ANALECTA PRAEHISTORICA LEIDENSIA 29

ANALECTA PRAEHISTORICA LEIDENSIA 29

PUBLICATION OF THE FACULTY OF ARCHAEOLOGY
LEIDEN UNIVERSITY

LEIDEN UNIVERSITY 1997

Redaction committee: L.P. Louwe Kooijmans / C.C. Bakels

Redaction of this volume: C.C. Bakels / A.L. van Gijn

Graphic design: H.A. de Lorm

ISSN 0169-7447

ISBN 90-73368-11-1

Subscriptions to the series Analecta Praehistorica Leidensia
and single volumes can be ordered exclusively at:

Faculty of Archaeology
P.O. Box 9515
2300 RA Leiden
The Netherlands.

contents

Marek Zvelebil

Hunter-gatherer ritual landscapes: spatial organisation, social structure and ideology among hunter-gatherers of northern Europe and western Siberia

1. Introduction

In my contribution, I would like to address the problem of interpretation, or understanding, of social structure and ideology of hunter-gatherer stone age communities in Europe, and illustrate, on the case studies from Northern Europe and Western Siberia, the problems and possibilities involved in such an undertaking. I would like to approach this theme from the point of view of landscape. In my opinion, spatially referenced human activity – and the cultural signatures such activity leaves on the physical landscape – provide a frame of reference which combines the practical concerns and the more abstract aspects of ideology and social organisation. It may be possible to 'read', in other words, to understand and interpret such cultural features in the landscape within its spatial-temporal frame of reference and with the aid of the appropriate conceptual frameworks. My aim, then, is to develop the concept of landscape, which combines the practical and the ritual aspects of landscape use, and to use this as a framework for understanding the social structure and ideology of hunting and gathering communities in Europe, and in particular, Northern Europe.

Landscapes reflect the use of geographical space by individuals and communities over extended periods of time, which includes the organisation of settlement in terms of seasonality, hierarchy and function, the prosecution of resource use strategies and the enactment of ritual activities. Landscape is modified and enculturated though such activities. As landscape antecedents and landscape successors, features of the landscape can impose constraints and opportunities on the communities involved (Roberts 1987).

How far can we go in our attempts at structuring such hunter-gatherer use of landscapes in the past? After first discussing some general features concerning landscapes, I address this question using three case studies from the northern forest zone of Europe and western Siberia.

2. The structure of past landscapes

There is not much point in going through the many, often contradictory, meanings of the notion landscape. To appreciate the range of meanings, one only needs to look at Tilley's all inclusive definition of the phenomenon (Tilley 1994, 25, 34). To me, landscape is succinctly defined as a set of real-world features, natural and cultural, which give character and diversity to Earth's surface (Roberts 1987). Archaeological landscapes, then, can be defined as a land surface within a specified span of time, which are modified by their own history. In summary, landscapes are not passive recipients of human activities, but dynamic and interactive elements in the evolution of past societies.

Within this framework, we can assume that landscapes are structured by their users, and reflect the practical and ritual activities in the landscape. This is true regardless of the extent to which our understanding of such past use is mediated by our own modern perception and concerns, although we do need to keep in mind that the very distinction between the practical and ritual use is a modern, heuristic device.

Landscapes are structured in time and space. Both of these dimensions are real, and at the same time perceptual, entities, social constructs modified by the conceptual frameworks of the users. Both dimensions, in their modified, historically and socially situated form, influence in a fundamental way the structuring of landscapes: let us first briefly look at time.

Time is a continuous phenomenon, packaged into different conceptual frameworks for the benefit of self-orientation, communication and comprehension (a.o. Clark 1992; Gosden 1994; Ingold 1993; Zvelebil 1993). As Edmund Leach observed:

> "Time, as we experience it, is continuous; it contains no discrete 'events'. The events are put there by reflection on the past" (1990, 227).

So, concepts of time are cultural constructs, and different concepts of time have acted through human behaviour on the structure of the archaeological record (Clark 1992; Gosden 1994; Zvelebil 1993). Time is also the condition of social practice and of history. It follows, then, that both *the past and present* temporal frameworks are reflected in the archaeological record: the first in the creation of its structure, the second in its interpretation (fig. 1). In terms of past land use, a distinction can be made between regular, abstract time, and personal, substantial time, the latter mediated more

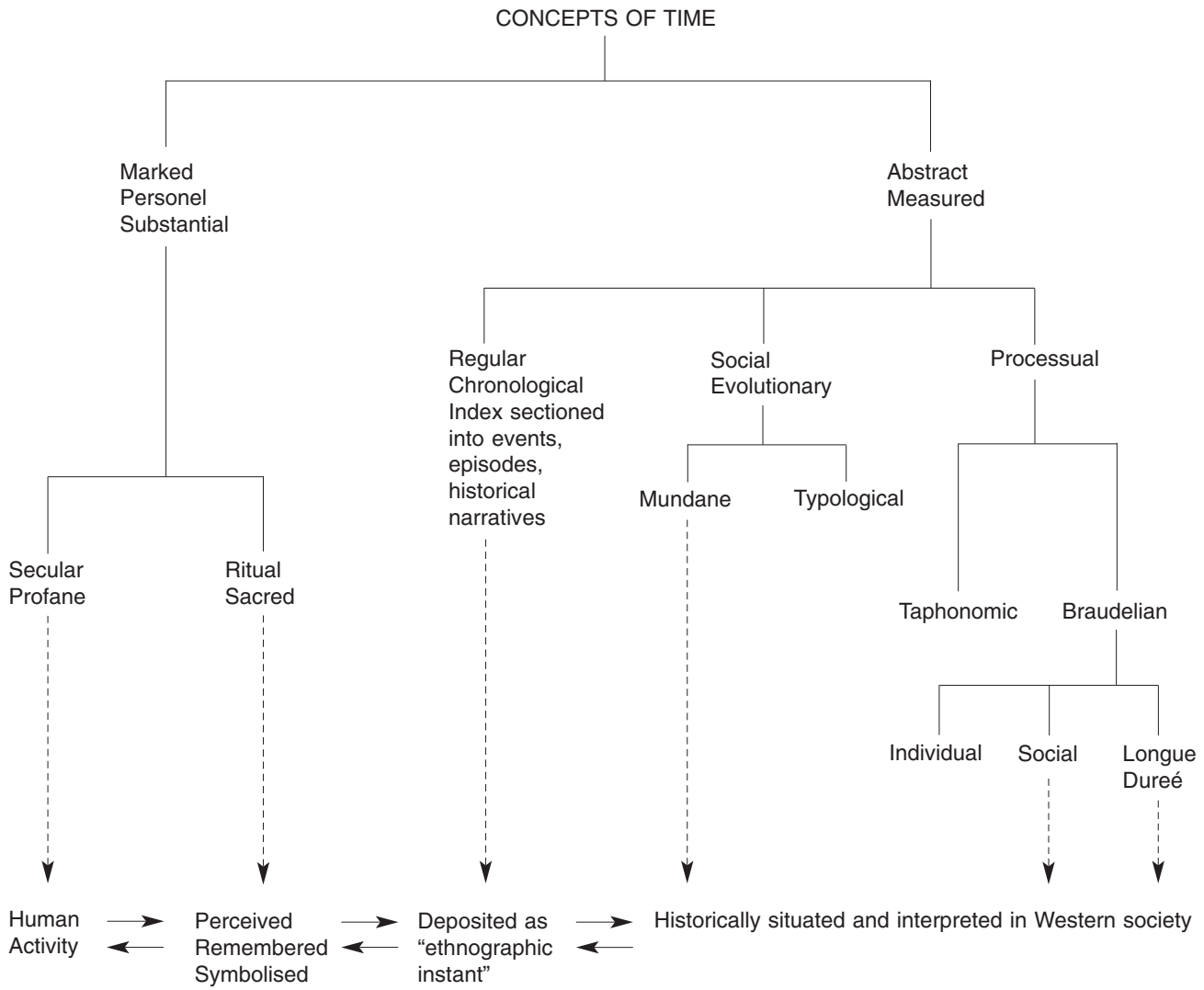

Figure 1. Concepts of time and archaeological record

directly by human experience. Substantial time can be further subdivided into secular and ritual; the former, according to Bloch (1977) is associated with “the systems by which we know the world”, the latter, ritual and mythological, with the systems by which we hide it” (1977, 290).

It can be argued that the organisation of hunter-gatherer activities in space reflects the different temporal frameworks at their disposal, in particular the operation of secular and sacred time dimensions. At the practical level, hunter-gatherer land use is guided by practical considerations such as the ecological structure and productivity of their resources, seasonality, the balance between the population and their resources, technology, and motivation guiding resource use strategies: i.e. adequate provision of food, long-term risk minimisation, procurement for market and exchange, or social competition.

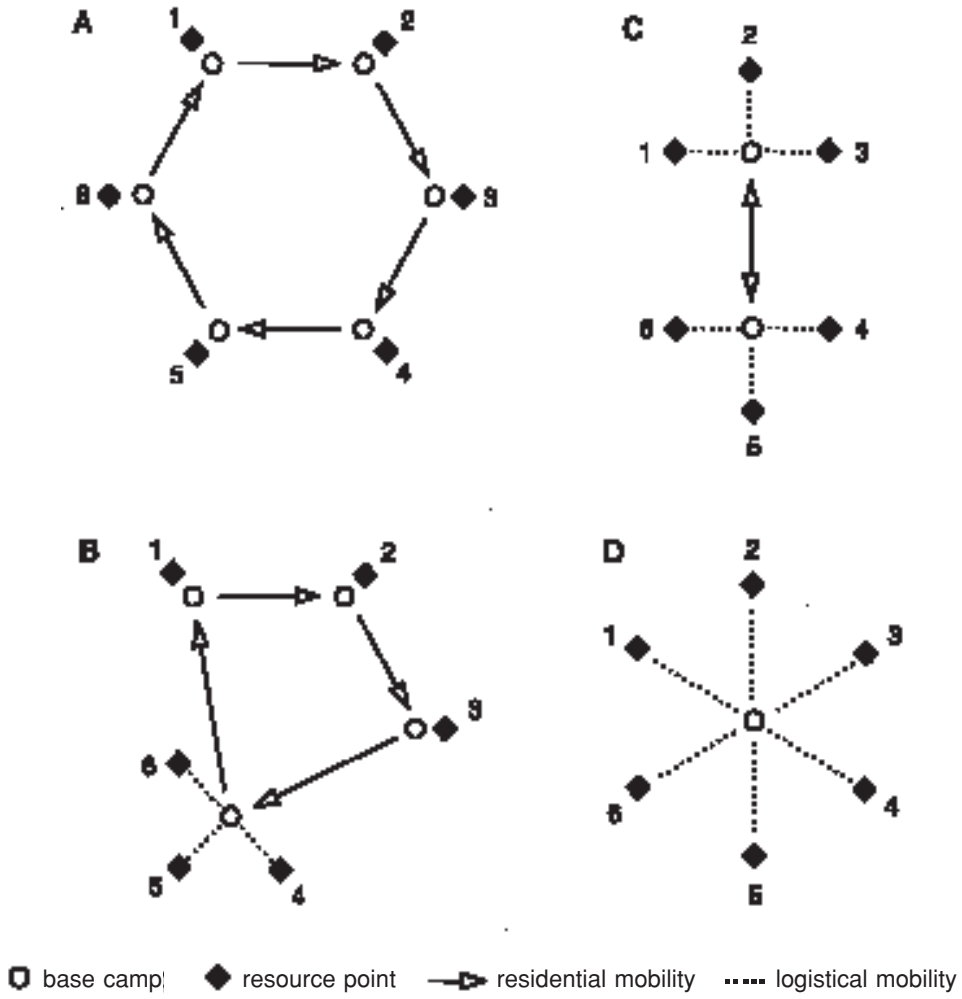

Figure 2. Practical organisation of hunter-gatherer mobility in the landscape. Systems A, C and D in this figure correspond to the reconstructed organisational arrangements A, B and C respectively in northern Europe in figure 6. After Rowley-Conwvy and Zvelebil 1989.

In temperate and boreal regions, hunter-gatherer choice of resource-use strategies is constrained by the marked seasonality of the environment and by uneven distribution of resources over the landscape. Late winter/early spring tend to be leanest times of the year, and, throughout the year, food resources tend to concentrate in water edge locations along rivers, lake shores and coastal zones. In many areas, the concentration of water edge resources is raised in the summer half of the year by seasonal migrations of anadromous fish, waterfowl, and sea mammals. Typically, hunter-gatherers respond to this situation by residential mobility, logistical mobility, storing of food, and social storage: reciprocity and storing of social obligations with other groups (fig. 2) In practice, few hunter-gatherers follow a single strategy, but employ a combination of these. The reduction in residential mobility and increase in logistical mobility, accomplished by means of sending out task groups, rather than moving as a group, entails an increase in

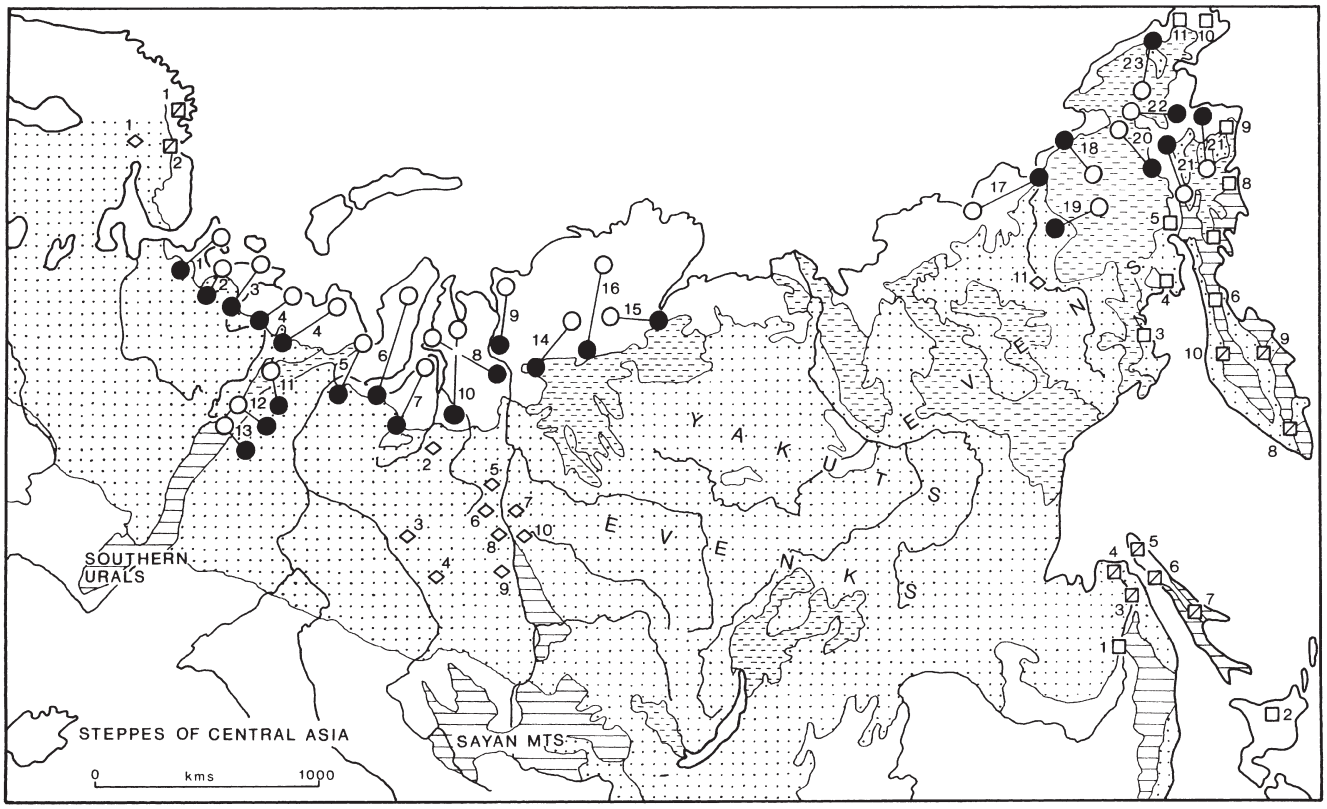

Figure 3. Map showing the location of territories of non-Russian inhabitants of Siberia. Kets of Podkamennaya Tunguzka are marked by a black rectangle number 10 near the confluence of Yenisey and Podkamennaya Tungunzka.
Black circles: winter basecamps of reindeer herding groups; *open circles*: summer basecamps of reindeer herding groups; *squares*: logistically organised, partly sedentary coastal and riverine hunter-fisher-gatherers; *rectangles*: reindeer-keeping hunter-gatherers of the Siberian interior; *dotted space*: coniferous taiga forest; *lined space*: upland grassland and parkland; *dashed space*: upland tundra. Lowland polar tundra around the shores of the Polar Ocean is denoted by white space.

sedentism, development of territoriality, and greater interference in – or enculturaltion of – the landscape. These are practical landscapes, generated in keeping with the seasonal and inter-annual rhythms of secular time.

At the same time, practical landscapes are also ritual landscapes. Practical activities are embedded in a broader framework of ideology and ritual; profane time is linked to ritual time. Cosmology and ritual impose a web of meaning on the landscape, and in its turn, landscape enculturated through symbolism and ritual plays a role in the processes of social production and reproduction (Giddens 1984; Tilley 1994). There is now an extensive ethnographic record of hunter-gatherers using features of a landscape as a means of communication, as claims to ownership, as structures of meaning and as structures of power (Ingold 1993; Morphy 1993; Tilley 1994). Such social strategies are usually legitimised through ritual and by reference to cosmology and mythology, where ancestors play a major role. Ritual landscapes then, possess symbolic, ancestral and temporal significance, which is complementary to, and dialectically interactive with, the practical, economic landscapes (*contra* Tilley 1994, 67).

3. An ethnographic case study: the Kets of Podkamennaya Tunguzka

To develop this argument in a more concrete form, I would first like to turn to an ethnographic case study from western Siberia. The Kets of Podkamennaya Tunguzka (fig. 3) are one of the traditionally hunting and gathering groups settled in the basin of Yenisei and Ob rivers in western Siberia (others are Selkups, Nentsy, Mantsy and Khantsy). Among the Kets, those settled along the river Pokamennaya Tunguzka (ca. 160 people in the first census ca. 1600) are said to have remained pure hunter-gatherer people without reindeer herding or reindeer transport until the end of the 19th century (Aleksenko 1967; Resketov 1972).

The calendar year of the Kets – their secular time – was divided into 12 months and reflected the subsistence

activities and mobility patterns of the group (fig. 4). The autumn was spent in tents along Yenisei, Tunguzka and tributaries fishing, fowling and gathering berries. With first frosts people moved to their winter settlement upriver. The early part of the winter was spent hunting bear and fur game in a logistical pattern of resource use: hunting parties of 3-4 men would leave the settlement for 4-5 days in search of prey, following a system of paths known as 'small roads'. This was followed by a festive season, the month of 'short days', marked by aggregation, mid-winter festivals and social activities. From the mid-January, the entire group broke into smaller units and set out on the 'great road' in the major residential move of the year. The entire move lasted about 3 months and involved movement from one temporary camp to another. Elk, reindeer and fur animals were the main game. At the end of this period people returned to the main settlement, where they remained during the snow-melt and the break-up of ice. The month of the pike – May – was marked by a dispersal to the traditional fishing grounds, owned by each household. There people built fish and waterfowl dams, fish weirs, fish traps, as well as fishing by hook and net. The main summer activities were fishing, fowling and gathering of plant food. Midsummer also marked the second social season, marked by the organisation of fairs along the main river – Yenisei. Fairs served as a focus for the exchange of goods, long-distance trade, interaction with other groups, the making of marriages and ceremonial activities marking rites of passage.

To summarise, in terms of residence and mobility, we have four organisational structures: residential aggregation at the main settlement (early winter, early spring), logistical mobility (early winter hunting parties), group residential mobility on the 'great road', and household based dispersal in the summer. Each group had at its disposal several hunting districts marked out by the small and great roads, so different journeys were taken in different years. How does the practical use of space among the Kets relate to the generation of socially constructed landscapes?

The cosmology of the Kets is a part of a broader foragers' belief system, which, in summary, seems to focus on two basic structures (Aleskenko 1967; Balzer 1980; Ingold 1986):

1. The division of the universe into three horizontal layers: sky, earth, and the underworld, which correspond to air, land and water respectively. These layers are linked by a 'cosmic pillar', or 'cosmic river', symbolised in the shaman's *turu*, or a tree often placed in the centre of the shaman's tent (fig. 5).
2. The division of humans and animals into the physical self, the body-soul and the free-soul. Human beings and those animals who are masters of their animal charges, such as the bear, possess all three substances; wild animals normally possess physical self and the body soul (their collective 'free soul' residing in the animal master), while among domestic animals "the spirit of the domestic animal is the soul of man, controlling the animal from without" (Ingold 1986, 255); domestic animals have no soul.

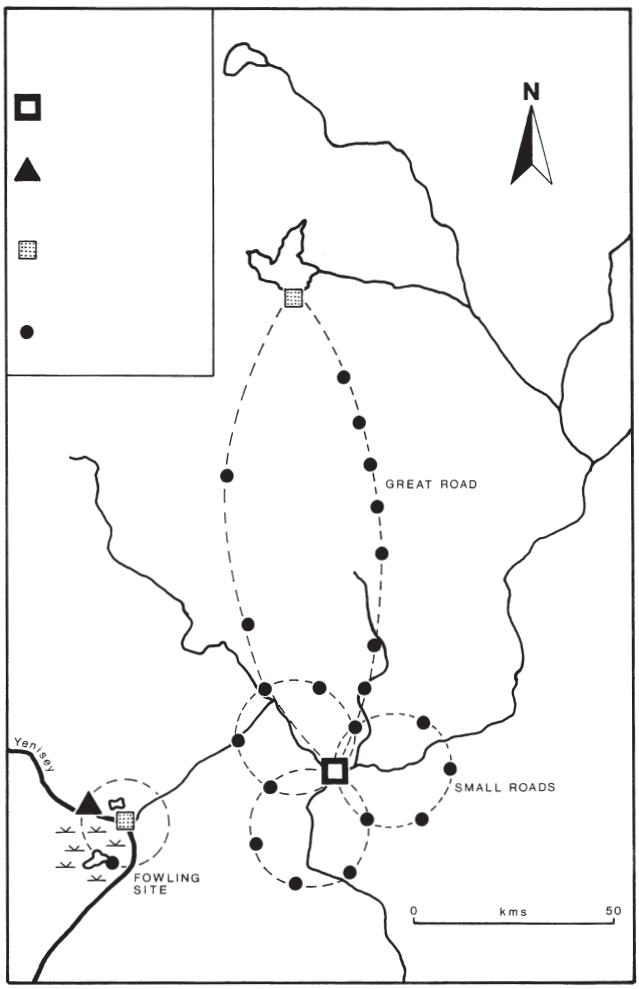

Figure 4. The annual territory of the Podkamennaya Tunguzska Kets. *Square*: main (winter) base camp; *triangle*: trading site on Yenisey (Russian settlement); *dotted squares*: temporary seasonal base camps; *black dots*: temporary procurement camps of a few days' duration (After Aleksenko 1967, Resketov 1972).

Within this cognitive framework, elk, bear and water birds play clearly defined roles as guardians of other animals and as channels of communication with the other, non-terrestrial worlds. The 'heavenly elk' for example, is an inhabitant of the heavens, and a central actor in the myths of revival and regeneration, as well as in the mediation between the world of the spirits and of humans. The bear plays an analogous but somewhat different role as the chief guardian of wild

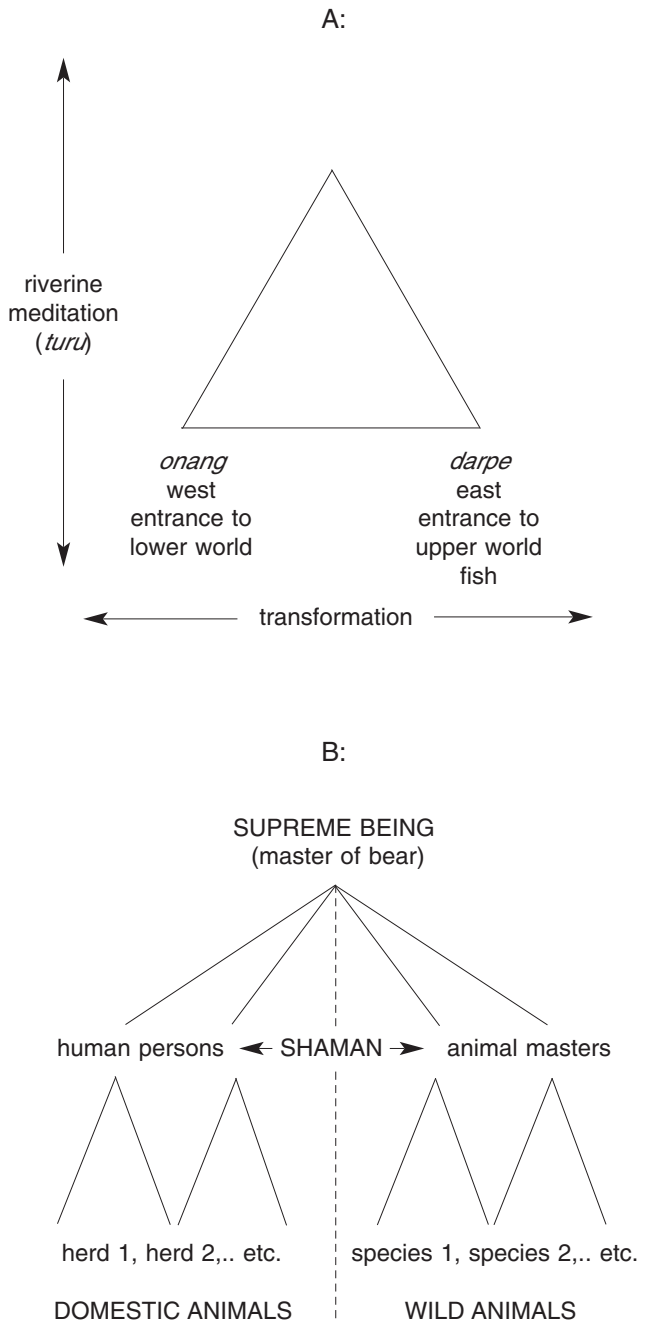

Figure 5. A summary diagram depicting some aspects of the cosmology of the peoples of Western Siberia (for explanation, see text. 5A: after Anisimov 1963, Tilley 1991; 5B: after Ingold 1986).

animals and a mediator between animal beings and human beings. Water birds are perceived as messengers between the other-world and the earth, guarding the entrance to the lower world, and acting as guides to the 'sea of the deceased' in some myths, to the 'burial beyond the water' in others (Aleksenko 1967; Balzer 1980; Ingold 1986).

With this background information in mind, we can recognise aspects of landscape as a social and ritual construct among the Kets:

– The Ket 'small roads' and 'great roads' were more than just migration routes. They imposed a network of paths through which the landscape was enculturated; they represented a pattern of activity, seasonal strategies by which a particular time of the year was defined (see also Tilley 1994, 29-31).
– Physical marks of enculturation were present along these paths. They included site locations themselves with temporary structures such as tents and more permanent ones such as the earth-houses of the main settlement. They included fixed facilities, such as fish weirs, traps and dams, pits and traps for fur animals. They also included marks made on trees, or ski and sledge remains placed to communicate specific claims of ownership or exclusive rights of use (Aleksenko 1967; Resketov 1972). So such features symbolised collective ownership of the landscape by the Kets as a group, and the ownership of locations in the landscape by individual households. They symbolised social order in the landscape and relations between households, groups and political units.
– Such symbols of enculturation were legitimised by reference to ancestors and linked to the overarching cosmology of the Kets. At the first camp of the 'great road', at the beginning of the journey, ceremonies were performed to communicate with a female ancestral being (the 'old woman of the road' (Resketov 1972)). Similar ceremonies were performed on return. Rituals linked to death and regeneration were also performed at summer fairs.

Rituals linking cosmology and landscape were also embedded in the course of regular subsistence activities. For example, after the first killing of animals serving as guardians or messengers in Ket cosmology, the soup remaining after cooking such animals (bear, elk, reindeer, waterfowl or fish) was returned to the river at specific holy places in an act of symbolic regeneration (i.e. the essence of messenger animals returned to the 'cosmic river'). Ceremonies associated with the bear hunt defined sacred, ritual places in the landscape by reference to bear as the guardian of other animals and a creature responsible for ensuring hunting success: this was for instance symbolised by specific bear bones (jaws, scapulas) being hung from trees (Aleksenko 1967; Resketov 1972).

4. Archaeological case study 1: Nämforsen in Northern Sweden

How far can we go in recognising such landscapes in the archaeological record? Rock carving and rock painting sites represent one major type of location, which, with its surrounding landscape, constitutes a landscape unit invested with symbolic meaning which must have served as a focus of ritual activities. This is borne out by ethnographic case studies of rock carving sites among, for example, the Australian Aboriginals (Bahn/Rosenfeld 1991; Flood 1987; Layton 1985; Morphy 1978), hunter-gatherers in South Africa (Lewis-Williams 1981, 1983) as well as by the pictographic and depositional evidence associated with prehistoric rock carving sites in Europe (a.o. Bradley *et al.* 1993, 1995; Hallstrom 1960; Kuhn 1956) and elsewhere (for example, Lee 1992).

Let us turn to Northern Europe, and summarise briefly the settlement-subsistence patterns reconstructed for this area from palaeoeconomic and settlement evidence. The period in question covers the later part of the hunter-gatherer Stone Age, just prior to the gradual adoption of farming, ca. 5500-1500 bc. Practical landscapes are structured around major settlements and the seasonal mobility schedules where these sites play a major role (fig. 6). At the same time, ritual locations are marked out by at least two types of sites: burial grounds and rock carving sites (shown as rectangles and squares respectively on the map in fig. 6).

Let us now focus our attention on Nämforsen. Nämforsen is a location of major rapids on the river Ångerman and a major rock carving site, dated very broadly to between 3000-1500 bc. It is the last rapids before the river enters the sea, situated at the junction of the interior uplands and the coastal plain. About 1750, petroglyphs were carved into the smooth rocky surface of three islands in the centre of the river (Hallström 1960; Malmer 1975; Tilley 1991). Nämforsen is central to some 600 stone age sites within the Ångerman river system, and about 60 to 70 km from the next rock carving/painting sites. Hunting elk and beaver, fishing and bird hunting appear to have been the main subsistence occupations, in a combination of residential and logistic mobility pattern, with sites near Nämforsen, located at the juncture of the mountains and the plain, as the main spring and summer settlements. The seasonal occupation during the summer half of the year at Nämforsen is suggested by the presence of bones of pike, salmon, seal, waterbirds and beaver – typically a spring/summer prey – while the elk, usually hunted during the winter, is absent (Forsberg 1985; Zvelebil 1981). As a location in the practical landscape, then, Nämforsen may have been analogous to the summer fishing, fowling and aggregation sites of the Kets (see above). One of the largest known settlements is located by the Nämforsen rapids, and was discontinuously occupied from 3000 bc. to the Iron Age, with the most intensive occupation dating to the late stone age (ca. 2500-2000 bc), marked by the presence of asbestos-tempered pottery (Malmer 1975, 1981).

The rock carvings at Nämforsen depict elks, boats, people, fish, birds, shoe/foot imprints, and tools, arranged into compositions which are remarkably lacking in hierarchical structure (fig. 7). The meaning of the rock carvings in general, and of carvings of elk – the most common motif – in particular at Nämforsen was interpreted in several ways: as a case of sympathetic magic designed to ensure hunting success, as totemic representations, as a 'tribal encyclopaedia' – a record of social knowledge, a "visual statement of myths, cosmic categories and associations held to structure both the supernatural world and human existence" (Tilley 1991), as a ritual confrontation between different interest groups within the community, and as a symbol of power and control by male elders over the others. The function of the site was identified as a major ritual centre (Badou 1977), a seasonal aggregation centre and a centre for exchange with the farmer traders from the south (Hallström 1960; Malmer 1975; Tilley 1991). Without going into the detail of various arguments, it is clear that Nämforsen was not only an important fishing location, occupied during the summer half of the year, but also a major ritual centre, featuring in an extensive exchange network between southern and northern Sweden.

In his analysis of Nämforsen, Christopher Tilley (1991) found parallels between the cosmological system of northern hunter-gatherers and the landscape features of Nämforsen. These can be summarised as follows:

- The importance of rivers in the cosmological system and their links with specific clans – as was, indeed, the case with Podkamennaya Tunguzka Kets, because this group of Kets is specified by the river which is central to their territory, the Podkamennaya Tunguzka.
- The notion of a cosmic river flowing from east to west and mediating between the different worlds of cosmos; and the symbolism of the rapids as openings to the other worlds: Nämforsen is located by the rapids.
- The liminal symbolism associated with the shaman's island in the cosmic river: the rock carvings at Nämforsen are located on three islands in the river.
- The idea that the point at which the cosmic river flows into the sea is marked by the most violent rapids marking the entrance to the underworld: Nämforsen is located by the last rapids before the sea.
- The link between the shaman's *turu* and the elk, symbolised by the figures at Nämforsen holding elk effigies.
- Use of birds and fish as a part of oppositional meaning structure in the shaman's ritual tent. Such a structural opposition was identified at Nämforsen.

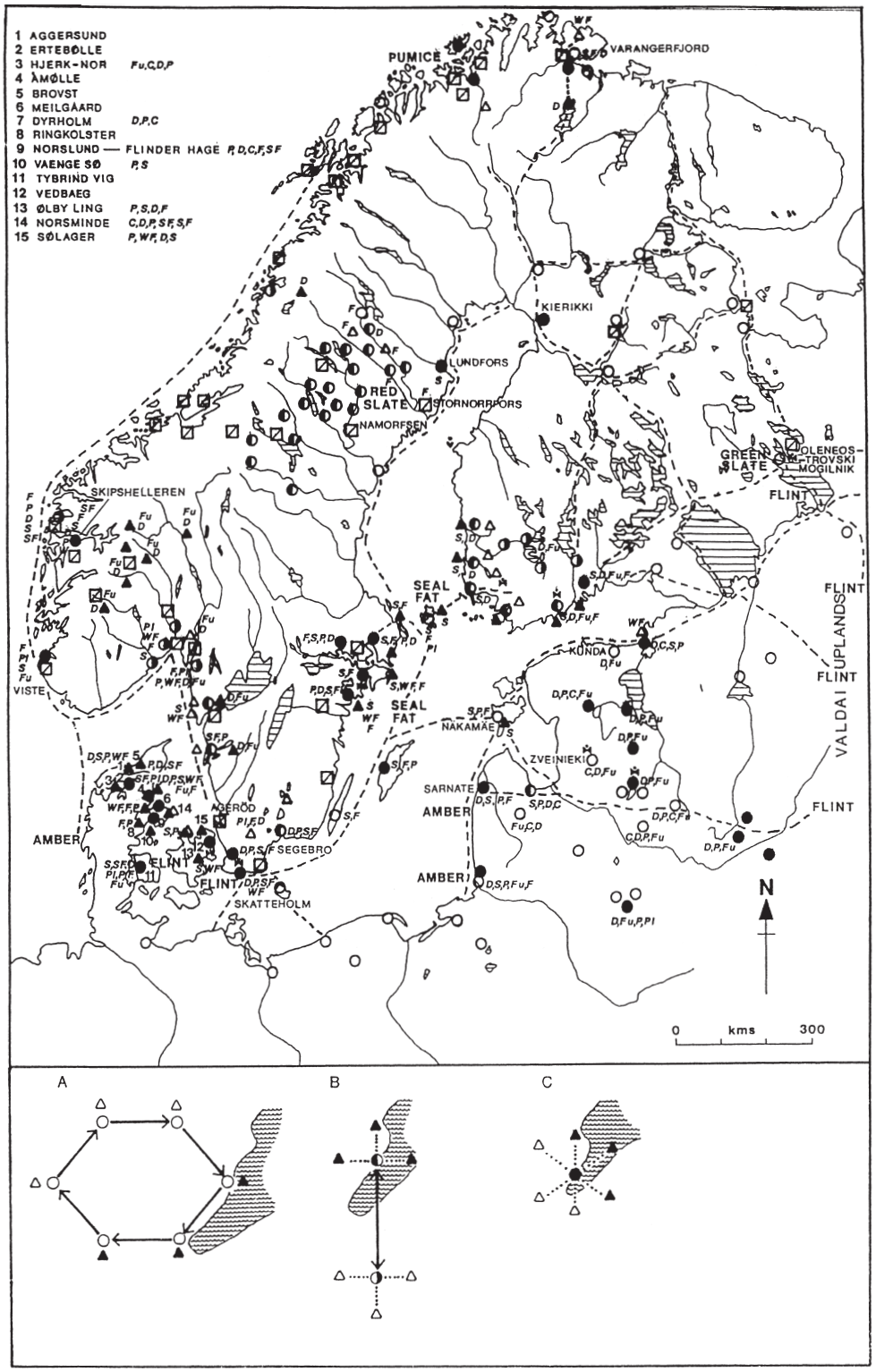

Figure 6. Hunter-gatherer settlement-subsistence patterns and the location of major burial and rock carving sites in Northern Europe, 6 000-1 500 bc.
A = Mobile pattern of land-use: Frequent re-location of the base camp as people move as a group from one resource to another in a foraging pattern of resource use.
B = Semi-sedentary pattern: People move as a group between two seasonal base camps, most resources are obtained by task groups sent out of the base camps to procure these in a logistical pattern of resource use.
C = Sedentary pattern: resources obtained by task groups from a base camp occupied permanently by at least some members of the community.
Symbols: open circle: triangle: specialised hunting-fishing-gathering site, temporary base camp, half-closed circle: seasonal base-camp, black circle: permanent base camp, slashed square: rock carving site, butterfly symbol: cemetery.
Letters: denote principal food resources found on sites, which have also provided information about the season and permanence of occupation. Fu = Fur animals, C = Wild cattle (Aurochsen), D = Deer, P = Pig, F = Fish, SF = Shellfish, S = Seal, WF = Wildfowl, Pl = Plant food (collation of a wide range of sources).

Figure 7. Rock carvings at Nämforsen. This illustration depicts only one of the carved surfaces. After Hallström 1960.

– The cosmological significance accorded to the elk conceived as a female elk. Most elk at Nämforsen are depicted without antlers.

In summary, Nämforsen played a role of a central ritual, aggregation and exchange site of a hunter-gatherer social group, each associated with and symbolically relating to a major river system (Forsberg 1985). The symbolism at Nämforsen can be comprehended by reference to the northern hunter-gatherer cosmology. The landscape analogies to the ethnographic situation of the Kets are also clear, and a similar pattern has been also historically documented for Saami groups (Vorren 1980).

In a diachronic perspective, Nämforsen may have began as a small rock carving site and a summer fishing location, which developed later into a major regional aggregation centre, in which elk hides and furs were exchanged for prestige goods and imports from the south. Contact with the traders from the south and the incorporation of Nämforsen into an exchange system linking northern and southern Sweden must have inevitably caused strain within the hunter-gatherer society, creating structural conditions for increased social competition and social dependency (Tilley 1991).

The carvings at Nämforsen are notable for their absence of status, rank, or hierarchical ordering of motives, reflecting, perhaps, the idealised social order of the hunter-gatherer society, in contrast to the evidence for social ranking evident in the burials (Bradley this volume; Clark/Neeley 1987; Meiklejohn/Zvelebil 1991; O'Shea/Zvelebil 1984). By symbolic representation, people may have masked the existence of social distinctions, acknowledged in social practice and in individual burials, but denied by the nominal adherence to the egalitarian ideology. Ritual time was employed to obscure the social reality. Tilley (1991) argues that contacts with traders- outsiders required the incorporation of a new set of symbols into the existing repertoire at Nämforsen, such as the new boat types and the circle cross, resulting in a structural change:

"Not only did the hunter-fisher-gatherers at Nämforsen accommodate their economic system to the demands of an exchange system for which they received very little in return, but they even restructured their cosmological and symbolic system" (Tilley 1991, 164).

But the key point, surely, is that despite, or perhaps because of this accommodation, the hunter-gatherer society continued to flourish. The farming way of life had been rejected both symbolically and in practice for another 500 years or more until the abandonment of Nämforsen and the subsequent demise of hunting-gathering societies between 1500 and 500 bc (Anderson 1976; Badou 1973; Christiansson/Broadbent 1975; Nygaard 1989). Is it possible to argue, then, that the symbolic and ideological framework – in combination with ecological factors, to be sure – prevented or proscribed the adoption of farming?

5. Archaeological case study 2: Olenii Ostrov, Karelia

Olenii Ostrov (or Oleneostrovski Mogilnik, Deer Island Cemetery) is the largest single Mesolithic cemetery known in Europe, and, at ca. 5500 bc, by far the oldest of the several Mesolithic cemeteries discovered so far in Northern Europe

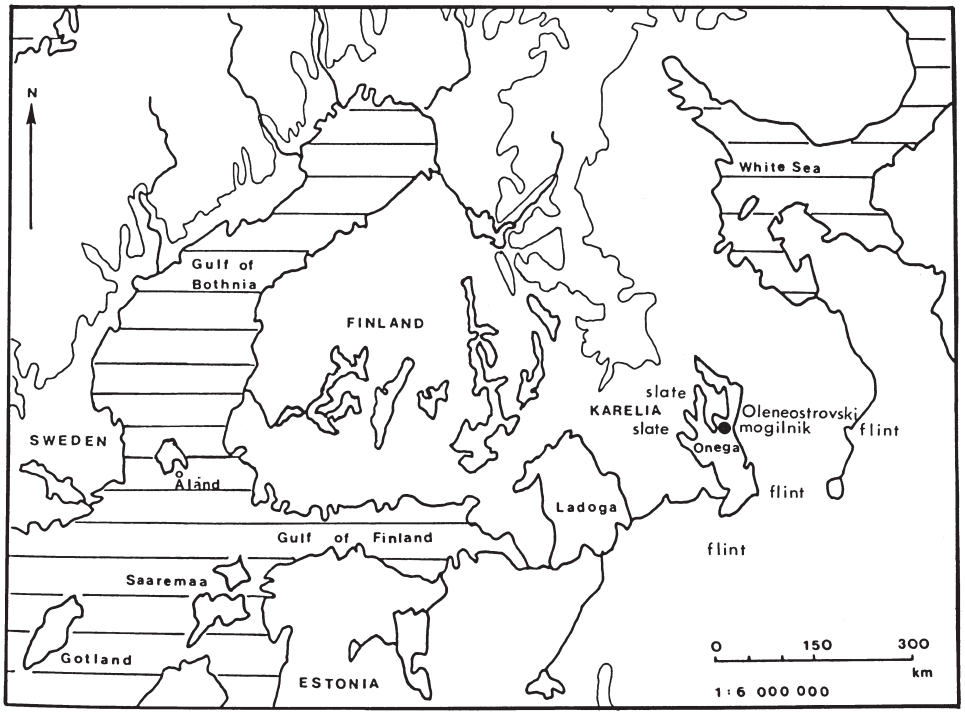

Figure 8. Location of Olenii Ostrov cemetery.

(Price/Jacobs 1990). Located on a small island in the northern part of Lake Onega (fig. 8), the cemetery was excavated by Gurina and published in 1956. Subsequent analyses by Khlobistina (1978), O'Shea and Zvelebil (1984) and Jacobs (1995) end in divergent interpretations.

Our reconstruction of the Olenii Ostrov cemetery and its society suggests that a community of about 400-500 people was using the cemetery, and that this group was subdivided into several groups, each numbering 90-100 persons (Fig. 9). The duration of use was relatively brief, probably 80-120 years, i.e. 4-6 generations (O'Shea/Zvelebil 1984). The estimates are of course very approximate, but in line with other indications of short-term or intermittent burial practices, such as at Skateholm (Larsson 1989, 1993) or Zveinieki (Zagorkis 1987), even though the use of the same *location* may have extended over several millennia.

The symbolism evident in the burial rite at Olenii Ostrov links the cemetery to a broader corpus of ritual and cosmology of the northern hunter-gatherers. Material representations in the burials include zoomorphic figurines, axes and maceheads, and elk-headed terminals of the kind depicted at the rock-carvings at Nämforsen (even though Olenii Ostrov is 3000 years older, and 1000 km away from Nämforsen). Elk, bear and waterbirds are the most common designs (fig. 10). The shores of Lake Onega, where Olenii Ostrov is located, also contained rock carvings with the same range of designs as those found at Nämforsen, using the same symbols as those found in the burials at Olenii Ostrov. Again, elk, deer (reindeer?), fish and waterbirds, and swan in particular are the most common designs. Humans are represented as engaged in hunting, harpooning, skiing and copulating with deer (Gurina 1956; Maula 1990; Savvateyev 1973).

Within this symbolic context, the meaning of ritual sites such as Olenii Ostrov and the rock carving sites at Zalavruga and Besov Nos on lake Onega can be again comprehended by reference to the northern hunter-gatherer cosmology. For example, the elk-headed terminals, four of which were found at Olenii Ostrov, and which are depicted as being carried around on sticks and poles on petroglyphs of both Onega and Nämforsen, find a direct parallel in the shaman's *turu*, a ritual rod used to mediate between the natural and supernatural worlds.

Scenes of copulation between hunters and deer/elk may refer to the role hunters play in the reproduction of wild animals which involves symbolic copulation between hunters and their prey: through the act of copulation, hunters return the animal soul of the killed animal to the animal master, thereby ensuring its physical reproduction in the near future (Ingold 1986)

Through similar referential reasoning, special shaft graves at Olenii Ostrov become more explicable as the graves of shaman, or ritual specialists: first, their western orientation

Figure 9. Layout of Olenii Ostrov cemetery. After Gurina 1956.

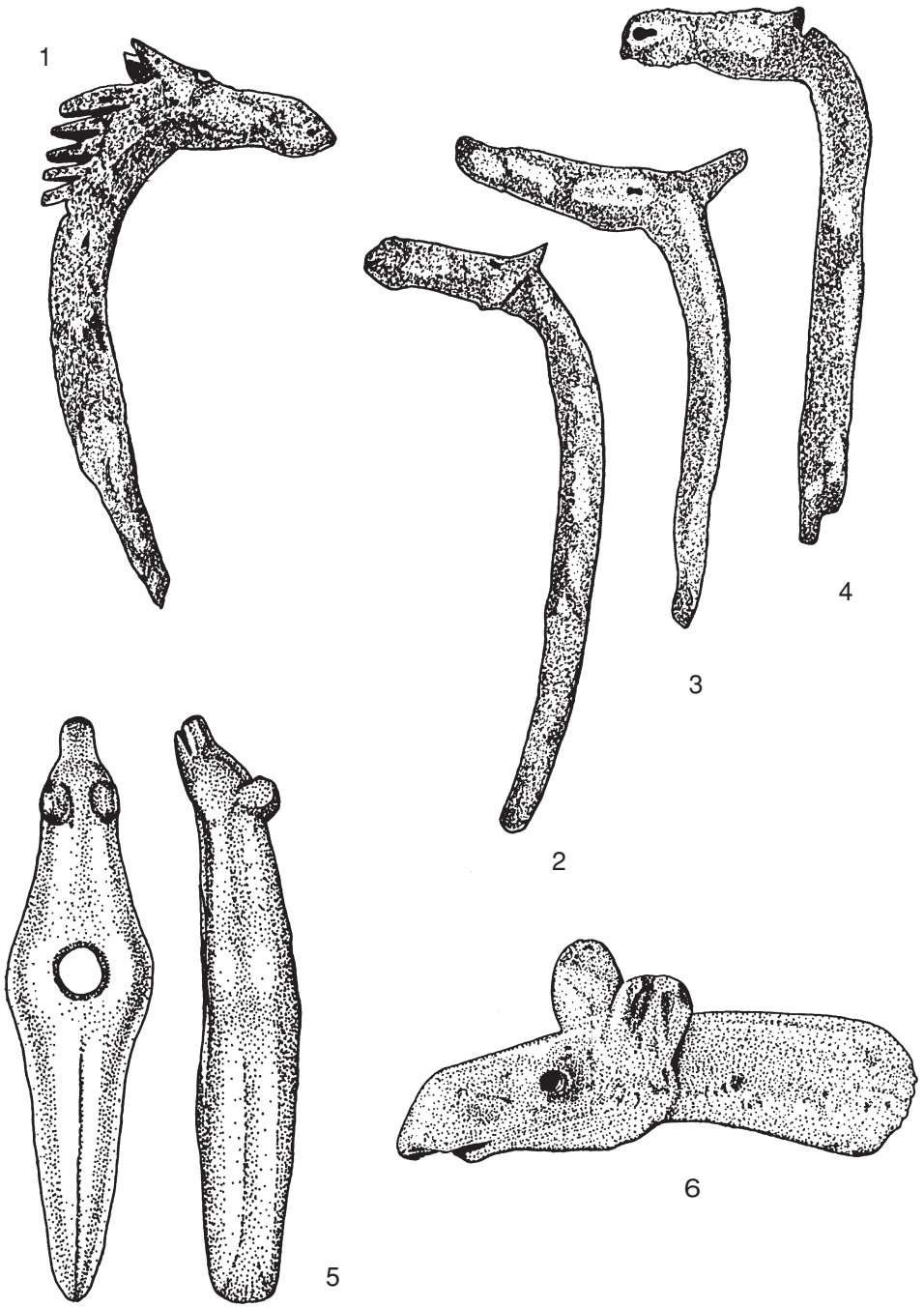

Figure 10. Sculpted artefacts from Olenii Ostrov and other areas. 1 = Olenii Ostrov, Karelia; length 54 cm; 2 = Sventoji, Lithuania, length: 43 cm; 3 = Sventoji, Lithuania, no scale; 4 = Olenii Ostrov, Karelia, length 50 cm; 5 = Tulguba, Karelia, no scale; 6 = Ravi, Säkkijärvi, Karelia, length 13 cm (fragment). After Carpelan 1975, Kivikoski 1967, Maciene 1990.

(while everyone else was facing east) can be explained as facing the entrance to the lower world, the domain of spirit ancestors of the shaman and of the rulers of the underworld. The souls of the rest of the group inhabited the upper world, associated with fish symbolism and entered from the east. The presence of beaver incisors, a category of pendants normally associated with females at Olenii Ostrov, in the shaft graves irrespective of sex, can also be explained, since

the shaman's role as a spiritual mediator with the underworld represented both men and women; consequently, his or her robe retained symbols of both genders (Anisimov 1963; Czaplicka 1914).

The enclosure by water of the Oleneostrovski island location itself is typical for burial location in northern Europe, and has persisted into the Christian period in some areas such as Finland, where the term *kirkkosaari* – or church island – denotes ancient burial locations claimed by Christianity. It reflects the ritual distinction between land and water, with burial of the dead taking place "beyond the water" as noted in the *Kalevala*, the Finnish national epos (Lönnrot 1963. See also Jacobs 1993). The association of waterbirds with the dead, and the frequent occurrence of waterbird designs on lakeside petroglyphs and on containers refer to the same set of associations (i.e. Maula 1990). Waterbirds are often the sole bird remains found in burials; the interment of a child on a swan's wing at Vedbaek is particularly pregnant with symbolism (Nielsen/Brinch Petersen 1993).

As with Nämforsen, the burial ground at Olenii Ostrov appears to have been a central ritual and aggregation site for a group of hunter-gatherers, divided into two clans, each defined by a totemic symbol – an elk and a snake. The territory of this group can be defined by particular features of its lithic assemblage, and by the regular use of three lithic materials: green slate, quartz and flint. The ritual and the secular activities were interlinked, and the ritual, unchanging time of hunter-gatherers such as the Oleneostrovski group was embedded in hunter-gatherer practice; both were rationalised by the overarching belief system. Neither the belief system nor the practice required change; on the contrary, they emphasised the perpetuation and replenishment of resources through the perception of nature as a giving environment (Bird-David 1990).

Tentatively, we have reconstructed the subsistence-settlement pattern as a dispersed and mobile one during the later autumn and winter, and an agglomerated and more sedentary one during the summer half of the year. In summer, concentrations of waterfowl and migratory fish offered an aggregation of resources which would sustain a concentrated population. Olenii Ostrov was probably used only during this time of the year, and not in winter, when people broke up into small groups for ungulate hunting and trapping. The secular time of the Oleneostrovki group revolved around the seasonal practice of these tasks, and the practical landscape was structured by them.

Although inter-linked, the essential timelessness of the ritual time acted in contradistinction to the practical contingencies of secular time. For example, Jacobs noted the large number of truncated skeletons at Olenii Ostrov, attributing this to poor preservation and secondary disturbance of burials. An alternative explanation is that these individuals died away from the cemetery and were brought to the cemetery for burial in an incomplete state. Ethnographic analogues for such practices exist in Siberia, where those dying during the winter were left exposed, often on wooden platforms in trees, before burial in the spring (Czaplicka 1914). If this was the case, such practice reflected accommodation between the requirements of practical time which dictated a mobile, dispersed lifestyle in winter and of ritual time, which required burial of the dead at the ancestral location as a way of merging the past with the present and as an affirmation of the link with ancestors.

The choice of animal teeth as perforated pendants can provide another example. Although teeth were available from a large number of both terrestrial and aquatic species, procured during practical time in the course of hunting, trapping and fishing, only three species were utilised to make perforated tooth pendants, which were either made into necklaces or suspended from belts laid across the body of the deceased: bear tusks, elk incisors and beaver incisors. All three animals play an important part in the ritual symbolism of modern Siberian groups: those of elk and bear were noted above, while beaver was held to have medicinal properties among many boreal people (Eidlitz 1969). Beaver mandibles formed a part of shaman's outfit among some Siberian groups (Gurina 1956). Similar selection was exercised in carving objects from stone, wood or bone which feature principally elk, bear, beaver and waterbirds. Here again, the ideology has acted on the resources procured in practical time to make then into symbols of the ritual, sacred time.

The location and the rhythm of use of the burial ground itself may be used as another example. The limited period of any one episode of use can be contrasted with repeated use of the same locations. Although at Olenii Ostrov we have evidence of only single episode of use, more extensively investigated locations such as Skateholm or Zveinieki show several episodes of use. At Zveinieki, for example, the burial ground was used intermittently over 3 000 years, between ca. 4800 and 1800 bc (Zagorskis 1987). While the episodes of actual use may have been dictated by the history of events and by the practical, secular time of hunting and gathering communities, the *longue durée* in the use of the same locations reflects the ritual time scale and the persistence of demarcated ritual zones within the landscape (see also Bradley 1991, 210).

Finally, the operation of the two different time scales can be seen in the contrast between the evidence for social structure inferred from the mortuary analysis and the symbolism of Oleneostrovskii society. Mortuary analysis has revealed the existence of at least seven social dimensions, expressing band membership, age, sex, personal wealth and three specialised ranks (O'Shea/Zvelebil 1984), suggesting a descent-based society organised into a sequential hierarchy

(Aldenfelder 1993; Johnson 1982), which was linked to ritual, but which operated independently from one another. Although ritual roles appear to have been inherited, wealth was not: it tended to decline with age (O'Shea/Zvelebil 1984). Differences in mortuary wealth and horizontal social differentiation were identified in other mortuary contexts in temperate Northern Europe (Clark/Neeley 1987; Larsson 1989; Meiklejohn/Zvelebil 1991; Zagorskis 1987). Although these identifications remain to some extent ambiguous, the elaboration and differentiation of burial practice in the late Mesolithic appears to be much greater than among the ethnographically known hunter-gatherers of Siberia, suggesting that social structure was more hierarchically ranked than was the case among the hunter-gatherers of the ethnographic record. As such, social practice, marked by ranking, conflicts with the egalitarian ideology of the hunter-gatherer mode of production, embedded in the world-view of the boreal hunter-gatherers (Ingold 1986, 1988), and linked symbolically with Olenii Ostrov and other Mesolithic cemeteries through the use of the same symbols and burial rites.

Bradley remarked that "by denying the passage of time, people can mask the effect of revolutionary developments" (1991, 217). As at Nämforsen, people at Olenii Ostrov may have masked the existence of social distinctions, acknowledged in social practice and in individual burials, but obscured by adherence to the symbols of egalitarian ideology required by the world-view of northern hunter-gatherers.

6. Discussion and conclusions

How can I justify such literary use of direct historical, or relational, analogy spanning 7000 years? To begin with, the use of the analogy in this case seems valid because the societies in question are historically linked and because they operated in similar ecological and economic conditions (see also Tilley 1991). This argument is considerably strengthened if we trace the historical continuity and change between these societies broadly in terms of structure and agency (Bourdieu 1977; Giddens 1984; Layton 1985, 1991). In my view, prehistoric and recent ethnographic societies share the same spatial and organisational structures. Two sets of structures are apparent:

1. Practical structure conditioned by the ecology of the resources, climate, geomorphology of the natural environment. Seasonal regimes of resource use, the organisation of the practical time, technological traditions in their relations to the division of labour and social organisation belong to this category of structures.
2. Ideological – cosmological structure arising from the hunter-gatherer ideology and as a consequence of boreal hunter-gatherer cosmology.

In other words, the remarkable symbolic continuity is an expression of the underlying conceptual structure; it is a function of an ideological system which emphasises timelessness and circulation of animal resources in regeneration cycles by means of having three substances – physical self, body soul and free soul, managed by human and animal masters in an act of collective appropriation (Ingold 1986); by the perception of nature as a giving environment, and by the prosecution of the egalitarian ideology of sharing (Bird-David 1990). Bearing this in mind, we can begin to understand the *longue durée* of such ideology.

The social (and economic) organisation of the societies in question, embedded within these structures, changes through the operation of dynamic factors: agency – by which I mean historically situated negotiation for power, control and attainment of goals between different segments of the society. This discourse takes place at different scales of organisation, starting with individuals, moving onto households, groups bound by kinship ties, communities and larger units. The use and meaning of symbols will change as a part of this process of negotiation – within the ideological structure which provides the frame of reference for changes in interpretation. In my opinion, although the agency modified the use of symbols, the ideological structure itself did not change until the corpus of symbols associated with hunter-gatherer societies was replaced by those associated with farming: i.e. not till about 1000 bc in northern Sweden and Finland, not till about AD 500 in Karelia, and not till the present century among the Kets of Western Siberia.

What does this tell us about the perception and use of landscapes by prehistoric hunter-gatherers and about their social structure? The examples which I have discussed emphasise not only regular patterning in the practical use of the hunter-gatherer landscapes, but also the existence of ritual and burial zones. To some extent such zones are overlapping: sites used for practical purposes also have social significance and ritual meaning: landscape is a socially constructed phenomenon. In addition, there are areas such as Olenii Ostrov or Nämforsen where the ritual and social roles are emphasised and symbolised in the landscape. These locations are central to the economic and social life of the groups using them.

Comparing the economic, the symbolic and the burial evidence, I have argued for a tension developing between the imposition of a normative egalitarian ideology and the social reality marked by an increase in social stratification and social competition. In areas such as Nämforsen, this occurred towards the end of the hunter-gatherer stone age. To my mind, this represents a good illustration of the dynamic forces of agency, in the case of Nämforsen provoked by contact with farming groups in southern Sweden. In the case of Olenii Ostrov society, cultural elaboration and incipient

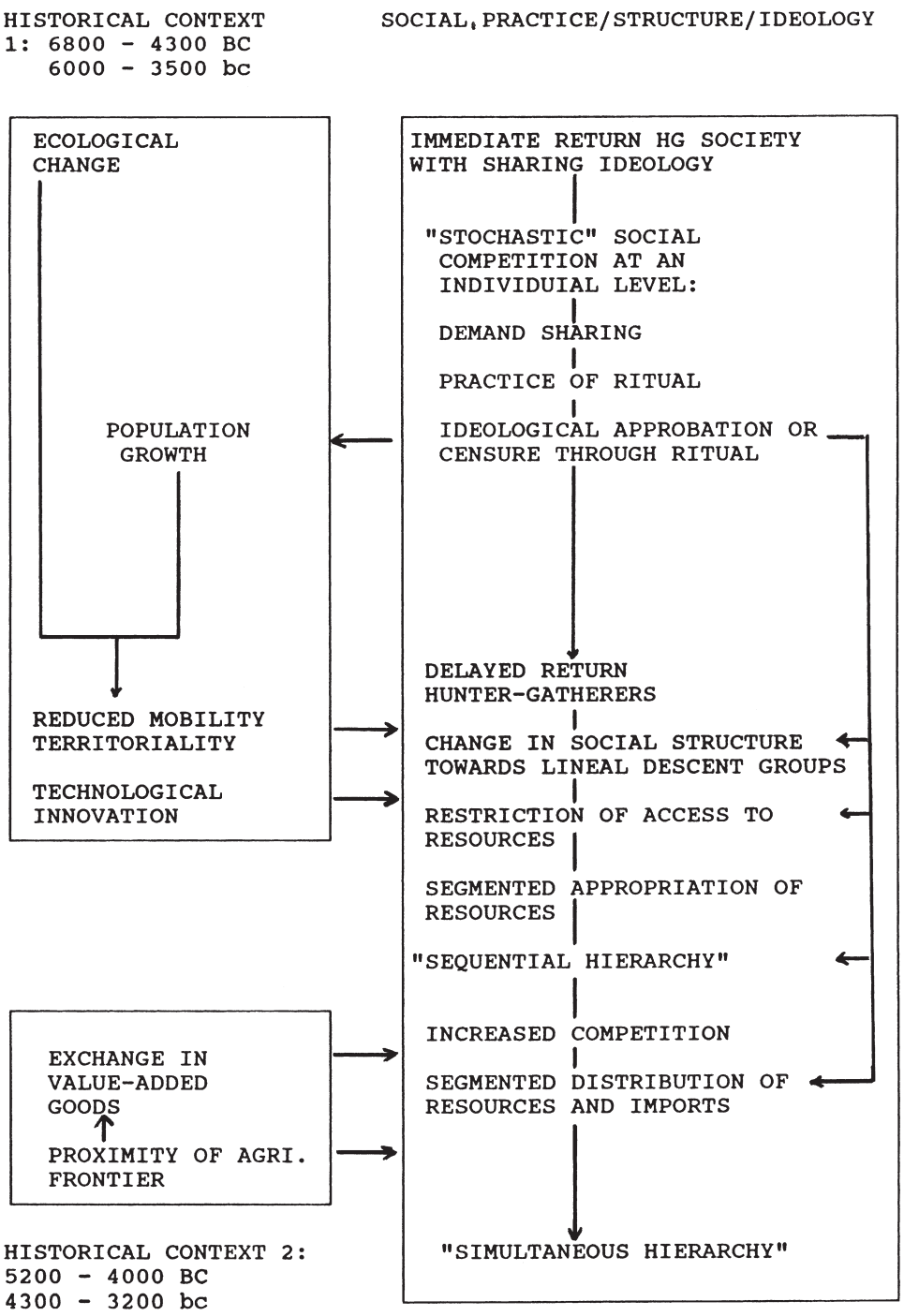

Figure 11. Ideology as an agency of social change.

stratification may have been linked to its central role in the regional trade in flint and the highly valued green Olonetz slate (O'Shea/Zvelebil 1984).

The historical explanation, then, is based on the premise that the ideology of sharing, although adhered to nominally, increasingly did nor reflect social practice in the late Mesolithic. The tension between ideological prescription and practice increased with technological innovation, increase in territoriality and, later, contact with farming societies. Territoriality and delayed-return technologies imply restriction of access to resources, and encourage resource ownership: their appropriation appears no longer collective, but a product of individual labour.

Within this context, the impact of the agricultural frontier would have been felt in many aspects of hunter-gatherer social life. Farming goods and products such as polished stone axes, ceramics, etc. contained a component of added value, arising from their exotic origin and prestigious – subversive perhaps – ideological association. As we know, stone axe imports were traded widely in Northern Europe, and there were other items of trade (fig. 6) (Zvelebil 1996). Unless re-interpreted in the context of hunter-gatherer ideology, such exchange goods were bound to promote social elites. Together, these developments created structural conditions for social dependency, and 'simultaneous' rather than 'sequential' hierarchies (Johnson 1982).

What effect would this have on the hunter-gatherer belief system? In the archaeological record, we can, perhaps, identify both ideological censure and transformation (fig. 11).

Several people have noted the incompatibility of foraging and farming symbolic codes: Chapman, for example, argues that products which symbolised farming were excluded from the late Mesolithic site of Lepenski Vir in the Danube Gorges (1993). As pointed out earlier, the hunter-fisher communities at Nämforsen adjusted their economy to the demands of an exchange system controlled by farmers, and recorded this in their symbolic system. In both cases, though, farming was rejected symbolically and in practice. The subsequent cultural simplification, evident at Lepenski Vir, as well as in the final phases of hunter-gatherer settlement in many parts of Scandinavia, suggests a sort of prehistoric "encapsulation" – a situation noted among ethnographic hunter-gatherers after a period of contact with farmers (Woodburn 1982, 1988). Alternatively, tension between the ideology of sharing and the practice of accumulation, promoted by contacts with farmers, would have been resolved by ideological transformation, allowing for the ownership of domesticated resources, formalised ranking, and the accumulation of wealth (fig. 11).

As we know, hunter-gatherer communities in northern Europe adopted farming at very different speeds: ranging from 100-300 years in the West Baltic to 500-1000 years in the east (Zvelebil 1996). It is commonly assumed that social and ideological structures were transformed in the process But how much change was actually involved? The emphasis on communal territories and communal ritual, characteristic of the early Neolithic in north-west Europe, emphasises the continuation of Mesolithic traditions. Other features common to both the hunter-gatherer and early farming communities include deposits of food and antler in graves, dog burials, mortuary houses, circulation of human bones, votive deposits in aquatic locations and the use of stone in grave architecture (see also Bradley, this volume; Jennbert, this volume; Thomas, this volume; Madsen, this volume). At the same time, there is evidence for social elites and exclusion from ritual practice, the extent of which, to my mind, has not been agreed upon. Could it be that, in some ways, communal ritual, symbolised by causewayed enclosures and megalithic tombs served as an elaborate ideological practice intended to safeguard the practice of sharing and communal identity by moving it from a personal and universal ideology (embedded in hunting-gathering) to a different level of social organisation: to a level of public ritual. This was perhaps the transformation which facilitated, ideologically, the adoption of farming.

references

Aleksenko, E.A. 1967. *Kety*, Moskva.

Aldenderfer, M. 1993. Ritual, hierarchy and change in foraging societies, *Journal of Anthropological Archaeology* 12 (1), 15-45.

Anderson, A. 1976. *Prehistoric competition and economic change in northern Sweden*, Ph.D. Dissertation (unpublished), Cambridge University, Cambridge.

Anisimov, A. 1963. Cosmological concepts of the people fo the north. In: H. Michael (ed.) *Studies in Siberian shamanism*, Toronto.

Badou, E. 1973. The cultural concept in the north Swedish stone age. In: G. Berg (ed.) *Circumpolar problems*, Oxford.

Badou, E. 1977. Den förnhistoriska fångstkulturen i Västernorrland. In: E. Badou & K.G.Selinge, *Västernorrlands Förhistoria*, Motala.

Bahn, P. & A. Rosenfeld 1991 (eds.) *Rock art and prehistory, Papers presented to symposium G of the AURA Congress, Darwin 1988*, Oxford.

Balzer, M.M. 1980. The route to eternity: cultural persistence and change in Siberian Khantsy burial ritual, *Arctic Anthropology* 27 (1), 77-89.

Bloch, M. 1977. The past and the present in the present, *Man* 12, 278-292.

Bourdieu, P. 1977. *Outline of a theory of practice*, Cambridge.

Bradley, R. 1991. Ritual, time and history, *World Archaeology* 23, 209-219.

Bradley, R., J. Harding & M. Mathews 1993. The siting of prehistoric rock art in Galloway, south-west Scotland, *Proceedings of the Prehistoric Society* 59, 269-83.

Bradley, R., F.C. Boado & R.F. Valcare 1995. Rock art and the prehistoric landscape of Galicia: the results of field survey 1992-1994, *Proceedings of the Prehistoric Society* 61, 347-370.

Chapman, J. 1993. Social power in the Iron Gates Mesolithic. In: Chapman, J. & P. Dolukhanov (eds.) *Cultural transformations and interactions in Eastern Europe*, Aldershot, 71-122.

Christiansson, H. & N.D. Broadbent 1975. Prehistoric Coastal settlement on the upper Bothian Coast of Northern Sweden. In: W. Fitzhugh (ed.) *Prehistoric maritime adaptations of the circumpolar zone*, The Hague/Paris, 47-57.

Clark, G. 1992. *Space, time and man, a prehistorian's view*, Cambridge.

Clark, G. A. & M. Neeley 1987. Social differentialtion in European Mesolithic burial data. In: P. Rowley-Conwy, M. Zvelebil & H.P. Blankholm (eds.) *Mesolithic Northwest Europe, recent trends*, Sheffield, 121-130.

Czaplicka, M.A. 1914. *Aboriginal Siberia. A study in social anthropology*, Oxford.

Eidlitz, K. 1969. Food and emergency food in the circumpolar area, *Studia Ethnographica Uppsaliensis* 32 (monograph).

Flood, J.M. 1987. Rock art of the Koolburra Plateau, north Queensland, *Rock Art Research* 4, 91-126.

Forsberg, L. 1985. Site variability and settlement patterns, *Archaeology and Environment* 5 (monograph), Umeå.

Giddens, A. 1984. *The constitution of society*, Berkeley/Los Angeles.

Gosden, C. 1994. *Social being and time*, Oxford.

Gurina, N.N. 1956. Oleneostrovskii Mogilnik, *Materialy i Issledovania po Arkheologii SSSR* (monograph).

Hallström, G. 1960. *Monumental art of Northern Sweden from the stone age*, Stockholm.

Ingold, T. 1986. *The appropriation of nature*, Manchester.

Ingold, T. 1993. The temporality of landscape, *World Archaeology* 5 (2), 153-174.

Jacobs, K. 1995. Return to Olenii Ostrov: social, economic and skeletal dimensions of a boreal forest Mesolithic cemetery, *Journal of Anthropological Archaeology* 14, 359-403.

Johnson, G. 1982. Organisational structure and scalar stress. In: C. Renfrew, M. Rowlands & B. Seagraves (eds.) *Theory and explanation in archaeology*, New York, 409-421.

Khlobistina, M.D. 1978. Nekotoryie voprosy paleosociologicheskoi interpretacii Oleneostrovskogo Mogilnika, *Sovetskaya Arkheologia* 3, 47-57.

Kuhn, H. 1956. *The rock pictures of Europe*, London.

Larsson, L. 1989. Ethnicity and traditions in Mesolithic mortuary practices of southern Scandinavia. In: S.J. Shennan (ed.) *Archaeological approaches to cultural identity*, London, 210-218.

Larsson, L. 1993. The Skateholm project: Late Mesolithic coastal settlement in southern Sweden. In: P. Bogucki (ed.) *Case studies in European prehistory*, London, 31-62.

Leach, E. 1990. Aryan Invasions over four millenia. In: E. Ohnuki-Tierney (ed.) *Culture through time: anthropological approaches*, Stanford.

Lee, G. 1992. *The rock art of Eastern Island: symbols of power and prayers to the gods*, Los Angeles.

Lewis-Williams, J.D. 1981. *Believing and seeing: symbolic meanings in Southern sea rock art*, New York.

Lewis-Williams, J.D. 1983. *Rock art of Southern Africa*, Cambridge.

Layton, R. 1985. The cultural context of hunter-gatherer rock art, *Man* 20, 434-453.

Layton, R. 1991. Figure, motif and symbol in the hunter-gatherer rock art of Europe and Australia. In: P. Bahn, P. & A. Rosenfeld (eds.) *Rock art and prehistory*, Oxford, 23-39.

Lönnrot, E. 1963. *The Kalevala or poems of the Kaleva District*, Cambridge, Massachusett.

Maula, E. (ed.) 1990. *Swansongs, Rock Art from Lake Onega 4000-2000 B.C.*, Tartu, The Society of Prehistoric Art.

Malmer, M. 1975. The rock carvings at Nämforsen, Ångermanland, Sweden as a problem of maritime adaptation and circumpolar relations. In: W. Fitzhugh (ed.) *Prehistoric adaptations of the circumpolar zone*, The Hague.

Malmer, M. 1981. *A chronological study of north European rock art*, Stockholm.

Meiklejohn, C. & M. Zvelebil 1991. Health status of European populations at the agricultural transition and the implications for the adoption of farming. In: H. Bush & M. Zvelebil (eds.) *Health in past societies*, Oxford, British Archaeological Reports International Series 567, 129-145.

Morphy, H. 1978. *Mangggalili Art, Paintings by the Aboriginal Artists Nauritjin and Banapana Maymuru*, Canberra.

Morphy, H. 1993. Colonialism, history and the construction of place: the politics of landscape in Northern Australia. In: B. Bender (ed.) *Landscape: politics and perspectives*, Providence/Oxford, 205-243.

Nielsen, E.K. & E. Brinch Petersen 1993. Burials, people and dogs. In: S. Hvass & B. Storgaard (eds.) *Digging into the past. 25 years of archaeology in Denmark*, Copenhagen, 76-80.

Nygaard, S. 1989. The stone age of northern Scandinavia: a review, *Journal of World Prehistory* 3, 71-116.

O'Shea, J. & M. Zvelebil 1984. Oleneostrovski Mogilnik: reconstructing social and economic organisation of prehistoric hunter-fishers in northern Russia, *Journal of Anthropological Archaeology* 3, 1-40.

Price, T.D. & K. Jacobs 1990. Olenii Ostrov: first radiocarbon dates from a major Mesolithic cemetery in Karelia, *Antiquity*, 849-53.

Resketov, A. 1972. *Okhotniki, Sobirateli, Rybolovy*, Moskva.

Roberts, B.K. 1987. Landscape archaeology. In: J.M. Wagstaff (ed.) *Landscape and culture*, Oxford, 77-95.

Savatteyev, 1973. Petroglify Karelii, *Voprosy Istorii* 6 (monograph).

Tilley, C. 1991. *Material culture and text. The art of ambiguity*, London/New York.

Tilley, C. 1994. *A phenomenology of landscape*, Oxford.

Vorren, Ø. 1980. Samisk bosettning på Nordkalotten, arealdisponering og resursutnytting i historisk-økologisk belysning. In: E. Badou & K.H. Dahlstedt (eds.) *Nord-Skandinaviens Historia i Tvärvetenskaplig Belysning*, Umeå.

Woodburn, J. 1982. Egalitarian societies, *Man* 17, 431-451.

Woodburn, J. 1988. African hunter-gatherer social organisation: is it best understood as a product of encapsulation? In: T. Ingold, D. Riches & J. Woodburn (eds.) *Hunters and gatherers* 1, Oxford, 31-64.

Zagorskis, F. 1987. *Zvejnieku Akumens Laikmeta Kapulauks*, Riga.

Zvelebil, M. 1981. *From forager to farmer in the boreal zone*, Oxford, British Archaeological Reports International Series 115.

Zvelebil, M. 1993. Concepts of time and "presencing" the Mesolithic, *Archeological Review from Cambridge* 12 (2): 51-70.

Zvelebil, M. 1996. The agricultural frontier and the transition to farming in the circum-Baltic region. In: D. Harris (ed.) *The origin and spread of agriculture and pastoralism in Eurasia*, London, 323-345.

Marek Zvelebil
Department of Archaeology and Prehistory
University of Sheffield
Northgate House, West Street
UK-S1 4ET Sheffield