Mobility, Meaning and the Transformations of Things

edited by

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The role of flint in mediating identities: The microscopic evidence

Annelou van Gijn and Karsten Wentink

The biographical approach in artefact studies

Material objects have always played an important role in the lives of human beings. Objects are used as tools to reach certain ends, as gifts to negotiate, establish or prolong social relations or as animated subjects that represented or even embody non-human entities such as spirits, gods or ancestors. In many cases, however, objects do not have a single fixed meaning or function, but rather are continually ascribed different meanings and functions. New Guinea stone axes, for example, started life as convenient tools, were exchanged between wedding partners to seal the relationship between the two parties, and after the death of the owner or user could be used to house the spirit of the deceased and were treated as an object of sacred power (Hampton 1999; White and Modjeska 1978). This latter stage, however, only obtained as long as the proper rituals were being performed and repeated, otherwise the ancestor would leave his stone housing to roam the earth, and the axe returned to its former state of being a tool.

The idea of objects having different meanings in different stages of their use lives is not new. Like human beings, objects go through different stages of life and are attributed different meanings, functions and statuses as they pass from one stage to another. Although anthropology and historical archaeology have provided us with numerous examples of this principle, the matter becomes more problematic when dealing with prehistoric artefacts for which no written records survive. One way of obtaining greater insight into the possible meanings, functions and statuses of objects is by studying them from a biographical perspective (Kopytoff 1986). By doing detailed empirical studies involving the selection of raw materials, techniques of production, traces of wear and residue, and the contexts in which objects were deposited, we are able to trace at least some of the choices made by our prehistoric agents. Each stage in the life trajectory of material objects can be studied by means of relatively recently developed analytical techniques in archaeology (Van Gijn 2010, chapter 2).

Although we are fully aware that we are generally not able to reconstruct all the details of the actual use life of things, we can often compile their overall biographies, revealing much of what has previously been invisible. One of the primary tools we have at our disposal is microscopic use wear and residue analysis. As objects are used for various tasks or are involved in certain activities, these will result in wear and tear such as edge rounding, striations, and polish and edge removals (Van Gijn
1990). Although frequently not visible to the naked eye, these traces of wear are made apparent by using various microscopic techniques. Key to understanding the different traces that are observed on archaeological materials are the thousands of experiments that have been performed at the Leiden Laboratory for Artefact Studies in the last 30 or so years. By comparing experimentally used tools with archaeological finds, we are able to interpret the activities these prehistoric tools were used for. Apart from traces of wear, we also study archaeological residues: bits and pieces of materials that have remained stuck to the surfaces of the objects we study.

**Flint: A telling material**

One of the materials for which the biographical approach has proved most profitable is the study of flint objects (Van Gijn 2010). Flint is often referred to as the metal of the Stone Age because it is an extremely versatile raw material that could be used to make many domestic tools, such as knives, scrapers and borers. Usually many of these tools are not regarded as particularly special. However, flint has several inherent properties that cause it to be less insignificant than we tend to think. First of all, it can appeal to our senses: it usually has a distinctive colour, and sometimes a mottled appearance of contrasting hues. Colour is a feature that many archaeologists tend to overlook, shaped as we are by black and white photographs and line drawings (Hurcombe 2008; Jones and MacGregor 2002). Flint has a texture that can be felt and experienced. The translucency of flint is also likely to have added to its attractiveness. Flint may even have appealed to our auditory senses: it produces a nice ringing sound when knapped, and everybody who ever attended a ‘knap-in’ (Whittaker 2004, 1) knows the characteristic sound of flakes dropping on top of each other. It can well be imagined that such knapping sessions were undertaken not only for the production of usable end products or to learn how to knap, but for the very experience of knapping in a ritual or ceremonial context (Van Gijn 2010, 183). Another physical property of flint is its capacity to make fire when flakes of flint are struck against pyrite or iron: flint is thus linked to an element that is highly significant in both domestic and ritual contexts (Larsson 2002).

Flint also signals its origin. Because of its characteristic colours and textures, it is often clear to any knowledgeable observer where the material comes from. As a consequence, flint artefacts can constitute, as Bradley and Edmonds (1993) call it, *pieces of places*. Although some archaeologists see the use of cortical flakes as a sign of raw material shortages, fragments of cortex (the outer layer of flint nodules) may well have been left intentionally on flint objects. The reason for this is that the presence of cortex may also contribute information about the origin of the piece of flint. For example, Rijkhoffl flint with a chalky cortex simply *had* to originate from the flint mines in the southeast Netherlands and could not have been obtained from the gravel beds or terraces along the rivers, as then the cortex would be rolled and hard. Exotic flint can thus make reference to places far removed from the daily sphere of interaction. This may also include contacts with far-away exchange partners or even allusions to the world of mythical ancestors or spirits, a realm that is just as unreachable (and thus threatening) as places that are spatially remote (Helms 1988). The same pertains to flint objects in which
much knowledge and expertise is invested: the know-how of a skilled craftsperson is often perceived as being bestowed with special – ancestral – knowledge (Helms 1993, Wentink 2008). Flint objects in which a lot of skills are invested and which are made of foreign raw material are thus likely to have a special meaning extending beyond the daily domestic sphere of local communities (Apel and Knutsson 2006). Such objects are often easily recognizable by a wider public and can be considered inalienable goods, materializing collective values.

Two more aspects contribute to the suitability of flint as a symbolic marker: its portability and its longevity (Boivin and Owoc 2004; Cooney 2008). Large flint nodules destined to be reduced to a series of domestic tools are heavy to transport, but individual flakes are not. They can thus easily be moved across vast distances. Stone has a permanency few raw materials can equal as it is less likely to deteriorate than most other materials such as plant fibres and bone. It can thus be inscribed with symbolic information, linking the past and the present and the present to the future. To conclude, as inalienable things, flint objects can have a life of their own and can play a role in negotiating social relationships and processes of change. Flint is more than a simple raw material from which to make weapons and utensils.

Objectives

In this chapter we want to show how microscopic analysis of flint objects can reveal information about their life histories that is not otherwise obtainable, yet provides key information about their past significance. Microscopic examination of flint surfaces has revealed evidence of a special biography of certain flint items, evidence that was hitherto unavailable. Clearly, every archaeologist would be ready to acknowledge the special significance of the oversized axes from the Middle Neolithic Funnel-beaker culture: they are big, display extensive craftsmanship and are commonly found in groups in the peat (hoards). And indeed, microscopic examination has revealed positive evidence of the special treatment of these axes, as will be discussed below. However, it is not only the usual suspects like the oversized axes and the Grand Pressigny daggers of the Late Neolithic that have produced such evidence. Use wear and residue analysis of settlement flint has shown that some simple flint items have had a special biographical trajectory as well. We will illustrate this with a few examples in which the cultural biography of flint artefacts, as deduced from a technological and functional analysis, is closely linked to the representation and negotiation of identity.

The usual suspects: Axes and sickles

Over large parts of Northern Europe we find the Funnel-beaker culture, a distinct cultural group that originates from southern Scandinavia and is characterized amongst other things by the first adoption of agriculture in these areas, the burial of the dead in megalithic tombs and a highly characteristic type of pottery known as the funnel beaker (Midgley 1992). In the northern part of the present-day Netherlands remnants of the West-group of the Funnel-beaker culture can be found, dated to 3400–2900 BC (Bakker
As part of the Funnel-beaker cultural package we also find extremely large flint axes that have been intentionally deposited, perhaps in sacrificial acts, in the peat bogs of the northern Netherlands (Ter Wal 1996; Wentink 2006). What is so remarkable about these objects is that they are magnifications of normal flint axes, that is, exaggerations too large to be used as their extreme size makes them highly impractical and susceptible to breakage. Wear trace analysis indeed indicates that these objects had never been used, and in fact many of them were never even polished, so strictly speaking they were not even finished (Wentink 2006; Wentink and Van Gijn 2008). Instead we found wear traces distributed over the entire body of the axe that were most likely caused by the axes having been repeatedly wrapped and unwrapped. In addition they were found to display traces of red ochre, indicating that they had at least partially been painted red (Fig. 9.1).

What is even more surprising is that these objects, found in the northern Netherlands, were actually produced in southern Scandinavia, an inference based on the raw material used and the absence of the distinctive production waste within the distribution of the West-group of the Funnel-beaker culture. Their use lives must therefore have involved transport and exchange over a distance of at least 200 to 400 kilometres. As they are too large to be used in a utilitarian way, we suggest that they were specifically produced to fulfill a different purpose, one that involved their being painted red, exchanged over vast distances, unwrapped probably to be displayed and wrapped up again, and ultimately ending their lives by being deposited in peat bogs, away from habitations of both the dead and the living. Clearly, these exceptional objects were held in esteem by all the communities en route, everyone involved being aware of the rules surrounding them. This indicates that they united people across vast distances through a common identity: that of the Funnel-beaker complex (Wentink et al. 2011).

Another type of conspicuous flint item is yet another import from southern Scandinavia: crescent-shaped, bifacially flaked flint sickles dated to the Late Bronze Age or Early Iron Age (Fig. 9.2). The implements were traded to the northern part of the present-day Netherlands as finished products. On the basis of their crescent shape and extensive gloss, they were commonly classified as and referred to as sickles (implicitly related to harvesting cereals). In fact, in southern Scandinavia they do indeed show traces of having been used to harvest cereals (H. Juel Jensen, personal communication). However, it was found that the traces of wear evident on the Dutch finds did not suggest cutting cereals. They were far too blunt for this purpose, and the distribution of the gloss...
across the entire surface of the object did not match our experimental findings (Van Gijn 1992). It was found that the traces seen on the Dutch finds most closely matched those resulting from experiments done with turf-cutting. Especially in the Dutch wetlands, turf would not only have been an important source of fuel, but would also have provided building materials for dwellings and burial mounds, as wood and stone are largely lacking in the wetlands. Most of the Dutch sickles were found outside settlements, either as single finds or in groups as hoards. One such hoard, at Heiloo in West-Friesland, is especially noteworthy: here four flint sickles and a bronze one were placed upright in the soil, suggesting an intentional deposition (Brunsting 1962; Van Gijn 2010, fig. 8.5). Even though these sickles were made and used as cereal-cutting implements in southern Scandinavia, in the area of the northern Netherlands they were assigned a different function. They were re-interpreted and, to some extent, changed identity.

**Domestic flint in the Rhine/Meuse delta: Negotiating a new, Neolithic identity**

Extensive use wear studies of Neolithic flint assemblages from the area of the Lower Rhine Basin have shown that domestic items may also reflect the identities of their makers and users (Van Gijn 2010, Chapter 6). One telling example will be presented, related to the issue of how, why and when the hunter-gatherers of the Mesolithic period turned to farming. This is a process that started in the Near East around 9000 BC, but it is not until c. 5300 BC that the first farmers settled in the southeastern part of the present-day Netherlands. It took another 1,000 years before we find the first evidence of agricultural practices in the northern and western wetlands of the Netherlands (Louwe Kooijmans 2007; Raemaekers 1999). The presence of several flint items of southern origin such as a pre-core of Rijkholt flint and the LBK point at the late Mesolithic site of Hardinxveld-Polderweg (located near the present-day city of Rotterdam) suggests that both groups must have been aware of each others’ existence, at least (Van Gijn et al. 2001). How these objects got to the wetlands, by down-the-line exchange or through the
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actual mobility patterns of Mesolithic hunter-gatherers, is difficult to determine. In any case, use wear analysis has shown that these early imported tools do not bear traces of use. Through the early Neolithic, the increase of imported stone items of southern origin in the northern and western parts of the present-day Netherlands indicates that contacts between farmers and hunter-gatherers intensified (Van Gijn and Louwe Kooijmans 2005, fig. 15.5; Verhart 2000). It is not until 4200 cal BC that the neolithisation process in the Rhine/Meuse delta really takes shape. Under the influence of the southern farmers of the Michelsberg culture, the inhabitants of the wetlands gradually change their life-style, but fishing and gathering continue to be very important in their subsistence patterns, and their technology continues to display features typical of the old hunter-gatherer life-style (see various articles in Louwe Kooijmans and Jongste 2006). Imported flint items of southern origin are a regular occurrence. However, it will be shown that it is not merely the relative frequency of imported flint objects, but also the way the receiving society treated these foreign items, that sheds light on the question of shifting identities. This will be demonstrated by comparing the results of the use wear analysis of the flint from three Neolithic sites in the Rhine/Meuse delta of the western Netherlands: Brandwijk (situated to the east of the present-day city of Rotterdam) and Ypenburg and Schipluiden, both located in the vicinity of The Hague. Brandwijk has produced a series of strata, the earliest of which, Layer 30, dated to 4610–4450 cal BC (the Early Neolithic B). However, most finds derive from Layer 50, dated to 4220–3940 cal BC (Swifterbant culture, Middle Neolithic A) (Raemaekers 1999; Van Gijn and Verbruggen 1992). The later sites of Ypenburg and Schipluiden date to the second half of the Middle Neolithic A and are attributed to the Hazendonk group (3750–3400 cal BC) (Louwe Kooijmans and Jongste 2006).

Brandwijk

The site of Brandwijk is situated to the east of Rotterdam in an old riverine landscape (Raemaekers 1999; Van Gijn and Verbruggen 1992). This is a period for which we assume a subsistence pattern that has been called extended broad spectrum: hunting, fishing and gathering, and domesticated animals with only very limited access to cereals. The flint industry of Layer 50 is characterized by the use of water-rolled flint pebbles. It involved a flake technology, which also produced the incidental blade-like flake. Most likely the flint nodules were available relatively close by, but the source is unknown. Many of the flakes still display cortex, indicating that the nodules were of limited size. Use wear analysis of these implements shows that many flakes were used for domestic tasks like plant processing. The bone awls, which were also studied microscopically, were used on plants as well, most likely grasses or reeds. We can therefore conclude that the occupants of this location spent time making baskets and doing wickerwork. Local flint was also employed in the manufacture of bone implements from metapodia.

In addition to the implements made of local flint, a number of tools were produced on non-local Rijckholt flint. The chalky cortex indicates that this is most likely mined flint. It concerns typical macrolithic Michelsberg tools, such as large pointed blades, end-scrapers and triangular points (Van Gijn 2010, fig. 6.4; Fig. 9.3a).

As production waste of these imported flint types was absent, we conclude that the
tools must have been brought to the site as finished products. Use wear research has shown that these imported tools displayed traces of use that are normally only found on tools of the Early Neolithic farming communities in the southeastern loess zones (Van Gijn 2008a). This includes polish 10, a type of polish that displays traces also associated with hide- and plant-working. This type of polish was first reported for the Michelsberg site of Maastricht-Klinkers (Schreurs 1992), but has occasionally been found on Early Neolithic artefacts of the Bandkeramik culture as well (Verbaas and Van Gijn 2007). Other imported tools display heavily developed traces of hide working of a kind to suggest the very time-consuming softening and thinning stage of the hide-working process, something we normally do not see in coastal assemblages (Van Gijn 2010) (Fig. 9.3b).

It is noteworthy that the wetland inhabitants did not use these imported tools, even though they constituted perfectly usable implements of better quality than the locally produced implements. There are no signs of any re-sharpening of the imported items. Instead they were kept exactly in the state in which they were received, as finished items already used by farmers to the south or southeast.

The question is why the inhabitants of the wetlands of Brandwijk did not make use of these perfectly made flint items for their own purposes. We would argue that these tools of Michelsberg signature were imported not as used tools to use, but to keep (Van Gijn 2008a, 197). The imported items had therefore already acquired a history that was relevant to the inhabitants of Brandwijk: they link the recipients in the wetlands (broad-spectrum hunter-gatherers) with the users of these tools in the uplands (farmers).
Ypenburg and Schipluiden

Around 3750 BC the wetlands were settled by people of the Hazendonk group (Louwe Kooijmans 2005). We find a number of their sites in the micro-region of Delfland, situated close to the present-day city of The Hague. Here three sites have been extensively excavated: Ypenburg, Wateringen 4 and Schipluiden (Koot and Van der Have 2001; Louwe Kooijmans and Jongste 2006; Raemaekers et al. 1997). The sites have provided the earliest undisputed evidence of crop cultivation in the western coastal zones.

The flint assemblage of these sites shows a similar pattern to the material from the earlier site of Brandwijk: the majority of the flint artefacts were made on relatively small pebbles of local origin, and they were used for a variety of domestic tasks, including wood working and plant cutting. In addition to the local technology, tools of southern flint with a Michelsberg signature are present. The presence of waste flakes and an incidental core of imported flint indicate that the flint was locally knapped (Van Gijn et al. 2006). These imported tools are all heavily used and frequently display traces of rejuvenation. Remarkably enough, they were almost exclusively selected for carrying out special activities: for the production of amber and jet ornaments, reaping cereals and making fire. Ornament making can be considered special because beads and pendants constituted the predominant burial gift at the cemetery of Ypenburg (Koot and Van der Have 2001; Van Gijn 2008b). Cereal harvesting can be regarded as special because it concerns the first crop to be grown in this area. All the implements with traces of use for reaping cereals are large imported tools, which, after use, seem to have been intentionally destroyed: they were burned and their functional edges were damaged by intentional flaking (Fig. 9.4). Lastly, the edges of some sickles were rubbed with an unknown red substance, possibly a pigment. The intentional fracturing of objects usually has a ritual significance and

Figure 9.4. Large flake used to reap cereals, from the Middle Neolithic site of Ypenburg, burnt and broken after use (Photo by Q. Bourgeois, Leiden).
may be related to the wish to kill an object that is considered ambiguous or dangerous. Possibly farming was still considered dangerous to these first agriculturalists in the wetlands, as it involved the destruction of the natural surroundings that still provided many of the food sources and raw materials needed to survive, and which may also have been the residence of ancestral spirits. Returning these harvesting tools to nature by ritually killing them may be seen as a way of appeasing the ancestral spirits. The third special activity in which the imported flint was involved was fire making. A large number of strike-a-lights were discovered at Schipluiden, many of which were made of southern flint. The special significance of this type of tool is indicated by their presence in a remarkable grave found within the settlement area of Schipluiden. It contained the skeleton of a middle-aged man, buried on his side with his legs flexed tightly to his body. In his hands, which were positioned in front of his face, he was holding three strike-a-lights and a nodule of pyrite, evoking the image of someone blowing a spark (Louwe Kooijmans and Smits 2006; Van Gijn and Houkes 2006; Van Gijn et al. 2006).

The Hazendonk inhabitants of the wetlands thus selected the large imported tools of Michelsberg signature for specific tasks. It has been argued that these tasks were not just ordinary ones, employed in domestic tasks like wood or plant working, but tasks with a special importance like cereal harvesting, fire making and manufacturing amber and jet ornaments (Van Gijn 2008a; 2010). These tools were used intensively and show evidence of re-sharpening and curation. However, unlike the imported tools found at the earlier wetland site of Brandwijk, they did not show traces typical of the inland Michelsberg activities. Rather than being kept as valued items of exchange, these tools were incorporated into the technological system of the Hazendonk inhabitants of the wetlands (Van Gijn 2008a).

Import flint and changing identity

The period discussed in this part of our chapter, the Middle Neolithic A (4200–3400 BC), is the time during which the inhabitants of the wetlands gradually adopted a Neolithic lifestyle (Louwe Kooijmans 2005). During this entire period, large retouched blades and other typical Michelsberg macrolithic tools found their way to the wetlands, either through exchange or the actual mobility of people. There is, however, a crucial difference in the way these imported tools were treated during the early part of this period, represented by the site of Brandwijk, and the later period, exemplified by the Hazendonk sites of Schipluiden and Ypenburg. In the early period the Michelsberg tools were imported as used tools: they displayed the typical traces of wear normally found only on the implements of the farmers living to the southeast and south. Strangely enough, even though these imported tools were highly usable due to their size and high-quality flint, they were not subsequently used by their recipients. Instead they were left unaltered in the state in which they were received, as gifts from the distant others (see Mauss 1990 [1923/1924]), and were kept separate from the local technological system.

The later Hazendonk people continued to import macrolithic Michelsberg tools from the South, but these implements no longer constituted a gift or token that could not be
altered. Instead, they were incorporated into the technological system of the wetland people of the Hazendonk group and thus, in a way, appropriated. It is highly significant that they used these foreign tools for a very new activity like cereal harvesting and for other, arguably special activities. These imported tools evidently had a special status, yet very much formed part of the local technological system. This indicates a change in attitude towards the Michelsberg farmers in the southeast and may be seen as reflecting a change in identity, from an affiliation with the Neolithic farmers in the South to the gradual appropriation of a new identity. It is therefore in the way this rather inconspicuous material was treated by its recipients that we can see the shift in mentality. Flint tools, even settlement material, played a role in the negotiation, construction and expression of a new, Neolithic identity.

Conclusion
The case studies presented above all show the importance of a detailed, biographical study of artefacts when studying the implications of imported flint objects, especially regarding the representation and negotiation of identity. It was shown that there is substantial variation in the biography of flint objects and that a study focussing merely on the presence or absence of imported flint – or other materials for that matter – is not enough to shed light on the possible meaning(s) these objects had for past societies. Such a biographical study requires different analytical techniques. The conception of the flint tool is represented by the selection of raw materials, determined by sourcing and raw material identification. The birth of the tool is the manufacturing stage, studied by means of technological analysis and experimental replication. The life of the object can be assessed by means of use wear and residue studies. Last, the deaths of objects can be interpreted by examining the context of deposition and their associations with other objects.

Rather than just mapping and categorizing objects, the focus of this approach is on what people were actually doing. By carefully analysing the different details about how people dealt with the things that surround them, we can at least acquire a glimpse of how prehistoric people interacted with their material world: how different objects played various roles, not only as tools used for everyday activities, but also as items of exchange, as gifts from far away affines, as tokens of identity or personhood, or as sacred objects playing roles in various religious or ritual activities. In short, especially for prehistoric societies, this approach can help us shed light on what is otherwise obscured.

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References


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Dutch North Sea coast c. 3500 cal BC. Analecta Praehistorica Leidensia, 37/38, 129–166. Leiden, Faculty of Archaeology, Leiden University.


