiated by the construction of a new highway from Gothenburg in Sweden to Oslo in Norway. Svinesund is situated at the border between the two countries, in the south-eastern part of Norway, a landscape known for numerous finds from the Stone Age (Fig. 1).

Today the Svinesund area is part of the Norwegian mainland. In the late Mesolithic this area was a large island, situated as the northernmost island in a large archipelago stretching from present Båhuslen County to Halden municipality. On this northern island a rather exceptional amount of Stone Age habitations have been documented. Due to the building of the highway, there have also been intensive investigations on the more southern islands, but no rates of settlement were found here comparable to the abundant traces of habitation sites documented on the northernmost island. There can be given both geological, ecological and historical reasons why just the northernmost island was pre-

ferred as the main locus for habitation: The physical conditions for harbouring and camping were much better here than further south, and the topography must have made it very easy and comfortable to gather food. This favourable situation has probably made people return to the island year after year, generation after generation. It is therefore likely that a historical tradition for using and visiting this island developed during the Mesolithic. The social groups could make agreements that this place should be the meeting place later in the annual cycle or the next year, to ensure a certain predictability to social life and reproduction (see Glørstad 2002b).

THE NØSTVET SITE TORPUM 9B

On the west side of a small fjord at the south side of the island, an extensive area of occupation was found on a large terrace, 50–47 m above sea level. The excavation of the area documented dense concentrations of finds from the late Mesolithic, Nøstvet period (Mikkelsen 1975). The site was not disturbed by modern activity such as farming and the ground was covered by dense forest (Fig. 2). The excavation covered an area of 294 m^2. Undisturbed cultural layers and hearths with good conditions for preservation of organic material were found. The site was dated to 6500–6200 BP according to the artefact types presented, ^{14}C-determinations and shoreline dating. The area outside the excavation field has been investigated by sampling strategies. This documented that this habitation site probably has covered an area of 1000–1500 m^2 (Tørhaug 2003).

A few artefacts and clearance cairns at the site can be dated to the late Neolithic. They are the result of late Neolithic agrarian occupation, but the main locus of Neolithic

Fig. 2. *The site Torpum 9b during excavation. Photo V. Tørhaug, UKM.*

occupation was on another terrace nearby (Rønne 2003).

A variety of structures were identified at Torpum 9b, including three cultural layers, seven hearths and two pits filled with debris from Mesolithic occupation. The surrounding area enclosing the cultural layers and hearths appeared to have been cleared of large stones during the Mesolithic occupation.

Three large concentrations of artefacts were clustered around the cultural layers and the hearths. The distribution primarily reflects three activity areas where a wide range of activities has taken place, like production and repair of composite tools and stone axes, and craft involving these tools. In these areas there are clear indications for both the flint industry as well as retooling and repair activities clustering around the hearths. Bones and hazel nuts indicate that food preparation has also occurred here.

It has been possible to date the site quite precisely with radiocarbon measurement to 6500–6200 BP. The cultural layers, hearths and pits were well preserved, and most of the ^{14}C-samples have been taken from charcoal and hazelnuts from these contexts. There are in total 19 ^{14}C-dates from Torpum 9b and the Nøstvet occupation is represented by 11 of these. Most of the other samples are from uncertain structures and have given dates to periods younger than the Nøstvet occupation. The ^{14}C-dates from the Nøstvet occupation are separated by c. 300 years and may indicate use of the site over a longer period.

There are indications that a wide range of activities took place at Torpum 9b. The presence of several hearths, cultural layers and distribution of artefacts illustrates the intensive utilization of this site. Whether it should be interpreted in terms of a more semi sedentary base camp is, however, uncertain. People have more likely occupied the site year after year. The homogeneous material makes it likely that people with the same traditions, especially connected to the area, used this site as a focal point in their social and economic life and organisation.

THE FIGURINE

The most unusual find at the site is the sculpture prepared from a fossil bivalve (Tørhaug 2003, C53850/57). The fossil was found 3.5 m east-south-east of the area with hearths, pits and cultural layers, in connection with a smaller concentration of debris from flint and stone tool production, typical Nøstvet artefacts and fire-cracked rocks. No hearth with charcoal was detected here, but this is most likely due to bad conditions for preservation generally present at the site. Only the largest accumulations of organic material are preserved. The concentration of artefacts should thus likely be interpreted as activities around a smaller hearth. It thus seems that the figure was deposited in this domestic context, not separated from ordinary life at the site (see Zvelebil and Jordan 1999: 122).

The fossil is slightly weathered through natural processes, but the bivalve umbo shows clear indications of intended polishing, resulting in striation, and so does also the bivalve ventral part, where the original keel is flattened and equipped with a small depression. The extremity of the umbro is carved and polished so the original curved form is made flat. The carving and polishing has also clearly divided the umbo in two sections. The fossil has been crafted to make the already present features in the fossil more visible and enhance the image of a 'figurine' (Fig. 3 and 4). It can be connected to a female image by the schematic contour of the body. It represents the lower part of the corpus with hips, pelvis, abdomen and legs. The polishing of the keel has emphasized the contour line of the abdomen with a possible navel marked by a small man-made depression. Under the abdomen the umbro area has been flattened and marked by two carved lines as an image of the female genitalia, and the legs have a planar underside due to polishing. On the back surface there are no traces of human transformations. The height of the sculpture is 3.6 cm and the width is 2.7 cm. The maxi-

Fig. 3. *The figurine. Top left, back of figurine; top right, front of figurine; bottom left, underside; and bottom right, the figurine from the side. Photo M. Teigen, E. Irgens Johnsen, P. E. Gjesvold, UKM.*

mum thickness occurs at the lower part of the body near the hips.

A fossil of an echinoid (C53850/42) was also found at the site in the north-eastern section of the excavation field, but this was not prepared in prehistoric times. The length of this fossil is 3.0 cm.

The particular meaning of the figurine is uncertain. It cannot be associated with any functional activity, like the other Nøstvet finds from the site. In the late Mesolithic there are a few finds of anthropomorphic figurines from north-east, south and west Europe. They are from materials like antler and wood and most of them are from graves (Plonka 2003:139–141). From the Mesolithic in Den-

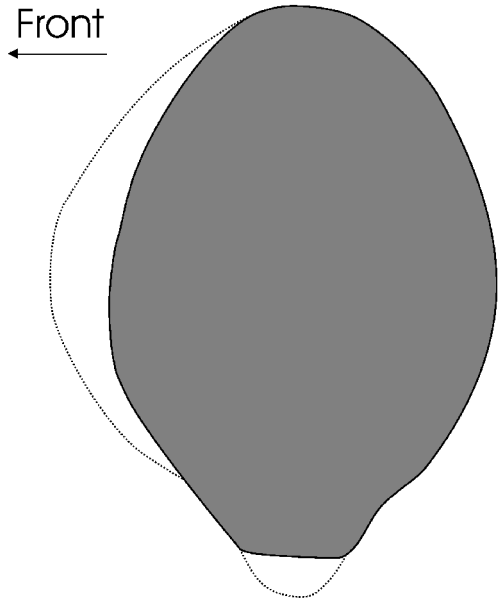

Fig. 4. *The parts of the fossil removed by polishing and carving. The figurine is seen from the side. Outline by H. A. Nakrem.*

mark there have been found some zoomorphic figurines of amber as stray finds or bog deposits. They are shaped and have a naturalistic form and have been interpreted as pendants or amulets (Vang Petersen 1991:3–6). It is difficult to find a parallel to the figurine from Svinesund. This indicates that it has been manufactured and used locally, maybe as an amulet.

PALAEONTOLOGICAL DESCRIPTION OF THE SVINESUND FIGURINE

The Svinesund figurine is prepared from the internal rock mould of a fossil bivalve – a preservation phenomenon known as a 'steinkern' – composed of mudstone. During initial analysis the figurine was compared with many similar fossils in the paleontological collection of the Geological Museum, University of Oslo. Parts of the original internal mould have been grounded and polished, and both brachiopods (of the Silurian genus *Pentamerus*) and bivalve molluscs were considered as a basis for the figurine. Most bivalves are identified from details in the shell, both internal and external features, but as the current figurine is a slightly weathered internal mould, most specific details are missing. Based on general geometry and dimensions it became clear that the closest genus is *Cyrtodontula*, a bivalve that is known from more than six different species occurring in the Ordovician rocks of the Oslo Region (Soot-Ryen 1960, Toni 1975). Basic dimensions of published *Cyrtodontula* (Fig. 5) from the Oslo Region are shown in Table 1. The museum collection contains mainly well-preserved specimens with the shell in place, but also specimens preserved as internal moulds.

Unclear but visible imprints in the figurine surface have been interpreted as dissolved uniserial bryozoans, which inhabited the bivalve shell internal surface. The imprints are weak, probably due to natural weathering and human polishing of the figurine. Most

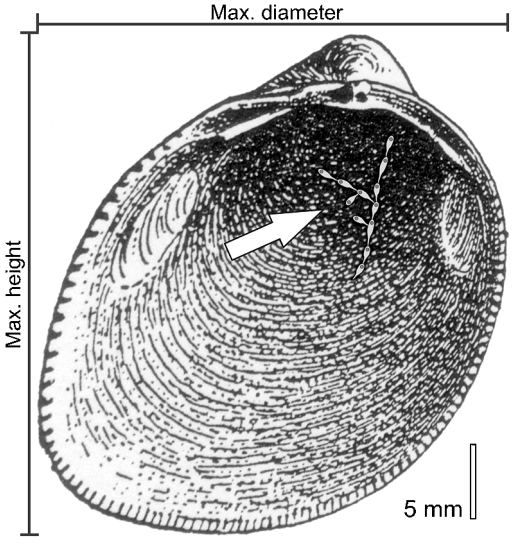

Fig. 5. *Basic measurements of bivalves (height and diameter). The arrow points at a bryozoan colony encrusting the shell's inner surface.*

Table 1. *Forms of* Cyrtodontula *described from the Oslo Region*

Specimens	Height (*)	Max diameter (*)
The figurine from Svinesund	36 mm	25 mm
Finds from Middle Ordovicium (Soot-Ryen 1960):		
Cyrtodontula dubia (Soot-Ryen 1960)	33–48 mm	24 mm
Cyrtodontula sp. A (Soot-Ryen 1960)	48 mm	27 mm
Cyrtodontula sp. B (Soot-Ryen 1960)	41 mm	32 mm
Cyrtodontula sp. C (Soot-Ryen 1960)	12.5 mm	8.5 mm
Cyrtodontula sp. D (Soot-Ryen 1960)	25 mm	10.8 mm
Cyrtodontula sp. E (Soot-Ryen 1960)	17.5 mm	c. 9.4 mm
Cyrtodontula aff. *complanata* (Foerste 1914)	?	?
Cyrtodontula aff. *subtruncata* (Hall 1847)	36 mm	22 mm
Cyrtodontula cf. *compressa* (Ulrich 1890)	18 mm	7 mm
Finds from Upper Ordovicium (Toni 1975):		
Cyrtodontula ventricosa (Hall 1847)	c. 16 mm	?
Cyrtodontula cf. *truncata* (Ulrich 1890)	c. 21 mm	?
Cyrtodontula sp.	c. 35 mm	?

**See figure 5.*

specimens of *Cyrtodontula* in the paleontological collection of the Geological Museum have clearly visible bryozoan colonies encrusting the shell inner surface (Fig. 6). Detailed studies of the bryozoans in the collection indicate that they belong to the cyclostomatid genus *Corynotrypa*, which prior to the current study has not been published from the Oslo Region. A comprehensive discussion of the life habitats of *Corynotrypa* is published by Taylor & Wilson (1994).

An echinoid fossil was also found at the habitation (Fig. 7). The specimen is preserved as a flint 'steinkern' without the external shell and most diagnostic features are weathered away. It is however possible to place it in the

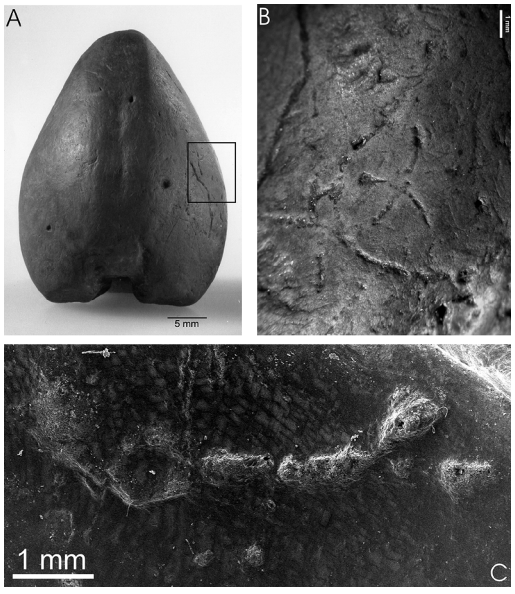

Fig. 6. *(A) The figurine. (B) Enlarged area from (A), showing bryozoan imprints. (C) Scanning electron micrograph of silicone cast of bryozoan imprint.*

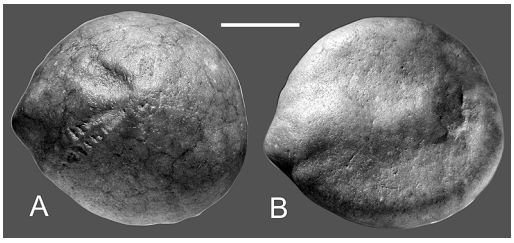

Fig. 7. *Fossil echinoid, most probably* Echninocorys obliquus. *(A) Dorsal view; (B) ventral view. Scale bar = 10 mm.*

genus *Echinocorys*, most probably of the species *E. obliquus* (Hisinger). The genus is common in the Upper Cretaceous chalks of UK, and also in the Lower Tertiary of Denmark and Scania, Sweden. Specimens of this genus have also been found at Stone Age excavations in Sweden (see below). The species *E. obliquus* is common in the Lower Tertiary Danian of Denmark. Flint-bearing chalk deposits are not preserved in Norway, and the nearest *in situ* outcrops of chalk with this type of echinoids are in Sweden (Scania) and Denmark, more than 400 km from the excavation site. It is well known that rocks and boulders are transported with drift ice southwards from Norway during the last glaciations, and erratic boulders typical of the Oslo Region (e.g. Cambro-Silurian limestones and Permian rhomb porphyrs) have been reported from Denmark, northern Germany and Poland. It is also documented (Berg-Hansen 1999, with references) that rocks have been transported from the south (southern Sweden and Denmark) to south-eastern Norwegian shores with drift ice by the end of the last deglaciation. Glaciers forming moraines are also known to have moved flint and other exotic rocks over significant distances. It seems thus most possible that the echinoid found at Svinesund, because of extensive weathering, may have been transported by sea ice. It cannot however be ruled out that it has been collected by man and brought to the settlement. From modern times it is well known that Danish ballast rocks (flint, including silicified echinoids and other fossils) have been thrown away along shores of southern Norway by ships bringing goods back to Denmark. There is no reason to believe that the current echinoid has such a history, as it was found 50 m above the present sea level, far away from any modern harbour.

FOSSILS IN FOLKLORE

Fossils and other natural elements have attracted man as far back as we have records of pre-historic societies, and over the years the different interpretations of their origin have been included in many folk histories.

In the earliest phases of human culture fossils may have been regarded as peculiar shapes. Perhaps they were collected and brought along during migration – there are many findings of fossils in occupation sites far from their geological origin. In one case a fossil has been found as part of a flint artefact of Paleolithic (Arkeuléen) age (Thenius & Vávra 1996:14). Fossiliferous rocks have also been prepared into axes, but at least some of these axes have been made of rather soft fossiliferous limestone, and cannot have acted as axes as such (Oakley 1965:120, Fig. 10 and 11). Limestone 'axes' may rather have acted in ceremonial circumstances.

Abundant fossils have been found arranged in a Neolithic (5000–4500 BP) grave from County Kerry, Ireland. Wyse Jackson & Connolly (2002:143) consider that the fossils were collected purposely by the builders of the passage tomb and placed within it as ceremonial decorations, ornaments or charms. This is one of oldest indication of such use of fossils.

Some fossils have been found with holes drilled through and some have been polished as beads and used for decoration, perhaps as charms. Otherwise no reports have been made on human preparation of fossils to enhance a fossil's original form to give them a desired shape.

Fossils in folklore are much better known from medieval times, where they have been attributed mystic, religious, erotic or medical powers, and they were also believed to be games or experiments by religious forces. It was not until the 18th century that the true origin of fossils became widely acknowledged.

NORDIC EXAMPLES OF FOSSILS FOUND AT STONE AGE SITES

During excavation of the Jonstorp sites in southern Sweden (Scania), two fossil echi-

noids resembling *Echinocorys* (*Analcytus* according to Lidén 1938) were found in a Mesolithic cultural layer together with flint tools (axes, cores, scrapers, flakes). Lidén mentions findings of four echinoid fossils in kitchen middens near Kolind, as well as fossils from graves in Göteryd reported by a local clergyman. These fossils are of local origin as they occur in the Cretaceous/Tertiary rocks of Scania. Rounded beads, some with holes drilled through, probably worn as amulets, were also found in these excavations. From the Mesolithic cemetery Skateholm in Scania two graves are known where petrified sea urchins were found at the hips of the deceased (Larsson 1983: 26). The fossils are interpreted as grave gifts. The graves are roughly contemporary to the site Torpum 9b (Larsson 1984:12).

Six belemnites (extinct cephalopods) were found in a Neolithic kitchen midden during the excavation led by the Danish National Museum at Langø, Fyn in Denmark. Broholm (1928:162) refers to more findings of fossils here by a local pharmacist. In other parts of Europe fossil belemnites are named 'thunderbolts' as they were believed to be the result of lightning strikes in the earth. In Denmark these fossils are called 'vættelys' or 'tordensten' ('thunder rock'). Broholm assumes that the belemnites in this Danish excavation probably had a resembling religious meaning, and that they were collected as amulets. Broholm mentions also the possibility that the belemnites may have been placed in the kitchen midden by chance, or by children in the Stone Age settlement. Fossils have also been found in Neolithic graves in Denmark. From a dolmen in Jylland a flint echinoid has been found as a part of the grave inventory (Ebbesen 1978: 44).

There are few findings that indicate that fossils may have been collected for practical purposes, but it is known that flint echinoids (sea urchins) have been used as raw material for flint knapping in Mesolithic time in Norway (Glørstad 1992). Norwegian stone axes made from hornfelses (metamorphosed shales and marls) often contain fossils or impressions of fossils. The nøstvet axe is for instance often made of this raw material (Jaksland in prep.). Such axes must be considered as heavy-duty tools.

BIVALVE MOLLUSCS AND ECHINOIDS IN FOLKLORE

The current work is based on findings of two very different fossils in a late Mesolithic habitation site, and some comments follow on bivalve molluscs and echinoids (sea urchins) in folklore.

Bivalve molluscs

As it is considered that the figurine from the Svinesund excavation site is a bivalve mollusc, here this group of fossils is discussed.

Shells, both of contemporary and fossil bivalves, were used quite extensively by early man, and also in the late Paleolithic and Mesolithic period. Shells with drilled holes have been found and it is commonly believed that they were used for ornamental purposes (charms) (Oakley 1978). Bivalves were an important part of their diet, and empty shells were sometimes taken care of for later ornamental use.

Fossil bivalve shells internally filled with rock matrix from many Jurassic and Cretaceous outcrops of central Europe and Great Britain are often known as 'hearts of stone' or 'bulls hearts'. An example of this category, *Protocardia* from the Upper Greensand (Albian, Early Cretaceous) was found in a Bronze Age barrow on the Chalk at Aldbourne, Wiltshire (Oakley 1965:12). Internal moulds or specimens with preserved shells shown in lateral view resemble a heart in shape.

Details in other rounded bivalves resemble the external female genitalia – the vulva, and in some cultures these bivalves were believed to have healing powers, especially for female diseases (Abel 1939). *Venus* and *Cordiopsis* are Tertiary genera in this group of bivalves. According to Valentini (1714) certain fossil

bivalves have been named 'real' Venus-rocks. Brachiopod internal moulds in many cases resemble external female genitalia, and they have been given still valid Latin names like the Lower Devonian species *Hysterolites hystericus* (Schlotheim) and *Schizophoria vulvaria* (Schlotheim), both known from Germany.

Echinoids (sea-urchins)
Fossil sea-urchins are common in the Cretaceous chalk deposits in central and northern Europe and in Great Britain where they have a long history in folklore. In the Nordic countries echinoid-containing chalk is found in southern Sweden (Scania) and in Denmark (late Cretaceous and early Tertiary age). They are often silicified and are commonly found as casts in flint. In British tradition they are known as 'shepherd's crowns' and 'fairy loaves'.

One of the earliest known cases of fossil echinoids being used in a ceremonial burial is in the Early Bronze Age tumulus on the Dunstable Downs, Bedford, where nearly 100 specimens of *Micraster* had been arranged to encircle the bodies of a woman and a child (Oakley 1965:117). Thunderstone beliefs are also attributed to fossil sea-urchins, and they have been kept for good luck in Denmark, because where lightning had struck once it would not strike again (Broholm 1928). Echinoids were also placed on shelves in diaries, as it was believed that they would keep the milk fresh (Bassett 1982:15).

A CULTURE HISTORICAL FRAME OF INTERPRETATION

The sculpture from Svinesund appears to be one of a kind. It may therefore seem difficult to place the find in a wider culture-historical context. Fortunately some other finds from the south Norwegian Mesolithic can make a frame of interpretation for the figurine.

Mesolithic hatchets of stone
During recent years, attempts have been made to re-evaluate archaeological material from southern Norway, especially the south-eastern part of the country, which can be interpreted as traces of a Mesolithic figurative 'art' (Glørstad 1999, 2002b). The re-evaluation was initiated by new carbon-dating results of stone hatches found in context. These tools were previously mainly known as stray finds. The hatches were commonly interpreted as tools for digging and gathering food and dated to the Neolithic (Solberg 1989). However, the new carbon datings, from western and south-western Norway, placed these tools in the first half of the late Mesolithic period (7500–5200 BP) (Glørstad 1999, Olsen 1992). From the west coast of Sweden, rather similar tools are dated even further back, to the middle Mesolithic (Nordqvist 2000). Finds from south-eastern part of Norway, unfortunately not carbon dated, seem to fit well with the Swedish results, so the frame of dating for the hatches can thus be estimated to the last half of the middle Mesolithic and the first half of the late Mesolithic (8000–6000 BP).

Although there were mainly stray finds, there does exist some information about the find context. In most cases the hatches are found in lakes, rivers or in the prehistoric sea. This indicates that the objects were thrown into water, most likely as some sort of sacrifice. Quite contrary to the interpretation of the hatches as heavy-duty tools, they seem often to be made of rather soft material like limestone and serpentine. They are designed in an elaborate style (Fig. 8) and there are clear indications for the developments of distinguished areas of traditions in southern part of Norway (Glørstad 1999, 2002b). Some of the objects are even quite competently decorated. Compared to the later Neolithic shaft hole axes, obviously made for the sake of status and prestige, the hatchets appear to be the product of an astonishingly different design tradition. They too seem to be objects of desire and prestige. They are made with a stylish nerve and a sense of design that even today proclaims admission. The style, the

Fig. 8. *Hatchet from Hove, Sandnes in Rogaland, south-west Norway. Photo T. Tveit, Arkeologisk museum Stavanger.*

quality of the handcraft, the soft raw material and the depositions in wet contexts, all point to the sphere of social symbols and status.

The style deserves further comments. Radically different from the Neolithic axes of status, the hatchets seem to connect to a more animalist or natural line of style. Several authors have pointed to the striking similarity between the hatchets and the antler of the elk and the deer (Bjørn 1934:7 ff, Broadbent 1978:100–101, Gjessing 1920:53, Gräslund 1962:133, Larsson 1976:15, Montelius 1917:17, Solberg 1989:96, Vinsrygg 1979:45). Earlier this similarity was taken as a proof of the origin of the hatchets: they were first made of antler and later the form was transported to harder materials. Instead one can focus on the intention behind the use of elements from the nature in the design. The choice of an antler-inspired style can be interpreted as an intrinsic element in the Mesolithic design language in the region. It seems that nature, especially certain elements of animal life, is actively taken and transformed into objects of desire. This transformation does not totally alter the appearance of animal elements; instead nature and culture are mingled. A kind of grammar can be abstracted out of this mingling of nature into culture: not only are antlers of elk and deer associated with the hatchets, the (human) phallus and beaks of predatory birds can also easily be recognised in these objects (Glørstad 1999, with references, Larsson 1976:18). These elements all share an essential feature: they are all natural symbols of virility, strength and status. Both the phallus and the antler are male attributes of virility and power, and it is likely that the underlying logic in the election of natural design element is to transform the male forces in nature into society through the hatchets. It is thus tempting to interpret the hatchets as a male status symbol.

Mesolithic rock carvings

The interpretation of the hatches has led to the construction of a possible Mesolithic sense of style, but they are not the only element in the archaeological record that fits into this frame of interpretation. Some of the rock carvings in the region are dated to the late Mesolithic (Mikkelsen 1977). The elk is the most popular motif. The style of the carvings is mainly characterised as naturalistic, but this is only half the truth. Certain elements of the animal are carved in a rather naturalistic manner. But nature is commented upon in the way that elements are changed or exaggerated, to enhance particular features of the animal. The animal is also altered by the addition of lines and decorative elements to its body, or to the surroundings of the elk (Fig. 9). Some researchers have suggested that these lines are maps of the interior of the animal (Mikkelsen 1977). Not denying this interpretation, there can still be no doubt that this reconstruction cannot be considered as an anatomical poster of the animal. It can rather be interpreted as

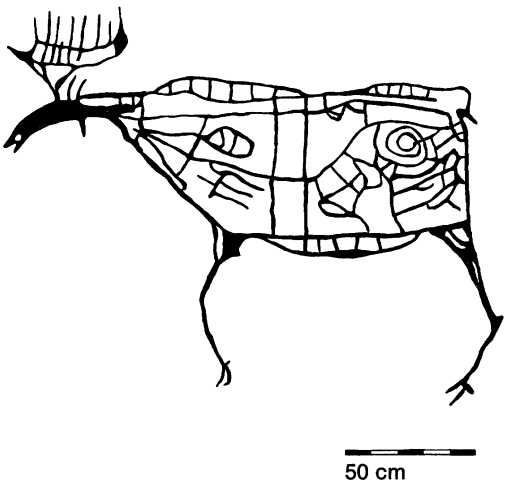

Fig. 9. *Rock carving from Åskollen in Drammen, Buskerud. The animal is decorated with lines and figures. Some may be symbolic expressions of vital organs. After Mikkelsen (1977:154).*

the cultural construction of the animal, or even more precise: the animal is made into culture without a total alteration or transformation of its natural appearance and power (Glørstad 2002b).

It is interesting that both the hatchets and the rock carvings are situated at similar places in the landscape: They both are associated with water. The hatchets are often found in wet contexts and the carvings are situated at the ancient shoreline, at riverbanks or at lakes. This presumably is not a coincidence. The waterways were important communication routes and a perfect medium for sacrifice because the water swallows the offerings. The water thus represented routs of communication between humans and between humans and other forces (Zvelebil and Jordan 1999:114). Other features link the rock carvings even closer to the hatchets: They are connected through the focus on the elk; in the carvings as a total figure, in the hatchets as the antler. It is even possible to find identical line decorations on the carvings and the hatchets (Bakka 1973).

A mesolithic sense of style

One can thus interpret the hatchets and the rock carvings as an expression of the same intrinsic feature of Mesolithic design and way of expression: They take both the nature and its organic forms as a starting point. But these forms are reworked and given a social aspect of meaning that erase the border between nature and culture, so important for present categorisation. Natural signs of status, such as antlers and beaks, are converted to social status and prestige. *A human product that resembles nature and biology is by this given extra strength and power, and* vice versa *the animals become more powerful by absorbing human features* (Glørstad 2002b).

This hypothesis can be strengthened by a study Einar Østmo has performed on the first excavated Mesolithic Nøstvet site in the Oslofjord area. The find catalogue contains several natural shaped stones that resemble the characteristic Nøstvet axe. According to Østmo, the stones have been deliberately transported to the site in the Mesolithic. He interprets this rather curious find as a sacrifice of axe shaped stones instead of real axes. This substitution was due to a routinisation and simplification of the original ritual involving the sacrificing of real axes (Østmo 1995). An alternative interpretation is that the axe-like stones were preferred as objects of sacrifice, because these objects united nature and society in one expression. Through the recognition of the axe-form in nature, the universal meaning of the axe was confirmed. May be they were interpreted as the axes of the ancestors or as a natural enhancement of the power of this group of objects. A natural or external confirmation of social relations could thus be created. The same logic as seen in the examples of the hatchets and the rock carvings can be constructed in this example as well: The power of nature is used to confirm the social order and tradition (Glørstad 2002b).

This kind of reason can maybe also be identified at the Mesolithic cemetery Skateholm in Scania. In one of the graves a natural

shaped axe-like stone was given as a grave gift together with three pecked stone axes (Larsson 1984:23). The stone can have been chosen as grave inventory because its shape mingled nature and culture and thus gave extra value to the other axes made by humans by referring to a transcendental meaning of the axes.

CONCLUSION

Surely this logic need not be exclusively connected to the south part of Norway. This way of thinking could probably, to some degree, be recognised in all societies occupied mainly by hunting, fishing and gathering; that is, societies in close dependence on the abundance of nature. But there is a rather good resemblance between this theory of social construction of reality and the traces of social life in Mesolithic south Norway, which can be the framework for interpreting the figurine from Svinesund. The carved fossil fits smoothly into the theory that Mesolithic society took elements from nature and transformed them into cultural products that both contained the original natural power, but who also was recreated in a social image. This deliberate transcendence between pure nature and pure society in cultural expressions can be recognised in both the choice of raw material and in the cultural transformation of the fossil. In more recent folk tradition shells rather similar to the one original encompassing the fossil from Svinesund, are called 'venus shells', thereby indicating the spontaneous allegorical classification of the creature. But shells in general are closely connected to female fertility (Cirlot 1988:293, Eliade 1991:125ff, Englund 1994:228). Sandro Botticelli's famous painting of the birth of Venus, where the goddess rises from a shell, is but one obvious example.

Not only has the shell itself been considered as a female attribute. As pinpointed earlier in this paper, natural shaped fossils, practically similar to the starting point of the figurine from Svinesund, are interpreted as symbols of the female sex and female attributes of fertility. It is tempting to believe that human beings of the Mesolithic also saw the obvious similarity between the female body and this type of fossil.

This natural form, so easily interpreted in a certain way, was then reworked by humans to strengthen the intrinsic features of a natural meaning. The fossil was made into a figurine that was the creation of both nature and man, and this diaphony of meaning was perhaps its foundation of power and basis of evocation. The figurine did not enhance the difference between nature and society, but presented these elements as a whole. The close connection between society and nature in the Mesolithic can thus have been mirrored in the sculpture, or the sculpture could have been an intellectual tool for thinking of this duality of culture.

Given this interpretation of the figurine, its function in Mesolithic society can be characterised as a close parallel to the dialectical movement described by G. W. F. Hegel: a unity that contains both the thesis and the antithesis of culture, that is society and nature (Hegel 1999). Following scholars as Claude Lévi-Strauss and Daniel Miller (Lévi-Strauss 1987, Miller 1992), it is tempting to assume that this way of reason is a basic human scheme of cognition. This can give an extra enhancement to the argument: the figurine was a powerful tool for thinking because it themed both the interdependence of society and nature, and the dialectical nature of non-scientific thought.

One last point should be made. Most of the other objects from south Norwegian Mesolithic that can be considered as part of the same social complex – the hatchets and the rock carvings – can be interpreted as sign of male prestige and power. Of course the elk in the rock carvings can be interpreted as some form of fertility logic, where the carvings should ensure a rich stock of animals. But since the big game hunt is generally connected to men, these possible signs of fertility can thus be interpreted in a male framework.

The figurine from Svinesund is a much more obvious expression of female fertility and female power. It is not possible to decide whether the figurine should be interpreted as a genuine female expression or a male wish to ensure or control female fertility and power. Given its ambiguous quality both interpretations could simultaneously have been applied. Still, as an expression, female connotations are evoked. This makes the figurine outstanding in the Norwegian Mesolithic material. The logic of expression can still easily be recognised in a wider material from the same region and period: nature dwells in the heart of society.

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