Ts. Tsonev and E. Montagnari Kokelj (eds.) The Humanized Mineral World: Towards social and symbolic evaluation of prehistoric technologies in South Eastern Europe
Proceedings of the ESF workshop, Sofia - 3-6 September 2003.
ERAUL 103, 2003, p. 109-113.

SOCIAL AND SYMBOLIC MEANING AND VALUE IN STONE TOOLS

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All lithic artifacts like other material culture were inevitably embedded in the social and symbolic world (Edmonds 1996). This aspect of lithic studies ranges from the symbolism of the raw material and its manufacture, through object symbolism, gender associations to value. A symbolic role as grave goods, ritual deposition and in trade and exchange can also be included. Only a few categories of lithic tools, however, - axes, daggers, arrowheads and macro blades - were used as prestige items.

Prehistorians use models based ethnographic analogy and theory to recreate past symbolic meaning but rarely can the archaeological data by itself provide us with a story. In this article I will address this interface between theory and archaeological evidence and look at ways in which we can more directly recognise symbolic meaning and value in lithics.

The two main bodies of evidence that we have for the social/symbolic interpretation are the objects themselves - their raw material, craftsmanship and appearance - , and the archaeological context from which they come.

1 - Value

There is an extensive literature on the concepts of value in the prehistoric past much of it associated with the debates about exchange and social ranking which we cannot cover here (Renfrew 1986). Suffice it to say that it is generally agreed the value of objects and materials in the past was ascribed and not intrinsic.

While this must be largely true it perhaps not surprisingly that some attractive rock types, which also have the utilitarian properties required by stone tools, have been valued in different cultures widely separated in time and space, appealing to a basic common human aesthetic sense. For example, two of the most highly prized materials in Neolithic Europe, jade, used for axe-heads and rings, and obsidian for fine blades, were similarly used and valued in several quite distinct societies and different parts of the world. Both combines the attributes of aesthetic attraction and high technical performance. Of course their *'universal'* appeal was restricted to periods during which stone tools were used; only jade retained a 'value' in Asia for other uses than axe-heads whereas its exploitation was totally abandoned in Europe, in the course of the Neolithic, for reasons not fully understood but perhaps partly in response to the introduction of metal. Indeed the European sources of jade were so totally unknown that archaeologists of the 19th century thought that the prehistoric jade axe-heads came from China.

We can principally judge the past value of lithic materials in prehistoric Europe by the distances over which they were traded and the quality of their craftsmanship. Jade axes had the longest exchange network reaching a distance northwards of almost 2000 km from their northern Italian source.

A feature of the distribution of obsidian in Europe is not so much the distances covered but the ubiquity and standardisation of the production from all known usable geological sources and its ability to traverse traditional 'cultural' boundaries. These are features that suggest a common acceptance of this material across southern Europe that was not just coincidental.

2 - Symbolic meaning

In most historical and ethnographic societies raw materials had a symbolic meaning backed by myth. Thus rock used for axe-heads may be viewed as the bones of ancestors (Whittle 1995) or the axe-heads themselves interpreted in terms of kinship, personal identity and an ancestral past (Pétrequin *et al.* 1998). In north America flint in some areas was related to concepts of north, ice and cold and the underworld and even consider to be a deity (Brown 1995 quoting

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Hall). We also find that the more prestigious the material the more elaborate the symbolism. In New Zealand, Maori jade (*nephrite*) axe-heads, which are remarkably similar in form and finish to European ones, were used in gift exchange and were often of exceptional value, a value which was enhanced by myths and fame acquired through use. Not only were they imbued with benign prestige but the were also used for formal executions and gained power when rubbed on the bodies of the dead (Clark 1965).

A similar mythical and symbolic background has been suggested for stone materials in prehistoric Europe (Whittle 1995) but how can we go beyond distribution patterns and outward appearance described above to discern some of these symbolic meanings in our archaeological record? The colour of Grand-Pressigny flint and the banding of Polish Krzemionki flint along with many other varieties would certainly suggest been the starting point for such stories, but where do we find direct evidence?

If we take the case of Krzemionki flint axe-heads we can see how there is a cycle of growth and decline, from the TRB to Corded Ware, in their production and distribution. The greatest distance of their distribution during the period of the Globular Amphora Culture coincides with what appears to be the period of their finest quality and their greatest symbolic 'value' (Whittle 1995).

At the Middle Neolithic site of Hurst Fen in eastern England a clear colour preference was recognised in that a red coloured flint was deliberately preferred for the manufacture of arrowheads and leaf points when compared with the rest of the flint assemblage (Clark & Higgs 1960). This is a local flint like the rest of the assemblage and we can perhaps make a simplistic interpretation in that it was though to represent the colour of blood, even though more complex mythological tradition may undoubtedly must lie behind this choice.

In Britain a spotted dolerite from south Wales was used for axe-heads (CBA axe group XIII) (Piggott 1954: 300-301). This rock is the same *bluestone* that was employed in the construction of one of the phases of Stonehenge, blocks of which were transported over a distance of some 200 km to the site of Stonehenge. Does this imply a powerful symbolism in the quality of the rock or are the two uses coincidental? If not was the *bluestone* initially significant because it was a rock used for axe-heads or was it because it was identified with megalithic construction?

The axe is indeed one of the most important symbolic object during the Neolithic, partly, perhpas, because it was portable and thus useful as a *primitive valuable* in gift exchange. It had male associations in burials and may also have been symbolic of woodland clearance in preparation for agriculture and thus a mastery over nature (Whittle 1995) or indeed fertility and regeneration (Ebbesen 1993), while contextual and formal evidence points to a link between it and the cult of burial and the ancestors.

One way of identifying symbolic or valuable axe-heads is by their size. That they are usually larger than others as we can see from both the archaeological and ethnographic record. In New Guinea it was the larger axe-heads that were valued for prestige value and display and size was the only feature to distinguish them from working axes (Strathern 1969, Hughes 1977) and there is indeed a continuum of size from the smaller working axes to the larger symbolic ones (Olaussen 1983). That size mattered is also clear also from European archaeological contexts where a similar continuum of size appears to have existed. While some axe-heads appear to be too large to have been used, being up to 0.40 m. long and up to 4 kg in weight in Sweden (Olaussen 1983), we find also that axe-heads from Scandinavian hoards were larger than those single finds (Tilley 1996 quoting Karsten) suggesting that prestige examples were selected from the normal production run of axe-head production as is found in ethnographic examples.

Then there is thesymbolism linking axe-heads with burial and ancestors cults.

We have already pointed to evidence of a link between axe-head material and megalithic structure at Stonehenge In Brittany not only are axe-heads found in long mounds and carved on megaliths, but there is an argument that menhirs themselves assume axe-like form - linked to male and phallic symbolism (Patton 1993). Long, triangular and trapezoidal burial mounds in Scandinavia have similarly been compared with the axe-head form and according to one author axe-heads might even sometimes have symbolised a person, with burial of an axe-head equated with the burial of an individual (Tilley 1996: 320). Since the size of axe-heads is significant in symbolic terms perhaps menhirs are a logical projection of this principle.

If such theorising may seem speculative we can note that the axe/monument link is matched, completely independently, in the interpretation of the dagger symbolism in Italy and Switzerland.. The dagger appears to replace axe as a male symbol in Europe between the third and the second millennia BC. In Italy we find that Lunigiana menhirs (in this case a statue menhir) clearly represented as a dagger (Bagolini 1981) besides having both male and phallic associations. Even further, as with the menhir/cairn to axe-head symbolism, it has been suggested that the triangular shape of stone platforms surrounding stone cists at Aosta and Sion, represent, in monumental form, the shape of a dagger (Bocksberger 1976).

Another approach to assessing past value is to

assess the quality of craftsmanship of an object although this is a somewhat subjective process as it may have involved such different motivation as commercial value, prestige value, or competitive skills between craftsmen.

Jade axes with their remarkably high mirror-like finish rendering them aesthetically beautiful are among finest artifacts produced in Neolithic Europe while obsidian and macro flint blades and bifacial daggers are examples of the high point of the flint workers craft in Europe.

Comparative studies however provide further evidence. A metrical study of arrowheads from different parts of Europe usually shows us that examples from burials are of a higher quality than those recovered from settlements and examples of this phenomenon can be cited from Italy, central and northern Europe and Britain. This may be because settlement finds mainly represent artifacts at the end of their life cycle - very much reduced in size or damaged. On the other hand, however, better quality arrowheads may have been specifically selected, or manufactured, for burial.

Some exceptionally fine arrowheads and daggers, such as the arrowhead 'sets' from the Early Bronze Age tombs in Brittany and Chalcolithic megalithic tombs in Andalucia in Spain, flint daggers from Remedello di Sotto, in northern Italy, are of such a quality that they do appear to have been deliberately made for burial (Mottes 2002). Probable further evidence for this practice was found in the Riparo Val Tenesi at Manerba, a collective burial site on Lake Garda, Italy where the intensive retouching of arrowheads seems may have been connected with the preparation of grave goods or offerings; arrowheads being the most frequent flint item of the site (Barfield 1984).

Even though high quality products are characteristic in most cemeteries, however, besides high quality arrowheads and daggers in fact a range of quality is also present. This is the case at Remedello di Sotto, Italy where besides the classic long 'Remedello' type arrowheads there are very inferior arrowheads in the graves. In Schleswig Holstein only 51% of the daggers are interred in a pristine condition - the rest have various degrees of reworking (Kuhn 1979: 41), while in the gallery graves of the Wartburg culture, in Northern Germany, the arrowheads range in quality from very fine to '*kaum ansprechbar*' (Raetzel-Fabian 2000: 102).

3 - Non functional as symbolic

One criterion for judging the symbolic character of an artifact is that it could not have served the function that it seems to represent. The fragility or unsuitability of some materials and products also points to a non-functional use. A biface of *phyllite* in Iberia (Forenbaher 1999: 88) and axe-heads of chalk in Britain have been cited as tools which because of the nature of their raw material must be symbolic tools. The fragility of Iberian barbed arrowheads such as examples from tombs in Andalucian Spain (Gonzales Rodrigues & Ramos Muñoz 1988) likewise could only imply a prestige or symbolic use as grave goods. In the same way an extremely thin non-functional bone dagger in a grave at Spilamberto clearly symbolises a flint or metal dagger (Bagolini 1981).

One categories of stone tool for which a symbolic function is often suggested are the stone battle-axes / axe-hammers and mace-heads which were often made of exotic rocks, although as with the unperforated axes could also be of inferior quality. A range of function, from practical to symbolic, comparable with the size range in unperforated axes, may match the variation in quality of material and craftsmanship. They appear, surprisingly, most commonly at a time when metal is replacing stone as the main axe materal so to what extend were they indeed functional? Broken and damaged axes appear in settlements and evidence has been produced which point to maceheads having inflicted wounds on skulls in Tuscany (Fornaciari 1979). On the other hand if we look at the impracticably long and thin decorated wooden haft of the battle-axe from Lake Zug (Hochuli 2000) we can see that we are dealing with a clearly symbolic weapon with a haft that can be compared with the representations of ceremonial halberds in the Mont Bego rock art (Barfield 1969).

4 - Contextual evidence for symbolism

Many artifacts whose appearance seems to reveal little of little symbolic significance in isolation, do reveal such values the context of burial ritual placements and hoards. While a prestige burial may be identifiable by the presence of high quality lithic artifacts, it is the burial context itself that provides evidence for other aspects of the *social persona* such as age and gender which may correlate with more mundane artifacts. By and large male attributes are remarkably consistent across Europe. In particular we find these are axes (in Neolithic) which are replaced by daggers (from the end of the fourth millennium) and arrowheads (implying a complete archery set).

While weapons are an understandable male correlate the regular occurrence of strike-a-lights (fabricators) is less understandable. They occur with male burials in Germany, Scandinavia, Italy and Britain in the 4th and 3rd millennia. We traditionally associate fire with the hearth and home and thus perhaps with women. However since settlement fires are usually kept burning and new fire can be borrowed when

extinguished, it may be that males, who were more likely to travel, needed more often to create fire - as clearly shown by the Tisenjoch Iceman.

We cannot here go into the problems of the meaning of grave goods - whether they were included with the dead deliberately to symbolise, wealth, gender and age groups or were they just personal possessions associated with the individuals when they were living - and buried because of sad associations or being on the body (Ucko 1969). Suffice it to say that more attention needs be paid to this aspect of interpretation, and the artifacts that are excluded from burial, such as sickles and scrapers etc., if we are to fully understand the relationship between artifacts and society.

We conclude that lithic artifacts can contribute to an understanding symbolism and value in the past, however interpretations remain subjective unless we have a convergence of several strands of ethnographic, theoretical, contextual and formal evidence.

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