



## **Time and space exchanging greetings**

### *Sketches towards an understanding of utmark production landscapes in a cognitive perspective*

The topic of this paper is time, a concept that every one of us is dealing with every day. Lately, we have been very concerned with the bias of our contemporary world when we study past societies. This led some into a quagmire of judgemental relativism and left the rest of us a little bit uneasy, to say the least. Those in the quagmire will be left to their destiny. The rest of us have benefited greatly from this general questioning of what we are doing, but we also see the necessity to keep up our work and do the best that we can. We would even want to go further.

When taking the necessary step from the current state of thinking about the role of the present in interpreting the past to a stage where we start thinking about the interpretations *in* the past of a still earlier past, we enter the territory of cognitive archaeology.

#### **What is cognitive in archaeology?**

Among the researchers that have used this term or label in one way or another there has been a tendency, inclining towards a canon, to regard cognitive archaeology as a specific field of study that comprises the symbolic and cultic sectors of past human life. It has also been seen as part of the anti-processual paradigm of the 1980s and 1990s; an emphasis on symbolism and cult has been a reaction against the earlier emphasis on settlement, production and environment.

Some processual archaeologists have, in fact, taken an interest in cognitive archaeology for over three decades. Kent V. Flannery and Joyce Marcus, to start with the most obvious examples, have been unsatisfied with the limitations of the 1960s and 1970s paradigm and declared an intention to make materially based archaeology more holistic. They define cognitive archaeology as ‘the study of all those aspects of ancient culture that are the product of the ancient mind’, but they also explain that this comprises cosmology, religion, ideology, iconography and other forms of intellectual and symbolic behaviour which can be understood from the archaeological

contexts, and thereby explicitly exclude hunting, fishing, cultivation etc. (Flannery and Marcus 1993).

In the 1990s, there were also other attempts to refresh the old processual school by incorporating the field of symbolism and other belief systems. Sir Colin Renfrew coined the concept 'cognitive-processual archaeology' (Renfrew & Zubrow, eds. 1994). Renfrew wanted to integrate the cognitive and symbolic with other aspects of past life, and also to stress the role of ideology as an organisational force in society. He also emphasised very strongly the need for testability, i.e. he keeps his feet very firmly rooted in the 'scientific' methodology of processualism. I endorse this, as a stance against the guys in the quagmire, because I do not think that we should allow any 'fanciful mentalist speculation' (cf. Flannery and Marcus 1993) just because it is labelled cognitive archaeology. Still, Renfrew, to some extent, kept the cognitive and the functionalist fields of study apart, rather than seeing the cognitive and functionalist *perspectives* as something that should be inherent in all our work.

Personally, I do not find this way of exclusive thinking progressive, and I do not think that the dichotomy between processual and anti-processual (or post-processual archaeology as most people call it) should be developed further. Instead, we need a synthesis, because there are useful aspects in both paradigms, and the gap is only as wide as we want it to be (cf. Kosso 1991).

Separating cognitive archaeology as a distinct field of study, in line with the archaeology of burials or ceramics or weaponry, gets us nowhere. As has been stated by e.g. the cognitive scientist Erwin M. Segal, 'archaeology is foundationally a science based on cognition' (Segal 1994). Many others have stated something similar, but they do not practise what they preach.

I started by asking myself: why cannot a cognitive approach be used also when we study a production landscape or a settlement pattern? The making of a crude Palaeolithic stone implement two and a half million years ago was the result of cognitive processes (e.g. Wynn 2002), so everything that humans have accomplished since, is the material for cognitive archaeology.

### **Do you have cognitive control?**

Among the prerequisites of my discussion are the sub-concepts of cognitive space, cognitive control and temporality. Cognitive space is actually what interests us as archaeologists when we study the landscape, because the landscape is only of interest to us when it has been experienced and/or altered by humans. The natural landscape *per se* is not our concern. Cognitive space is created when the landscape is experienced by a human. We often talk about cognitive maps. If several humans experience more or less the same cognitive space, we may perhaps be able to talk about socio-cognitive space.

For the sake of survival, it is of importance to anyone to have a relatively good understanding of the space that surrounds him or her. There is a need for cognitive control. Let me exemplify. For someone on a long-distance journey, a forest can be a serious obstacle. For a stranger in the region, the lack of cognitive control becomes



**Figure 1.** Travel or work in forested areas, like this one in Ångersjö parish, necessitates cognitive control.  
(Photo by the author)

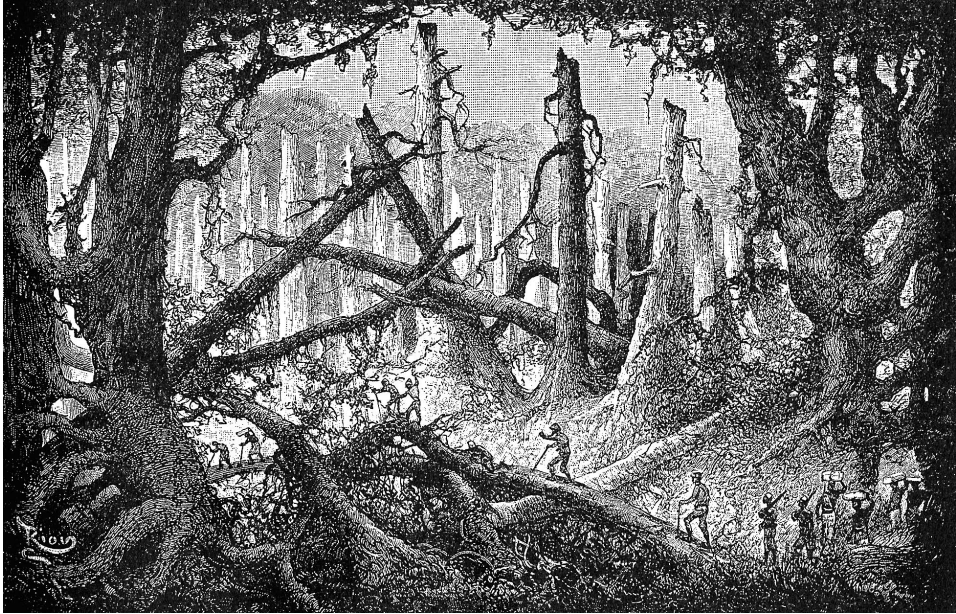
immediately apparent. The forest becomes a mental landscape that is threatening or bothersome because it is unknown. It becomes a negation of the settled areas that you have just left behind. For anyone who knows the terrain, the situation is different. He or she can take the line of least resistance, take shortcuts without getting lost, can avoid natural obstacles, etc. All this is self-evident because travel, as well as work, presupposes economising your energy, which in its turn necessitates a good cognitive control. Thus, the cliché of the westerner cutting his way through a tropical rainforest at the head of a caravan of carriers, is a picture of his estrangement, ignorance and dependence, in short, his lack of cognitive control.

### **When was then?**

We must also be aware that landscape is also time, not just space. Space is continually submitted to change; this is what we call the temporality of the landscape (cf. Ingold 1993). For us as archaeologists, this change is much more important than time itself. Change is unthinkable without time, but time without change would be totally devoid of interest.

Richard Bradley has developed the discussion on ‘the importance of place’ by applying a hermeneutic perspective to geographically coinciding, but contextually and chronologically separate, phenomena in the landscape. The past has, *sensu* Bradley, in each time period been reinterpreted to fit the needs of that time, and between the monuments and the interpreters long intervals of time without any activity may have passed. ‘Once such a hiatus had been allowed to happen, a different kind of





**Figure 2.** Henry Morton Stanley and his caravan entering a clearing of the Baïle pygmies in the Congo basin (From Stanley 1890).

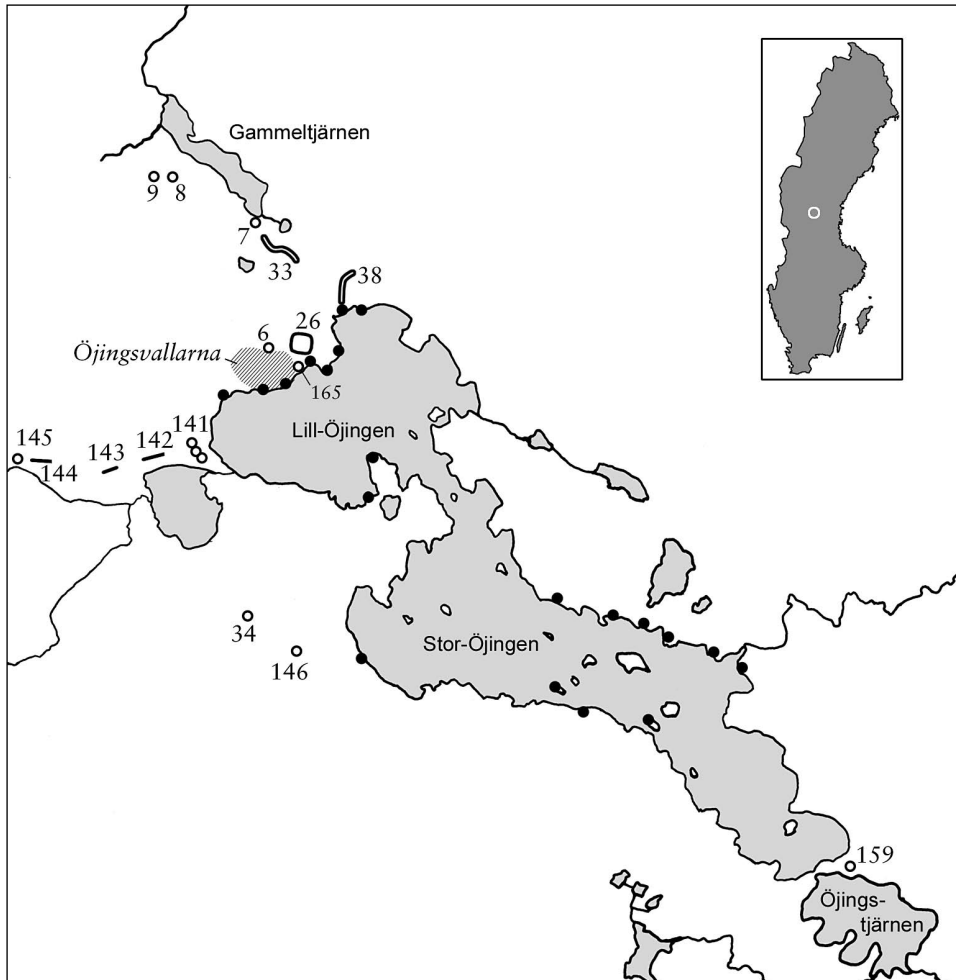
history emerged’ as Bradley stated (1993:116). The older monuments lend the place an authority of the past.

Among our cognitive functions are perception, memory, concept formation, reasoning and problem solving. All these functions may be put into action when we encounter landscapes or monuments of the past, but as Bradley also stated, ‘people take what they need from the past, and every reading is selective’ (*ibid.*:97).

Our chronological time concept is a very late invention. It helps us in catching the bus in the mornings, and it also helps us as researchers to sort out datings. It does not, however, help us to understand past thinking. Then we have to make use of what Stig Welinder once termed ‘human time’ (Welinder 1992). As is well understood in the discussion of this topic, time can be experienced and also described in many different ways (e.g. Bradley 2002:5–6 and *passim*). However, there are a couple of concepts that most conceptions of time seem to be based on. These are the solar and lunar cycles and the generations. Most people have not met their great-grandparents. Thus, in many parts of the world, the concept of ‘long ago before living memory’ is expressed as ‘before three generations’, which can mean anything from before grandfather’s time down to the deepest prehistory. If – and this is important – they can relate to what is there in some way; Mesolithic quartz or flint flakes do not make sense to most people outside the archaeology sector, but potsherds do.

### The case study

Ängersjö is a small forest parish in north-western Hälsingland, immediately adjacent to the geographical centre point of Sweden. Even though it is located at the centre, it is very marginal and in many respects a borderland. Up to 1645, it was on the national border between Sweden and Norway. Today, it is part of the historical province of Hälsingland, part of Jämtland county, part of Härjedalen municipality, and at the outer fringe of all of them. The identity of the inhabitants has shifted during the twentieth century from belonging to Hälsingland to belonging to Härjedalen.



**Figure 3.** Lake Öjingen and its archaeological landscape. The black dots along the lake shore represent Mesolithic sites. Other sites are referred to in the text. Map by Staffan Hyll.

The forest covers most of the area in an undulating till landscape dotted with numerous bogs and lakes. The entire area is above the line of the highest postglacial sea level and only about 0.4 % of the parish area is arable. Two hamlets and a number

of single farms comprise the entire population of around 120 people. During the period 1860–1970 it was totally dominated by forestry. Prior to that, the economy was based on husbandry with complementary cultivation and use of *utmark* resources. There is no longer any cultivation or husbandry in the area. Today, it may be classified as post-industrial and partially depopulated. But there is a lingering population who refuse to give up, and who find ways of supporting themselves. Hunting is still very important, wage labour in the public sector of adjacent towns is another source of income, and lately, they have found ways of keeping up the old spirit of flexibility by investing, on a small to medium scale, in the heritage experience industry.

These people knew their forest. The excessive elk hunting made most areas familiar to the men, but of course the forest grazing of the cattle, the hay mowing on the mires, berry picking and other activities necessitated a good cognitive control for the women as well. They simply had to know their terrain to survive, and I am sure they paid very little respect to the ideas of Aron Gurevich and Georges Duby and others about the dangers of the *utmark* (cf. Svensson 2003).

When talking about *utmark*-use we presuppose an *inmark* as well, and are thus referring to the last millennium or so. However, the use of the forest for activities that later were conceptually confined to the *utmark* has a very much longer history than that. In Ängersjö, we can perhaps discern traces of extensive forest grazing as early as at the beginning of the South Scandinavian Bronze Age (*ca.* 1800–1700 BC), and the oldest datings of pitfalls for elk and reindeer are from about the same period. We might label this as the neolithisation of the taiga. If there was a neolithisation, it must have been preceded by a Mesolithic, and in the area we find numerous camp sites around the lake shores that date back at least 8000 years and perhaps even longer.

One such lake is Öjingen, situated about 10 kilometres south-east of the village of Ängersjö. It is considered a rich fishing lake even today, and that might be the reason for the 20 camp sites with implements, cores and flakes of quartz and jasper that have so far been found around its shores. There are no datings from the sites, but one jasper core has been typologically dated to around 6000 BC.

In the vicinity, we find two pitfall systems (figure 3, nos. 33 & 38), that have two radiocarbon datings from the oldest and the youngest parts of the (South Scandinavian) Bronze Age respectively. In a nearby shieling cabin a set of iron points used for the spears placed in the bottom of pitfalls have been found. They had a birch-bark sheath engraved with the year 1840. Pitfalls were prohibited in Sweden in 1864. Thus, there is a possibility that the pitfalls were restored and reused over and over again during a very long time span.

The present-day shieling, Öjingsvallen, seems to be the successor of an older shieling, named Gammelvallen (figure 3, no 26) by the inhabitants. Gammelvallen is radiocarbon-dated to the high Middle Ages, but palynological analysis has shown that grazing and even cereal cultivation took place here from at least the seventh–eighth centuries. This dating coincides with datings from Ängersjö village and another Gammelvallen site in the parish with identical remains, indicating the establishment

of a whole land use system in the mid 1<sup>st</sup> millennium AD. The palynological record shows a presence at the site for at least for the last 800 years, even if the medieval curves do fluctuate a lot (Emanuelsson *et al.* 2001). For the parish as a whole, no late medieval agrarian crisis can be discerned. Rather the contrary; there are indications of expansion, consolidation and regulation of settlement and infields during the fourteenth–fifteenth centuries (Mogren 1997).

The forests around Ängersjö have a number of bloomery iron smelting furnaces, all dating from the period *ca.* AD 1350–1600 (Magnusson 1986), and in the Öjingen area there is one as well (figure 3, no. 8). Another one is just outside the map to the west. In the smaller lake Gammeltjärnen, a dugout log boat from the sixteenth century has been found (figure 3, no 7).

There is probably an ethnic dimension to this landscape as well. Carvings with hunting motifs, showing hunters with skis, rifle and dog hunting for reindeer and capercaillie or black grouse, dating from the eighteenth century, are found in one of the shieling cabins (figure 3, no. 6). They have been interpreted as being depictions of Sámi hunters. Other remains in the landscape include tar and charcoal production remains (e.g. figure 3, no. 165), as well as corduroy bridges over the bogs (figure 3, no. 142–144). There are no settlement remains in the area except the Mesolithic campsites. Öjingen is entirely a production landscape.

### Take what you need from the past

So what are the implications of this survey? Well, they take us back to Richard Bradley, to the generation-based time-concept, and to cognition.

Öjingen is a rather dense and complex cultural landscape, despite being part of the marginal taiga. In fact, it is not unusual to find such ‘hot spots’ in the forest, separated by large areas that seem to have been unattractive to humans all through the history. Here, there are numerous remains of many different types around the lake, scattered over a time span of 8000 years. However, there is no long-term continuity to be found. There is more than one hiatus in the archaeological record of the place. So, how to explain a hot spot without continuity?

We might suggest that the rich fishing potential in the lake was the factor which attracted the other activities during 8000 years, and with this explanation, we can close the discussion. However, is it really that simple?

In a setting with recurrent discontinuities, we need to work with the concept of *rediscovery*. How does rediscovery happen? Well, the discoverers gain cognitive control of the area and find that someone has been there before them. Someone has trapped elk, someone has smelted bog ore, someone has stalled cattle, and someone has built a corduroy bridge. When? If the discoverers can relate to the remains, they must conclude that it happened sometime before living memory, ‘before three generations’. The remains are thus understandable. Space becomes important for the interpretation of time. The landscape becomes temporal.

Consequently there follows an understanding that things can be accomplished here, because earlier generations have done so. Hence, they start doing what they want to do. They have taken what they need from the past, in a selective reading of the landscape. Time has become important for the interpretation of space. Time and space have exchanged greetings.

Production remains are not manifest in the sense that they send an intentional message to posterity. Still, they send a message, and the message is interpreted according to posterity's needs. The message is that 'this has been known territory and is thus possible to gain cognitive control over'.

I therefore suggest that the structuring principles of Richard Bradley's thesis about the authority of the past can also be employed for production remains, and, of course, also for settlement remains. This brings us to another theoretical crossroads. We must choose between trying and giving up. To be able to test these hypotheses we must believe in the unity of mankind, the possibility of understanding their thoughts, and of learning what really happened in history. If we choose the other road, the road that leads to the past as a foreign country which we cannot hope to understand, we had better find another profession.

## Summary

In this paper, a discussion is initiated regarding the possibilities of understanding traditionally labelled 'processualist' themes, such as settlement, or in this case, production, in a cognitive perspective. The prerequisites for this discussion are the concepts of cognitive control of landscape, a pre-modern cognition of time, the temporality of the landscape, and the 'authority of the past' *sensu* Richard Bradley. The empirical data used in the discussion are taken from an area around a lake in Ängersjö parish in the Swedish southern taiga region, a sparsely populated area with a very limited access to arable land. It is presumed that, given the prerequisites mentioned, time is important for the interpretation of space and vice versa. Thus, production remains in forests can also be about memory.

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