

Chapter 11

The Use of Ochre in Stone Age Burials of the East Baltic

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ABSTRACT One of the most characteristic features of Stone Age burials in the East Baltic is the use of ochre in the graves. The ochre was not in its natural state: it was a specially prepared product. The long duration of use of Zvejnieki burial ground, northern Latvia, spanning several millennia, provides an opportunity to observe changes in burial practices, including the use of ochre. The symbolic significance of the use of ochre is stressed. Settlement sites in the East Baltic have also produced evidence of ancient rituals involving ochre.

Ochre, or coloured earth, was one of the first pigments that humans came to know. The name 'ochre' comes from a Greek term meaning 'pale yellowish'. In its natural state, ochre is actually yellowish or orange, even yellow-brown in colour. When it is burned, the ochre is dehydrated and obtains a reddish colour (Enzyklopädisches Handbuch 1969:948; The Concise Oxford dictionary of Archaeology 2002: 295). Traces of the presence of ochre at living sites are recorded very far back in the Palaeolithic (Barham 1998:703–710). Later, in the Middle Palaeolithic, at Blombos Cave in South Africa, bars of ochre occur, engraved with marks. Red ochre has also been found in connection with human burials in caves in Israel, dated to 100 000–90 000 BP. In one of these caves, pieces of ochre were found in the same layer as burials and red-stained stone tools, while in another cave red-coloured human bone was found (Hovers et al 2003:491–522). In Europe, ochre was widely used in cave art, occurring in this context in the Palaeolithic from the Atlantic seaboard in the west right up to the Ural Mountains in the east. Already in the Middle Palaeolithic, and up to the very end of the Stone Age and even later, ochre was also used at burial sites, constituting a component of the burial ritual. In the youngest period of the Stone Age – the Neolithic – it was also used to paint pottery.

Researchers emphasise the deeply symbolic and diverse meanings of the colour red, mainly expressed in the burial context. The colour red is reminiscent of natural substances sharing the same colour, such as blood. The presence of the colour red in burials is regarded as being connected with the concept of death and with the preservation of the energy of life, providing magical force for the route to the world beyond. In a wider sense, the use of ochre has been connected with the human spiritual world and the broadening of knowledge, and in the burial context it has been related to the beginnings of symbolic thinking (Bower 2003:277; Vianello:2004). However, researchers have also emphasised that ochre has not been

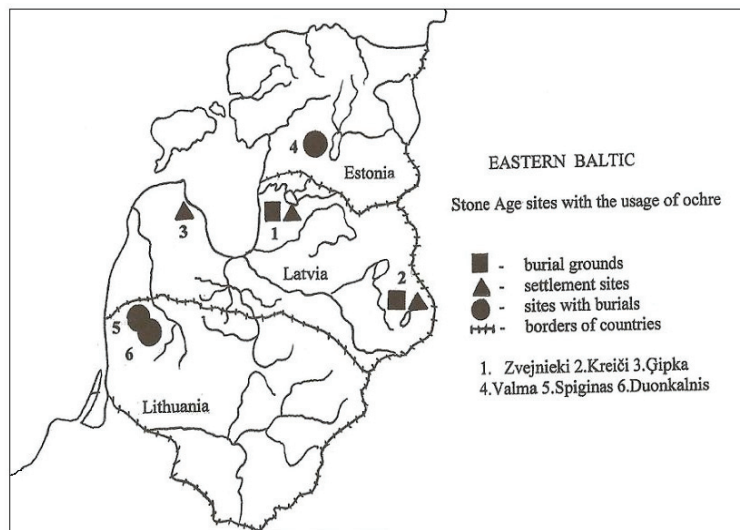
used in the same ways across space and time, and its presence or absence is not always comprehensible or interpretable (Hovers et al 2003).

Stone Age sites in the East Baltic also preserve traces of the use of ochre (Fig. 1). It occurs in both Mesolithic and Neolithic graves in Lithuania, Latvia and, in some measure, also in Estonia. These sites include Spiginas and Duonkalnis, on islands in Lake Biržulis, western Lithuania, the Zvejnieki burial ground in northern Latvia, the Neolithic cemetery of Kreiči at Lake Ludza in south-eastern Latvia, and in particular the burials at the Valma settlement site in central Estonia. Traces of the use of ochre have also been identified at Mesolithic and Neolithic residential sites, in special hearths or so-called 'ritual pits' at the Spiginas and Duonkalnis sites on the islands in Lake Biržulis, and at the coastal site of Ģipka in Latvia. This provides some opportunity for tracing the use of coloured earth at Stone Age sites in the East Baltic.

Ochre in Nature in Latvia

Ochre is a natural mineral pigment, containing iron oxides and hydroxides (Fe_2O_3). In nature, it may have a minor admixture of clay, sand, peat or freshwater lime. Ochre generally varies in colour from light yellowish brown to dark brown. It is deposited where iron-rich underground waters emerge at the surface: at riverbanks, wet meadows and peatlands (so-called bog or lake ore). The naturally occurring dense or loose limonites generally have small amounts of other minerals – calcites and silicates (Upīte 1987:118). Natural ochre deposits of various sizes occur throughout the territory of Latvia (Kuršs, Stinkule 1997:161–163). Natural deposits of ochre also occur along the shore of Lake Burtnieks in northern Latvia (Fig. 2). Ochre sources have never been systematically surveyed by geologists, but information about ochre deposits has been provided by people familiar with the region, and they have sometimes been

Fig. 1. The East Baltic region (Lithuania, Latvia and Estonia), showing sites where traces of ochre have been found: 1. Zvejnieki archaeological complex; 2. Kreiči settlement site and cemetery; 3. Ģipka settlement site; 4. Valma settlement site and graves; 5. Spiginas settlement site and cemetery; 6. Duonkalnis settlement site and cemetery.



found in the course of geological coring or identified in archaeological survey work. It is significant that such sources are to be found close to Stone Age settlement sites. Thus, for example, ochre has been found at several places near the outflow of the River Salaca from Lake Burtnieks, where there are at least three Neolithic settlement sites: Rīņņukalns, Kaulēnkalns and Līdaciņas (Fig. 2). The closest known natural sources to the Zvejnieki archaeological complex, on the north-western shore of Lake Burtnieks, were about 2 km away, at the mouth of the River Seda, east of the site, and at two locations on the opposite shore of the lake – downhill from the manors of Bauņi and Mīlīši (Fig. 2).

Zvejnieki Archaeological Complex

Lake Burtnieks is located in northern Latvia in a depression within an extensive drumlin field, formed by melting ice between 15000–14000 BP. The Zvejnieki archaeological complex developed on a long, gently-sloping former island in the lake. This island is an approximately 1600-m-long drumlinoid, stretching north-west to south-east (Eberhards et al 2003:30). Two Stone Age settlement sites and a corresponding burial ground were located in the south-eastern part of this island. Archaeological excavation of this monument was conducted by Francis Zagorskis (1929–1986) in the 1960s and 70s, in the process unearthing more than 300 graves (Zagorskis 1987, 2004). During the past decade, material from the cemetery has been radiocarbon-dated, and specialists from Latvia and other countries in northern Europe have investigated the natural situation of the burial ground, the course of its development and the material recovered from it, including the anthropological evidence (Larsson & Zagorska 2006). Importantly, the duration of use of the cemetery has been confirmed – it was in use for four millennia, from the 9th to the 5th millennium BP (Zagorska 2006:91–14). However, the cemetery material is so rich and diverse that it is still

providing new research possibilities and opening up new avenues of study with regard to burial practices, including the use of ochre in graves. Coloured earth, or ochre, was very widely used in the graves, and these practices changed over the course of time, resulting in diverse examples of Stone Age burial rites and beliefs.

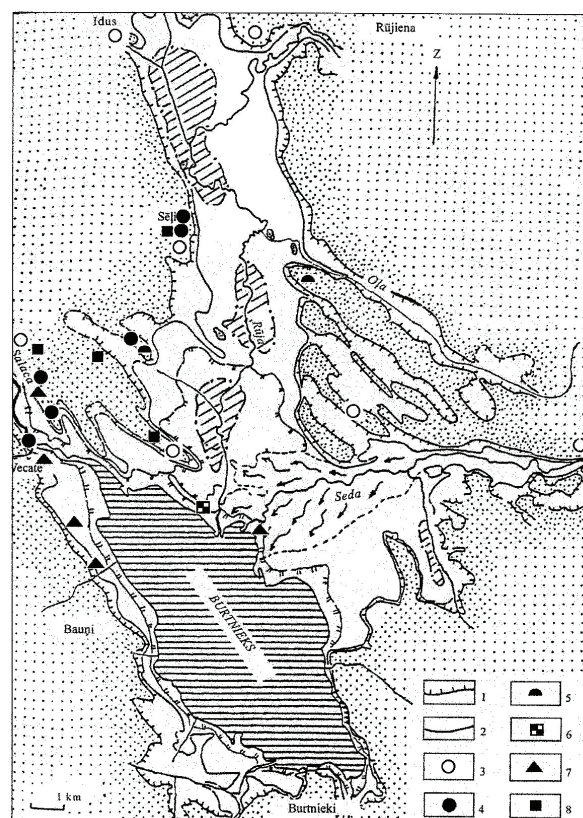


Fig. 2. The Lake Burtnieks Basin : 1. former shoreline; 2. present-day shoreline; 3. finds of flint nodules; 4. Stone Age settlement sites; 5. possible cemeteries; 6. Zvejnieki archaeological complex; 7. natural ochre deposits.

Ochre was used so intensively that in many cases the preserved parts of the skeleton were red or reddish, as were the flint, bone and even amber artefacts provided as grave goods. Many of these even had pieces of ochre stuck to them. Individual pieces of ochre were also found in the graves, possibly provided as grave goods.

It should be made clear from the outset that the ochre used at Zvejnieki burial ground was not in its natural state. Chemical analysis of ochre samples has shown that specially burned ochre, with a crystalline structure corresponding to haematite, was used in the graves (hema- blood from a Greek). The natural ochre had been burned at a temperature of 300°–500° C. In these samples, iron makes up only 20%–50%, with considerable quantities of other constituents, including quartz, clay minerals (illite and kaolinite) and dolomite (Upīte 1987:118–120). This analysis indicates that a special substance was being prepared for burials, which could be used to line the base of the grave, be strewn over the body and sometimes even used to fill the grave. This substance could also be moulded over the face or body, in some measure embalming the corpse. This is confirmed by observations at the cemetery where in some cases the ochre was in the form of a powder, sometimes with a considerable amount of other constituents, and in other cases had been mixed into a mass predominantly consisting of blue or red clay.

The Ochre Graves

Ochre was used in the preparation of the grave and strewn on the burial itself. Slightly over half of the burials – 164 – involved the use of ochre. Among the ochre graves, there were 130 graves entirely strewn with ochre, with greater or lesser intensity, as well as partially ochre-strewn graves, where the red pigment had only been applied to particular parts of the grave – either on or next to the burial (34 cases, Fig.3).

The former island of Zvejnieki, nowadays a ridge, consisted of light, sand-coloured brown gravel and coarser gravel, in which the contour of the grave was easily distinguishable, particularly in cases where ochre had been used intensively, in which case the grave fill was dark red, or sometimes even shades of violet.

The ochre graves were very diverse. Generally, the depth of the grave, as measured from the present-day ground surface, was 20–50 cm, and only in particular cases did they reach a depth of one metre or more (Burial 57). Generally, the base of the grave was covered in an intensively red 5–10 cm layer of ochre, and the body itself was covered in ochre. The grave fill consisted of light grey gravel, sometimes with a minor admixture of ochre. Graves where ochre was used in this way sometimes also had a layer of intensively black, even charcoal-rich earth. The black earth had been strewn in the base of the grave, with a layer of red ochre above it

(Burials 5, 170, 206–208 and 263–264). In other cases, the grave, with an ochre-strewn individual lying in it, was filled with black, charcoal-rich earth, which sometimes contained flint flakes, fragments of animal bone and small fragments of bone implements. In other words, it had been taken from the occupation layer of the Stone Age settlements (Burials 86, 110, 119 and 170). In some cases, distinctly ochre-rich oval areas resembling the remains of fires had been created next to the body (Burials 207, 211, etc.). In many cases, the grave structure had been augmented with individual stones or stone settings. The intensively ochre-strewn burials more frequently contained grave goods – bone and flint spearheads, harpoons, arrowheads, daggers, awls, strings of tooth pendants and amber ornaments (Zagorskis 1987:51–72).

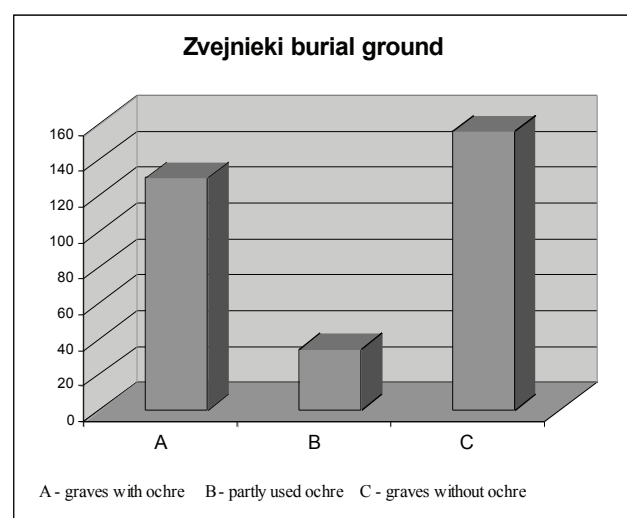


Fig. 3. Zvejnieki burial ground. Numbers of burials with the ochre (A), burials, partly strewn with the ochre (B) and burials without ochre (C).

In the partially ochre-strewn graves, the red-coloured earth was present in certain places near the skeleton, most commonly around the head. Sometimes the red ochre strewn around the head did not contain any other finds (Burials 39, 96 and 162), but in the majority of cases ochre was present if the head was adorned with strings of tooth pendants, which could even form very complicated headdresses, as in the case of Burials 146, 153, 160, 164 and 300 (Zagorska & Lõugas 2000:232–239). Apart from the head region, red ochre had also been strewn by the elbows, knees or feet (Burials 146, 164, 187 and 290). In some cases, the burial of a young child was discovered, in an ochre-strewn oval area up to 30–40 cm long, alongside an adult with no ochre (Burials 132 and 132a). In a double grave, containing an older woman and a younger man (Burials 254 and 255), the woman had been completely strewn with ochre, while the man was partly ochre-strewn (the head and the lower legs).

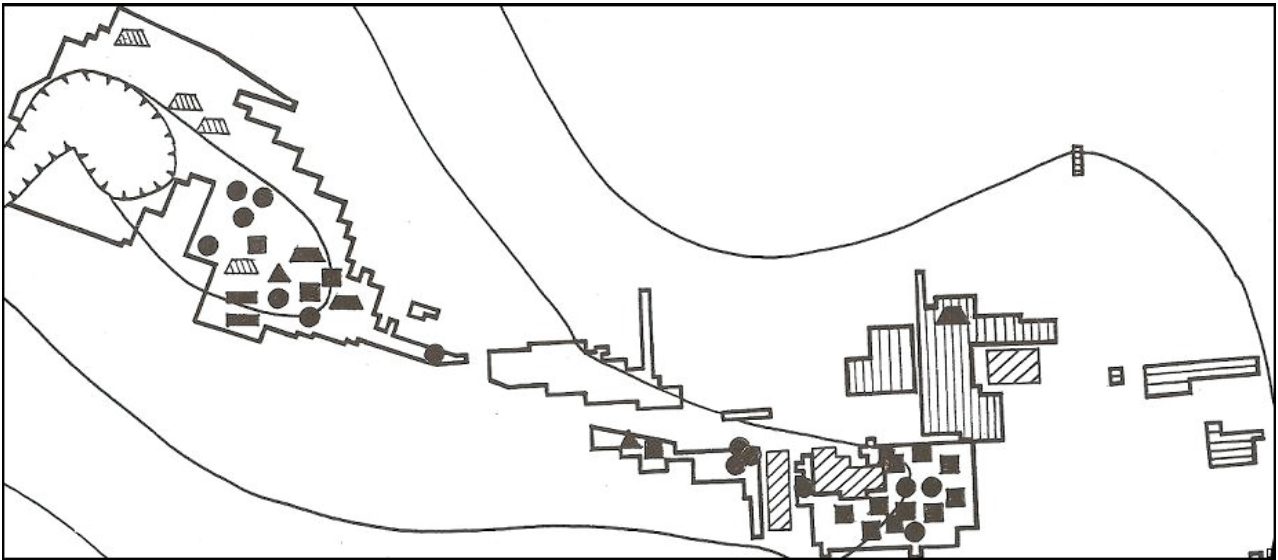


Fig. 4. The Zvejnieki burial ground. Graves dated by radiocarbon: Black trapezoids- Middle Mesolithic; hatched trapezoids - Late Mesolithic; black circles - Early Neolithic, black squares - Middle Neolithic, black triangles - Late Neolithic, black rectangles - Late Bronze-Early Iron Age.

Another characteristic of the Zvejnieki burial ground are collective burials, with between three (Burials 263, 264 and 264a) and six bodies (Burials 274, 275, 276, 277, 277a and 278) placed alongside each other. In some cases, they had even been laid at two levels, usually in opposed orientation. Such burials generally have copious amounts of ochre, although there were some cases of partially ochre-strewn burials. The collective graves are in all cases richly furnished.

Collective burials with so-called 'votive deposits' next to them are also very distinct: rounded areas, up to 30–50 cm in diameter, very intensively strewn with ochre, 8–10 cm thick, with scattered intentionally broken artefacts – bone hunting and fishing implements, flint spearheads and amber ornaments (Burials 206–209).

The most thoroughly ochre-strewn of all the burials at Zvejnieki burial ground are those of children, about 90% of which had an intensive layer of ochre, 3–10 cm thick. One third of the ochre-strewn child burials had grave goods: a bone female figurine (Burial 172), bone spearheads (Burials 27, 41, etc.), daggers and awls (Burials 260 and 272). However, the majority of the grave goods consisted of tooth pendant ornaments, with elk, wild boar, roe deer, aurochs and horse, as well as marten, badger, seal and dog teeth. In one of the child graves, the number of tooth pendants reached as many as 224. In another, where a child had been buried together with an adult male, the child's headdress, perhaps a cap, had been decorated with an elaborate tooth pendant ornament, with bear teeth marking the ends of the decoration (Zagorska et al 2000:237; Larsson 2006:260-262). Second in terms of the number of ochre-strewn burials in the burial ground were male burials, while the number of female burials with ochre was only half that of

the males. This is the picture of ochre use we obtain if we consider the cemetery as a whole, rather than dividing the burials chronologically. A more comprehensive view of burial customs, including the use of ochre, is obtained if we consider each period of the Stone Age separately, tracing stable, unchanging traditions, as well as particular changes in rites, over the course of time.

The Chronology of Zvejnieki Burial Ground and Changes in the Use of Ochre Over Time

From all of the above, we may conclude that the use of red ochre was one of the most important aspects of the Stone Age burial ritual. Based on archaeological typology, and partly also on the spatial distribution of the burials and the newly-obtained radiocarbon dates, it has been possible to assess the duration of use of the burial ground (Zagorska & Larsson 1994; Zagorska 1997; 2000; Eriksson et al 2003; Zagorska 2006). It turned out that the cemetery had been used during more than four millennia, from the Middle Mesolithic up to the end of the Late Neolithic, approximately spanning the 9th–5th millennium BP: cal 7310–7050 to 2890–2620 BC (Fig. 4 & 5).

All of the earliest burials, from the Middle Mesolithic, had been laid in heavily ochre - strewn layers of 3–10 cm thickness. The very earliest burial of the Zvejnieki archaeological complex, No. 305, was found not in the cemetery, but within the Mesolithic settlement. This male burial lay in the lowermost horizon of the cultural layer, in extended supine position, surrounded by a layer of powdered ochre. The grave goods consisted of a bone fish-spear and vertebrae of pike. The grave has been dated to 8240±70 BP (Ua-3634).

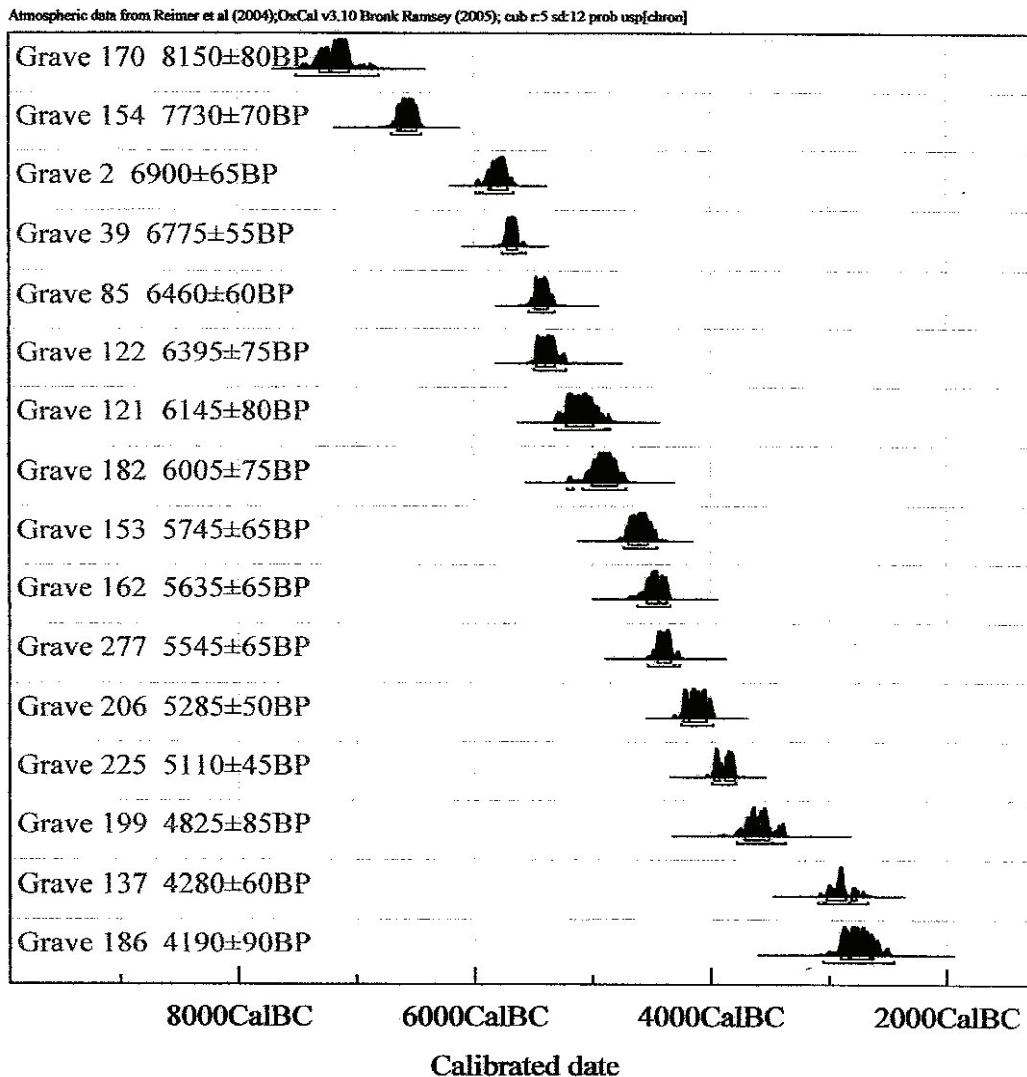


Fig. 5. Zvejnieki burial ground. The range of the radiocarbon dates from the Middle Mesolithic to the Late Neolithic

Likewise, the earliest known burial in the territory of the cemetery, No. 170, had been buried in an intense ochre layer, with a grave fill of black earth. The grave contained 167 tooth pendants, 41 of them forming an interesting headdress, consisting of teeth of elk, wild boar and aurochs (Fig. 6B). The grave has been dated to 8150±80 BP (OxA-5969). An elderly male (Burial 154) was unearthed in a 60 cm deep grave with a 2–3 cm thick ochre layer around skeleton, a grave fill of light grey gravel and stones placed at the both ends of the grave – on the head and the feet. The burial is dated to 7730±70 BP (Ua-3644). These three burials are the earliest so far discovered in Zvejnieki. It may be assumed that the cemetery was established in the second part of the Middle Mesolithic, and that ochre was already being very intensively used at that time. Richly ochre-strewn Mesolithic burials have been found in north-western Lithuania, where Mesolithic cemeteries were established on two islands, Spiginas and Duonkalnis (Fig. 1). At the

Duonkalnis cemetery, heavily ochre-strewn burials were found. In one double burial (male and female together, Nos. 2 and 3), the head of a 50–60 year old man had been decorated in a similar manner to that of a male at Zvejnieki – with 25 tooth pendants of elk and wild boar, and more elk teeth arranged above the face, covering the eyes and inserted in nostrils, ears and mouth (Fig. 6A). This male burial was in the centre of the grave. Buried to the left was a female, with a small pile of stones on the right, heavily strewn with ochre (Butrimas 1985:63–64). At the Spiginas cemetery, too, some ochre graves have been unearthed, the richest at this site being a female burial (No. 4), containing a considerable amount of ochre. The deceased had been decorated with animal tooth pendants (Butrimas 1992:4–10).

The male burial at Duonkalnis (No. 3) has been dated to 6995±65 BP (OxA-5924), while the Spiginas burials are older. The poorly preserved Burial 3 is dated to 7470±60

(GIN-5571), while Burial 4 has been dated to 7780±65 BP (OxA-5925) (Bronk Ramsey 2000:244). All of these individuals, male and female, were perhaps prominent members of the Stone Age community.

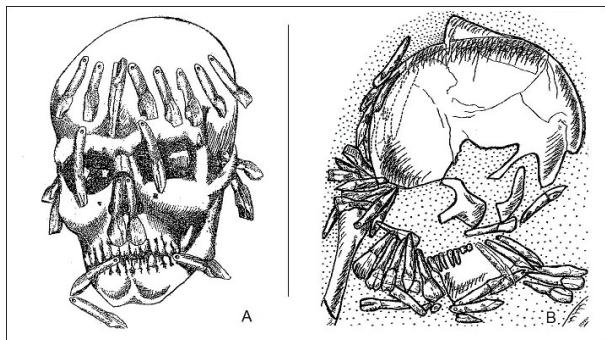


Fig. 6. Headgear consisting of tooth pendants, richly ochre strewn: A – Burial 3, Duonkalnis; B – Burial 170, Zvejnieki.

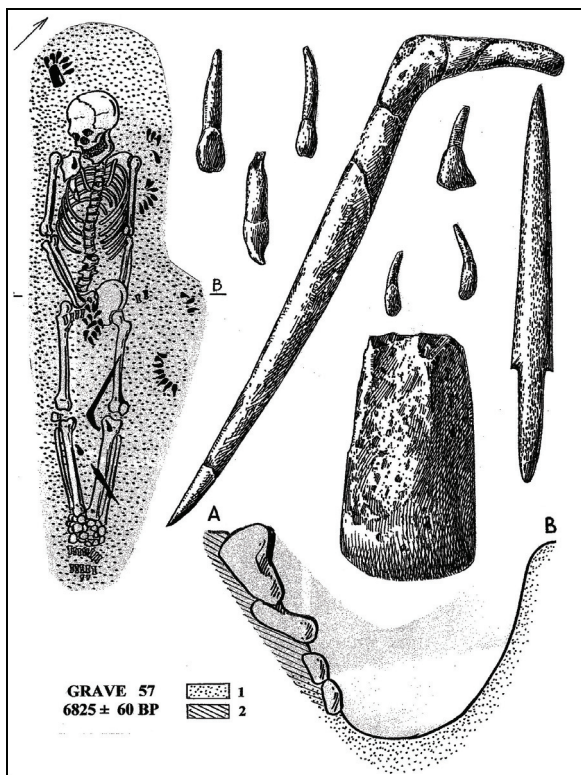


Fig. 7. Zvejnieki burial ground. Burial 57, cross-section of the grave and inventory. (1 – ochre, 2 – black earth).

The Late Mesolithic graves generally have a greyish grave fill, with stone settings and large amounts of red ochre, especially in the graves of children (No. 83). All of the burials dated to this period were richly ochre-strewn.

The dates obtained for 44 burials permit the pattern of use of red coloured earth to be sketched in for particular periods of the Stone Age. It should be noted that in this case only dated burials are used.

Burial 57, that of an elderly female (Fig. 7), was especially rich. The grave was deep – more than one metre, and the sides of the grave, beginning at the top, had been strewn with ochre. An intensive ochre layer surrounded the skeleton. The grave goods consisted of a stone axe, flint artefacts and animal tooth pendants (elk, red deer and aurochs). Some of the tooth pendants had been placed in groups at some distance from the skeleton, in a very intense patch of ochre. Perhaps they had been attached to grave goods made of organic materials which did not survive. This individual had been provided with a bone spearhead and an elk-head staff. The burial has been dated to 6825±60 BP (Ua-3636). It was the richest female grave in the whole cemetery, confirming the special role of this person in the Late Mesolithic community.

During the Early Neolithic, some changes occurred in the use of ochre in the burial rites. The tradition of sprinkling ochre over the whole burial continued, as can be seen from some of the female burials (No. 121) and some male burials (No. 165). Likewise, in some double graves, consisting of a male and child (No. 122/123) or a female and child (No. 85 and 85a) ochre had been richly strewn over the deceased. In some cases, ochre came to be used somewhat more sparingly, sometimes being strewn only on particular parts of the body. It occurred mainly on the head region, and sometimes at the elbows, pelvis or feet. In particular, we may mention one young male burial (No. 153) and four male burials, whose heads had been strewn with red ochre (Nos. 162, 173, 178 and 300). In all cases, the deceased had been placed in extended supine position. The grave fill consisted of light-coloured gravel, sometimes with an admixture of black earth, the red ochre observable in the region of the head, often very intensively strewn. In some graves, there was only an ochre layer around the head (Nos. 162, 173 and 178), while in other graves (Nos. 153 and 300) rich headgear consisting of animal tooth pendants was found. Such an ornament was most clearly represented on male Burial 153. (Fig. 8).

The body had been placed in the grey gravel layer, with ochre at the head and black earth in the pelvic region. The layer of red ochre around the head was almost 10 cm thick. The head ornament consisted of 91 animal tooth pendants, which had evidently been attached to the headgear. Stretching across the head from one ear to the other was a band of dog, marten and badger teeth, in the middle of which there were eight elk teeth and one fairly large dog tooth. Strings of tooth pendants, consisting of dog, marten and badger teeth, hung down both sides of the head. In addition to this splendid headdress, the man had other grave goods as well: an implement made of wild boar tusk and a small bone point.

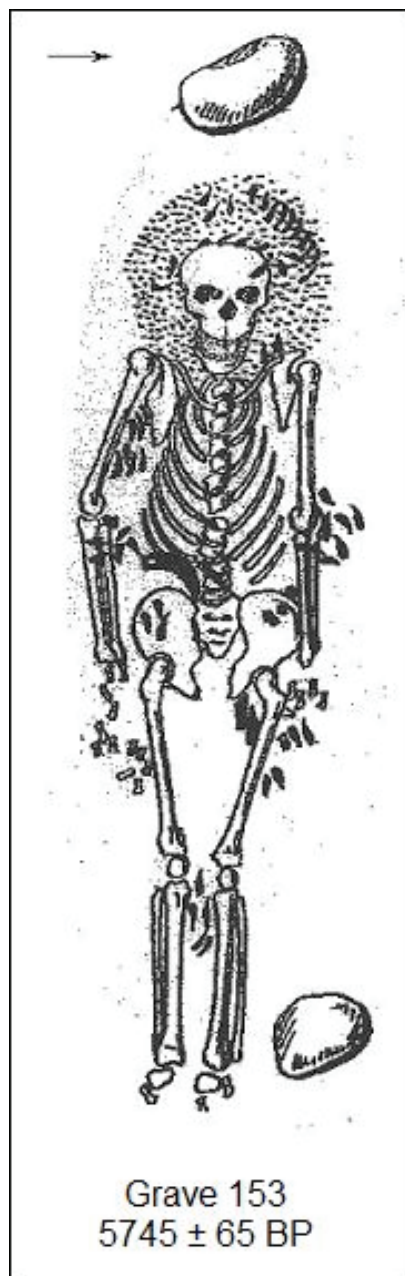


Fig. 8. Zvejnieki burial ground. Burial 153, partly ochre-strewn.

Apart from this, in the region of both elbows, there were bird bones, which may be interpreted either as stocks of food given to the deceased or as a special offering. The grave has been dated to 5745±65 BP (OxA-5968). Another male burial, No. 300, was filled with black earth, having ochre only in the region of the head. The head was surrounded by an ornament consisting of 59 pendants, showing a very careful and rhythmic arrangement of animal teeth (wolf, badger, dog and marten). At the mouth, between the jaws, were two symmetrically arranged wolf molars. This impressive scene was augmented with hunting implements. The

grave has been dated to 5690±45 BP (Ua-3642) (Zagorska 2006:98, Fig.4). Such headdresses, in heavily ochre-strewn patches, were found on several other male burials, setting them apart from the rest of the burials.

The dated burials of the Early Neolithic include some that have no evidence of the use of ochre (Nos. 197, 210 and 251). These were single graves with a grave fill of black earth taken from the settlement site. Thus, it is evident that different burial rites were being observed already in the Early Neolithic at the Zvejnieki burial ground, including a change in the use of ochre in the graves.

The middle Neolithic brought quite drastic changes to burial rites and the use of ochre in graves. A large proportion of the burials, mainly single burials, but also some collective burials, were devoid of ochre, the grave fill consisting of greyish gravel or black earth. Such graves generally contained no grave goods (Nos. 210 and 251), and only some produced a rich set of amber ornaments (No. 228) or potsherds (No. 199). Partly ochre-strewn burials were very rare. These included female Burial 256, where ochre was observed around the head and the right shoulder. There was still a stable custom of strewing children's graves with ochre. Burial 226, very richly strewn with ochre, was that of a young child (0–7 years), adorned with an ornament of 80 animal tooth pendants (dog, wolf, marten and seal). This burial has been dated to 5345±60 BP (Ua-19814). In south-eastern Latvia, the Neolithic cemetery of Kreiči has been discovered, on the shore of Lake Lielais Ludzas, close to a settlement site of the same period (Zagorskis 1961:3–18). At this cemetery, 22 burials were found (Fig. 1). Only one of them, a small child buried together with a female, had been intensively strewn with ochre. This was also the most richly furnished burial in the entire cemetery, with an ornament of 42 animal tooth pendants consisting of elk and wild boar teeth, along with some bear teeth. Near the head was an amber plaquette, perhaps from the same necklace (Zagorskis 1961, Table II).

Multiple graves, in which three to six people were buried in one or two layers, are most characteristic of the Middle Neolithic. A layer of black earth was laid on the base of the grave, with ochre strewn over the bodies and the grave filled with black earth from the settlement site. All of the skeletons were partly or entirely strewn with ochre.

A completely new feature of the burial traditions was the presence of so-called votive deposits: concentrations of grave goods in heavily ochre-stained patches at the edges of the graves (Nos. 206–209, 263–264, 264a and 274–278). Such offerings were observed next to single graves as well (No. 252). The votive deposits consisted of flint spearheads, scrapers and flakes, bone and antler implements, and amber ornaments. A deposit next to one group of burials, No. 206–209, contained 33 different objects, with some of the flint spearheads intentionally broken (Fig. 9). Two of the burials from this multiple grave have been dated, permitting precise determination

of the age: Burial 208 has been dated to 5345±60 BP (Ua-19815), while Burial 206 is dated to 5285±50 BP (Ua-3634).

Middle Neolithic graves are known from the north-western shore of Lake Võrtsjärv in central Estonia (Fig. 1). Within the territory of the Valma settlement site, some graves were unearthened, including a double grave of a young female and male. The female had ochre strewn in the pelvic region. Both burials had grave goods, consisting of bone and amber animal figurines, flint artefacts and a sherd of Comb Ware. The burial traditions and inventory are very similar to those at Zvejnieki (Jaanimäe, 1959, 39–40; Eesti esiajalugu, 1982, 68–70).

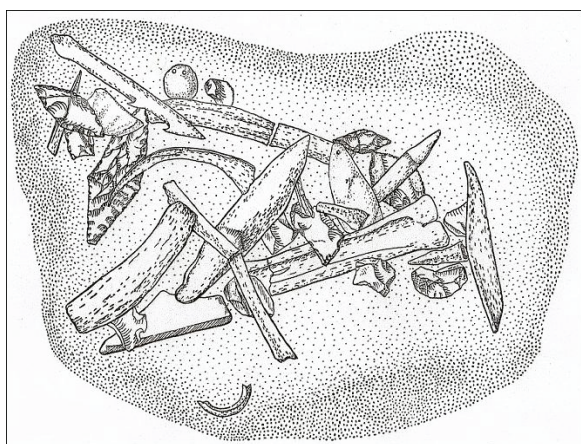


Fig. 9. The Zvejnieki burial ground. Votive deposit by multiple Burial 206–209: bone and antler artefacts, flint arrowheads intentionally broken. All heavily ochre-strewn.

Another very special and rare tradition, observed among the multiple burials at Zvejnieki, was the plastering the forehead and the face with greyish-blue or red clay, mixed with red ochre. Amber rings were found in the eye sockets, under this plastered clay, or mask, and these still had traces of red ochre on them. Such rings were found on the burial of a 7–14-year-old child (No. 206) and on three male burials: one young adult (No. 275) and two older men (Nos. 225 and 263)). Burial No. 255 has been dated to 5110±45 BP (OxA-5986) (Zagorska, 1997a, 435–440; Zagorska 1997b:42–50).

The closest parallels for this burial practice are to be found in Finland. In spite of the fact that bone has not survived in the acidic soil of this northern country, a large number of ochre graves, even multiple graves, with some human teeth and similar amber rings, have been unearthened (Miettinen 1992:24–40; Rätty 1995:161–170; Edgren 1959:22–24; Kukkonen et al 1997:3–12; Edgren 2006:327–336). Some similar traits are also observed in the north-western parts of Russia, on the southern shore of Lake Onega (Ivanišev 1996:82).

The graves dated to the Late Neolithic did not contain ochre. In this period, crouched burials without ochre predominate. This has been observed not only at the Zvejnieki burial ground, but also in burials from Late Neolithic settlement sites: Abora I and Kvāpāni II in south-eastern Latvia (Loze 1995:33–42) and Tamula in Estonia (Jaanimäe 1957:80–100). It appears that in the East Baltic the tradition of using ochre in burials had disappeared completely by the end of the Stone Age. This same development has been observed in Finland (Purhonen 1984:43–44).

Conclusions

As described above, ochre was used in the East Baltic during almost the whole of the Stone Age. Graves were most intensively strewn with ochre during the Middle and Late Mesolithic. At the beginning of Neolithic, the use of ochre decreased, with a more widespread tradition of strewn ochre only on part of the body, mainly the head. The use of ochre increased again in the Middle Neolithic, when the multiple graves appeared, associated with so-called votive deposits. Ochre has not been found with the Late Neolithic crouched burials.

In the older phase of use of the burial ground, female and male burials were intensively strewn with ochre, but later special attention was devoted to males, intensively sprinkling their heads, decorated with special headgear made from animal tooth-pendants or amber rings. These must have been prominent individuals of some kind in the community, good hunters or fishermen, or even shamans. Particularly, it is the individuals with ochre-stained clay masks who may be regarded as shamans. Special attention was given to children, using ochre in their graves throughout the Stone Age. These trends in the development of the ochre use are observed at Zvejnieki only, and do not pertain to any wider generalisation. Although there is some general pattern in the use of ochre in the Stone Age of Northern Europe, in each particular area the traditions of ochre use could have been different, and the development of these customs could have followed a different course.

The use of ochre has been widely observed on the southern shore of the Baltic Sea in the Stone Age, from the Denmark and southern Sweden in the west to north-western Russia in the east. We have little means of grasping the true sense of prehistoric people's attitude towards burial rituals, including the use of ochre (Larsson 1991:33–38; Fahlander 2003:74). Researchers' interpretations of ochre use are based mainly on ethnographic data.

It has been emphasised that the colour red was very important at moments of transition in a person's lifetime, in the passage from one state to another. In the prehistoric world, this might have applied to the transition to adult state, or to death – a transition to another world. For the

Khanty of northern Siberia, the colour white is associated with the Upper World, black is associated with illness, hunger and death, while red is a symbol of rebirth and regeneration (Zvelebil, 2003, 9). Both colours – black earth and red ochre – are observed in the Zvejnieki burials, often intensively combined in one grave. The red colour of ochre is often associated with the colour of blood, the most essential substance for life, and also important as the blood of the dead, connected with rebirth and the afterlife. The colour red appears to play an important ritual role among the Eurasian people (Okladnikov 1950:407–409). The red colour of ochre has often also been associated with fire – representing light, warmth and the hearth (Gurina 1956:230–232). Evidence of red-coloured remains of fire has also been found on east Baltic settlement sites. At the Mesolithic site of Spiginas, not very far from the graves, a rounded pit 40 cm in diameter and 5 cm deep was found, filled with red ochre. It contained a single flint blade (Butrimas 1992:9). At the Late Neolithic site of Duonkalnis a whole sanctuary, connected with burial rites, was discovered. A black burnt area, about 9 m in length, was unearthed, together with traces of post-holes around it. Close to this area, pits containing ochre, and burials were found (Butrimas 1985:63–64).

Traces of rituals connected with fire were observed at the Neolithic dune site of Gipka in western Latvia. A dark,

charcoal rich hearth was unearthed in the central part of the site. Ochre was present in the whole of the surrounding area. On the eastern side of this ritual area, a pottery vessel full of powdered ochre had been left, crushed by the overlying sand. Ochre had been used at this site to colour anthropomorphic clay figurines, which had been deliberately broken (Loze 2006:162–166). Some of the Finnish clay figurines, also deliberately broken, likewise showed signs of red ochre paint. The destruction of images of enemies, deceased tribal members or other menacing persons is a widespread magical practice among the northern Eurasian peoples (Nunez 1986:25–26).

All of the above indicates how important red ochre was in Stone Age burial rites, and how strong the symbolism of red ochre was in the life of the Stone Age communities of the East Baltic. The use of the colour red had become an essential, stable, standardised part of the burial ritual. It seems this was connected with care both for the deceased members of the tribe, and for the living, expressing the strong belief among the latter in a life beyond the grave. At the end of the New Stone Age in the East Baltic, with the beginning of changes in the way of life of the fisher-hunter-gatherers, the custom of using red ochre in burial rites also gradually disappeared.

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