

Chapter 8.

SMELTING IRON: CASTE AND ITS SYMBOLISM IN SOUTH-WESTERN ETHIOPIA

Gunnar HAALAND

Department of Anthropology, University of Bergen, Randi Haaland,
Centre for Development Studies, University of Bergen, and Data Dea,
Department of Social Anthropology, University of Bergen / Addis Ababa

“Society is a human product. Society is an objective reality. Man is a social product. – The institutional world requires legitimation, that is, ways by which it can be ‘explained’ and justified. – The reality of the social world gains its massivity in the course of its transmission. This reality, however, is a historical one, which comes to each generation as a tradition rather than a biographical memory. – The original meaning of the institutions is inaccessible – in terms of memory. It therefore becomes necessary to interpret this meaning – in various legitimating formulas. These will have to be consistent and comprehensive in terms of the institutional order, if they are to carry conviction to the new generation” (Berger and Luckmann: 1966: 79).

Introduction

Conceptualisation of processes explaining culture-historical developments in any particular place or region will be vastly improved by being placed in a comparative analytical framework. In ethnographic fieldwork we have the opportunity to observe the interplay of ecological, social, and symbolic processes and on the basis of this improve the analytical framework by which we explore and interpret the remains of the past.

Humans live in a world of material objects they themselves have produced, in a world of institutional rules and regulations they have created, and in a world of symbolic meanings they have constructed. Objects have the special quality that they have a material existence that is readily observable. The activities involved in production and use of material objects is observable, but activities do not have the concreteness of material objects. Furthermore, to observe that a particular actor performs actions involved in the production and use of particular objects, for example, iron objects, does not by itself demonstrate why this type of activity is performed by a particular type of actor. This has to be understood against the background of the institutional order regulating allocation of roles in society. To understand why actors categorized as blacksmiths perform the activities involved in blacksmithing one has to place blacksmithing in the context of the institutional rules regulating the division of labour in society. Even among anthropologists who in principle have access to the observational material required for such an analysis there are significant disagreements about how such an institutional

order should be conceptualised. Since archaeologists cannot observe the prehistoric institutional order there are of course even more severe constraints on the kind of inferences they can make in this field. When it comes to the symbolic universe ‘explaining’ and legitimating activities undertaken within a particular institutional order, we enter the methodologically difficult task of interpreting the meaning of objects and activities.

We shall in this article, based on ethnographic observations from a small community (Oska Dencha within the former Tsara chieftainship) in South-western Ethiopia, start with material which both anthropologists and archaeologists can observe, namely human-made material objects, in this case productive equipment used in iron-smelting and the material output of the smelting. In contrast to archaeologists we had the privilege to observe the actual human activities involved in the making of iron. Furthermore, we could explore the institutional structure that was mobilized in these activities, and we had the opportunity to inquire into some aspects of the metaphoric linkages of the symbolic universe legitimating the institutional order.

In another paper we have focused on the institutional order of iron-production in this ethnographic region (Haaland et al. manuscript). Our focus here is upon the universe of ritual symbolism in terms of which people understand and execute the operations involved in smelting. Within this universe focus shall be upon the metaphoric association between smelting and pot making, activities involving the polluting transformation of sacred earth by fire to produce important cultural products like iron objects and pots. We shall from the perspective of the idea of the sacredness of earth discuss how this is related to the construction of the social identities of both the smelter and pot maker as polluted, and of low ranking caste. We shall also discuss how sacrifice and offering are important parts of the smelting activities and how they are related to the identity of the smelter.

Fieldwork: The Ethnographic Setting and the Natural Environment

Oska Dencha is located in a rugged area of mountain ridges, hill slopes, and lowlands between the old kingdoms of Konta and Kafa (**Figure 1**). This area was a kind of buffer zone

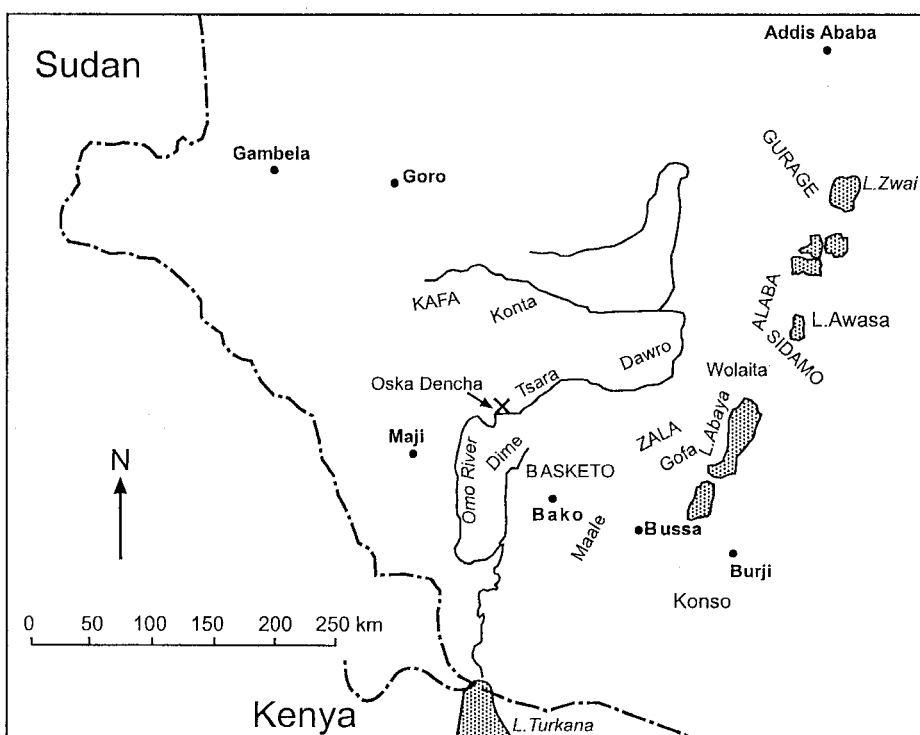
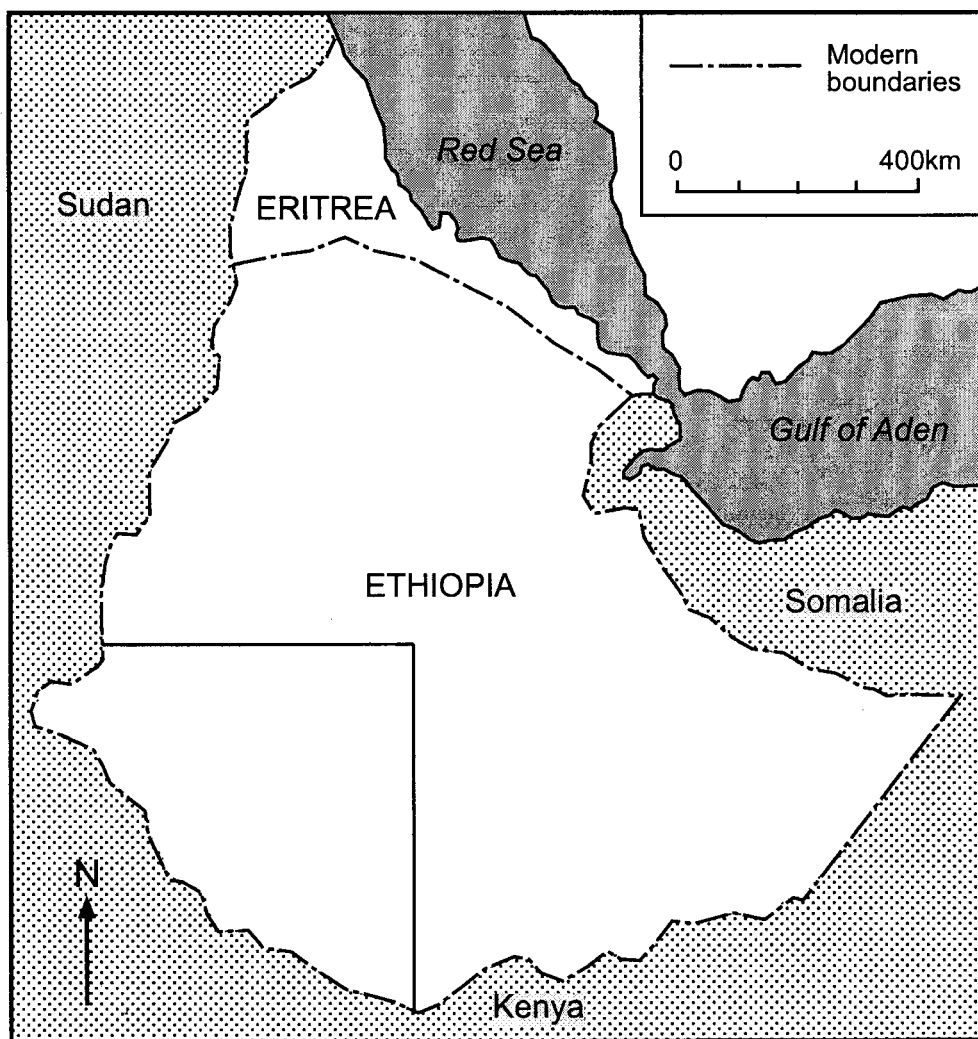


Figure 1. Map of south-west Ethiopia showing the location of Oska Dencha and, inset, some of the major ethnic groups in the region.

between these kingdoms, and was occupied by several smaller chieftainships (Basketo, Dime, Tsara) that like the Dawro, Konta and the Kafa spoke different languages of the Omotic language branch of the Afro-Asian language family. These languages fall into different sub-branches of the Omotic branch. For our purposes the most important sub-branches are Northwest Omoto (including Dawro, Konta, Wolaita and Maale), South East Omoto (including Tsara), and Kefoid (including Kafa). The villagers are farmers and keep some livestock, mostly cattle and goats. Ploughs are used on a few cleared plots for cultivation of teff. The main agricultural tool is the digging stick, with or without an iron point.

The population of the village mainly consists of Tsara. Ironwork is an occupational specialization associated with a social category called *mana* in Tsara language. Within that category males do the smelting and forging, while women make clay pots. *Mana* homesteads were located in a lower lying part at the outskirts of the main village. Previously they were not allowed to own land and livestock. In the past it was claimed that they were dependant on the chief for their food and in return had to provide iron objects needed for agriculture and for warfare, as well as special spears for the investiture of chiefs.

The Smelting

Iron ore is found along the hills at a distance of one hour's walk from the furnace. The ore was extracted from small pits with digging sticks. Nine men from the village and the master smelter Chilacho worked together to dig out the ore (no other members of the smiths family participated in this activity). Before extracting the ore the Chilacho sat down to drink the local liquor after first having poured part of it on the ground outside the pit, as an offering (*yarshua* in Omoto languages) to the spirits (*ayana*) of his ancestors. They dug a 3 metre deep hole in the hillside to reach good pieces of ore. When the group of diggers sat down to take a meal of food, which had been brought from the village, the master smelter took his part aside and consumed it in a place separate from the others.

A range of activities took place in connection with construction of tuyeres, bellows, the furnace, and with the actual smelting operations transforming ore to bloom. Both Chilacho and his wife made the tuyeres - small (12 cm long) ones called *zeida* and a larger (25 cm long) flared type called *tsole*. *Tsole* (all the names connected with smithing are in the Tsara language) also refers to penis while *zeida* refers to the foreskin of the penis. The final number of tuyeres was 30, 15 of each of the two types.

Chilacho told us that new furnaces should be constructed by the smelter, his wife and his sons. The furnace should be built outside the homestead in bush land in order to prevent people who were ritually unclean (mainly menstruating women) harming the smelting operation. Elsewhere in Africa the common practice is to destroy the furnace after the smelt in order to remove the bloom from the pit (Haaland 1985).

In Oska Dencha the furnace was constructed in a way that allowed for removal of the bloom through the top opening of the furnace. The furnace we observed in Oska Dencha had thus been used several times (**Figure 2**), but had to be repaired before the smelting could start.

The furnace was 80 cm high, and underneath the furnace was a 40 cm deep slag pit. The furnace wall was 12 cm thick and the inner diameter of the furnace across the mouth (opening) was 42 cm. Radiating around the base of the furnace were 15 holes made for the 5 pot bellows to be attached to the tuyeres. Each pot-bellows had three openings for the small tuyeres.

When the repair of the furnace was completed a goat was sacrificed (*shuka* in Omoto languages) and the blood was spread around the outside of the furnace. This was said to ensure a successful smelting operation. The blood must not come inside the furnace since this was said to cause the people who ate the sacrificed meat to die. The only taboo connected with furnace construction was focussed at women who should



Figure 2. The furnace and pot bellows are repaired and ready for smelting (photo. Gunnar Haaland).

not be menstruating since this ritual impurity was said to be harmful to the smelt. There are otherwise no prohibitions on women participating in making the furnace or smelting the ore.

An incident occurred when we first came to the place of the furnace. Three clay pot bellows had been broken. According to Chilacho non-*mana* children in the village had done this. He was very furious and would not come near the furnace until some of the people from the village had removed the broken pieces. He then offered (*yarshua*) three pieces of iron ore and one tuyere together with 10 birr (Ethiopian currency), which he put under a tree circa 10 metres away from the furnace. From a cup, he drank some liquor and poured part of it on the ground as a sacrifice (*yarshua*) to what he called *awa tsalahia*. This expression is generally translated as father's devil, but it carries very different meanings for people of different religious affiliations. For Chilacho the term *tsalahia* (devil) has benevolent connotations more like fathers spirit, while for those influenced by Christianity the term *tsalahia* is identified with the devil of the Bible. He then cursed the people who had broken the pot bellows by the names of Meriam (St Mary), his father's spirit, and his father who created him.

Chilacho went on to say, "what they broke were the pot bellows, what they meant was to make me and my family sick. Since they broke the pot bellows I have been sick and my family have been sick. To protect me from the evil actions I have to sacrifice". If he did not sacrifice he said he would suffer from misfortune caused by *gome* (moral transgression). Chilacho showed us his finger which had been damaged when smithing and said that this was due to his pots having been damaged. When they were re-making the clay pots for the bellows, he took a stone, threw it into the furnace, and again cursed the boys who broke them saying "may the boys' stomach be hurt like the pot bellows were".

Chilacho started the smelting by smearing cow dung (from a heifer) mixed with water around the rim and inside the pot bellows. According to him, this was to ensure a successful smelt. The larger tuyeres were fitted to the base of the furnace with wet clay soil, while the small tuyeres were fitted between the opening of the pot bellow and the large tuyeres (**Figure 3**). Before they started to blow the bellows Chilacho sacrificed (*shuka*) a goat. He slit the throat of the goat and smeared the blood that he had collected in a calabash on the furnace and the pot bellows (**Figure 4**).

When the burning charcoal was red-hot the smelter put the first tray of iron ore into the furnace. Charcoal and ore were added continually with the ratio of 3 trays of charcoal to one tray of ore. After 9 hours Chilacho said he could tell from the colour of the flame, the noise made by the slag, and the content of the furnace that the smelting was completed. The iron bloom is removed the next day when the iron has cooled (**Figure 5**).

There are few taboos associated with smelting. Menstruating women could not participate since they could pollute the furnace. Smelters should abstain from sexual intercourse during the smelt. If a person has had sex and he then blows the bellows it was said that the fire would burn him. Charcoal is hot and said to symbolise semen. Similarly shamans (*sharetcho* in Ometo languages) should not be present when preparing the ore for the smelting. The first day during the operations we observed that a person identified as a *sharetcho* was ordered by Chilacho to leave, since anything he would touch would be polluted and would damage the work. Chilacho also operated a small smithy under a thatched roof with open walls. When a smithy is made, according to Chilacho, a goat is sacrificed (*shuka*) before it can be used, in order to ensure that the iron tools will be good. The blood of the sacrificed goat is put on the pot bellows, the hearth and the anvil.



Figure 3. Chilacho is overseeing the killing of a goat for sacrifice during the smelting operation. (photo. Randi Haaland).



Figure 4. The two types of tuyeres are attached to the pot-bellows and furnace (photo. Randi Haaland)



Figure 5. The bloom is recovered from the furnace with an iron pick (photo. Randi Haaland).

Chilacho and his wife are not involved in any puberty rites, or rituals related to birth, marriage, or death. Chilacho however, is the person who makes the metal aprons that girls wear, as part of their growing into puberty. They start wearing strips of metal, two or three, from the time they start walking, and end up with a full apron when they have reached adulthood and are ready to marry. At this time they also add cowry shells to the apron to signal that they are sexually mature. These aprons are worn both by the females in the family of the smith and by the Tsara females in general.

The *mana* is accused of breaching human food taboos by eating dead animals as well as other ritually unclean (*tuna* in Ometo languages) food. One evening Chilacho himself told us that the *mana* eat the meat of animals that had died without being slaughtered. Once his group of smiths had been invited to the town of Sawla, to demonstrate their skills in iron working and everything had gone well and they had been praised for their good work. However on the way back to their village they came across a dead animal which they ate. When the villagers got to know this trouble erupted and their stigmatisation was further reinforced.

The Institutional Context of Iron-production

The material items described in this summary sketch may be similar to those found in archaeological contexts, and the practical activities and technical relations we observed in connection with the construction and use of these items may serve as a relatively straight forward key to infer practical activities connected to material remains of prehistoric iron production based on similar technology. However our sketch also contained observations of features that relate to the institutional order regulating the flow of events connected to iron working.

First of all, the term *mana* does not only refer to an occupational specialist, but to a total social identity associated with iron-working. We have elsewhere (Haaland et al. manuscript) argued that division of labour among Omotic speaking people is based on an institutional order which can be characterized as caste, i.e. a social system based on status summation in such a way that having one particular status, for example blacksmith, entails that one also is incumbent of a specific cluster of other statuses, for example position in ritual, kinship, political structures. From a sociological perspective caste is a type of social organization based on a ranked clusters of statuses. *Mana* is just one ranked identity among the Tsara, another such identity is the farmer caste ranked above *mana*. The separation between the occupational castes are made relevant in restrictions on commensality, on intermarriage, and in earlier times also in ownership of land.

Comparative ethnographic material (Barth 1960; Berreman 1979; Tuden and Plotnicov 1970) indicates that structurally very similar forms of stratification have emerged in very different cultural contexts, and that they are intimately linked to the growth of political power centres with control of coercive force strong enough to squeeze out an agricultural surplus from a large number of cultivators. The livelihood of the crafts and administrative specialists thus depended on maintenance of the redistributive political centre. This generalization may serve as another key in our interpretation of possible organizational contexts of prehistoric material remains. The importance of such provisional interpretation is that it can serve as guidelines in our search for other types of archaeological material (for example, settlement structures, location of different types of production sites as well as ritual sites) which may indicate whether occupational tasks are performed in a caste-like organizational context, or in a context characterised by more egalitarian principles, for example many Bantu communities (see Haaland et al. 2002 for further discussion).

As pointed out by Donham “Omotic Kingdoms must have risen and fallen, and the power of kings waxed and waned” (1999: 20). These kingdoms varied significantly in scale from powerful centralized states such as Kafa, Dawro and Woleita, to middle range chiefdoms like Male and Gofa, to small decentralized tributary communities like Tsara and Dime in a buffer zone. No matter the scale of the political systems, the association of crafts with specific ranked identities was an important principle of social organization in all of them, although the occupational tasks associated with specific identities as well as their relative rank, varied with the scale and complexity of the political centres. We shall here only give a short description of a variation of the caste system as found in the powerful state of Dawro. In the previous kingdom of Dawro social identities, each associated with occupational tasks, are still taken as basic principles for daily interaction in a variety of fields, e.g. economy, marriage, ritual, residence (Data Dea 1997). These identities are ordered in ranked strata (*yara* in Dawro dialect) as follows:

- Malla* - Citizens, farmers, rulers
- Wogatche* - Iron forgers
- Degelle* - Tanners

Gitamana - Iron smelters

Mana - Potters

Manja -charcoal-makers, forest users, hunters

An interesting point in this connection is that iron forgers belong to a distinct caste ranked above the caste of iron-smelters.

The Symbolic Universe

The causal connections between the activities we observed and the material objects (furnace and smelting tools; ore and slag; bloom and slag) are so closely constrained by functional technical requirements, that we think that it gives a good basis for analogous interpretation of techno-ecological relations in prehistoric processes of iron-smelting based on similar technology and natural resources as exemplified in the work of Randi Haaland in Mali (Haaland 1980). We also think that the organizational connection we observed between the occupational specialization of iron-smelters and the institutional order of caste is strongly favoured by the political economy of early states. With a critical application we thus think our sociological analysis can be used in the interpretation of the institutional context of prehistoric iron-production sites.

Berger and Luckmann have argued “Symbolic universes – are bodies of theoretical tradition that integrate different provinces of meaning and encompass the institutional order in a symbolic totality, “– the symbolic sphere refers to the most comprehensive level of legitimation” (1966: 113). In our description of iron-smelting in Oska Dencha we tried to indicate that particular objects and activities are not only linked to technical and organizational processes, but that they are part of a symbolic universe of meaning in terms of which people understand their ‘world’ and act in it. To explore that universe of meaning we would have needed material that we did not have the opportunity to collect during our short stay. However following Donham’s argument that the “Omotic societies to use Edmund Leach’s phrase (1954), shared a common ritual language” (Donham 1999: 20) we shall try to interpret the fragments of observations we made in Oska Dencha in the light of observations from other Omotic communities.

We shall start with some general considerations on the relationship between a caste based institutional order and its symbolic legitimation. The “roles that symbolically represent the total institutional order have been most commonly located in the political and religious institutions.” (Berger and Luckman: 1966: 94) In India the social order is symbolically conceived as a body (the primal man Purusha) and the *varnas* (caste categories) as his parts with the Sudra *jatis* (service castes) as his feet, the Vaishya *jatis* as his thighs, the Kshatriya *jatis* (ruling castes) as the arms, and the Brahmin *jatis* (priestly castes) as his mouth. The social structure of castes is understood as metaphorically analogous to the configuration of the body. Maintenance of the social whole is believed to

depend on maintenance of the relation between the parts like maintenance of the body depends on the maintenance of its functioning parts. In Lakoff and Johnson's view this is an example of a PART-WHOLE cognitive schema. We experience our body as a whole with parts, and this in Hindu culture serves as a metaphor for a conception of society as a whole with interdependent parts (the castes). "When we take two things as being isomorphic, we mean that their parts stand in the same configuration to the whole" (Lakoff and Johnson 1987: 274). In India an incredibly rich corpus of myth, stories, songs, rituals etc elaborate this idea and serves to create the symbolic representations that Durkheim called religion, making belief in the rightness of the institutional order of castes compelling, even after the politico-economic conditions behind its emergence have disappeared.

In the Omotic region of Ethiopia we have not found a correspondingly rich documentation and systematic symbolic elaboration of such a cognitive schema, although we shall argue that here another PART-WHOLE schema serve a similar function of conceptualising an understanding of the interdependence of different occupational castes in the societal whole. In the Omotic schema the social and natural order is conceived of as dependent on the "vitalizing presence of divine kings" (Donham 1999: 20).

Kingship is conceived as based on three notions: the doctrine of the original life-giving king; the concept of the unbroken but perilous transmission of his vital force, and the idea of politics as the orderly union of hierarchical status groups or castes (Donham 1999: 22). By drawing on sexual metaphors various rituals express symbolically the union between distinct hierarchically ranked identities: the king with his people, the free farmers with the occupational castes, men with women (Donham 1999: 26). In the symbolism of hierarchy the king is conceived of as encompassing the whole society, and this idea is fostered in a range of metaphors relating to fertility - of women and of the land. In the Maale origin myth the first king Maaleka was the inventor of fire. The politics of the present is conceived of as a fertile union of unequals brought about by the life-giving force of Maaleka. This is materially manifested in the layout of the royal compound (lion house or *zobi mari* in the Maale dialect). The "royal compound was the male nucleus of the Maale polity, dominating the surrounding female medium" (Donham 1999: 25). Like most Omotic houses the lion house was built around a central pillar associated with maleness. The privilege of entering the compound generally separated men from women in the sense that it was prohibited for women of childbearing age to enter. The way men entered also separated the high farming caste (entering from the front gate) from the artisan castes (entering from the back door). Furthermore the seating arrangement separated the king sitting on the throne from the others sitting on the floor (Donham 1999: 26). The ideology of hierarchy, of interdependent but unequal separate social categories, is here reflected in a very explicit spatial form that shows a surprising structural similarity to Hindu ideology as analysed by Dumont. The actual idioms in which this structure is expressed do however belong to a different and, as far as we know, unrelated cultural tradition.

In an ordinary Omotic house there is a similar spatial representation of hierarchy on a less elaborate scale. This is particularly expressed in the symbolism of the central house pillar (*tussa*). Before erecting the *tussa* the house wife gives her husband sorghum beer which he pours into the pillar hole (*tussa olla*) in the name of his father's god (*awa tossa*) and *bita talahia* (literally meaning the devil of the earth, which in a non-Christian context carries the meaning of a benevolent spirit), praying for fertility of the women, of the cows, and of the earth. On the family level the central pillar is the most important site for both *yarshua* and *shuka* sacrifices. A diagonal wall separates the men's section (between the central pillar and the front door) from the women's section containing the kitchen (between the central pillar and the back door). Caste hierarchy is expressed in restrictions on lower castes entering the house, while the gender hierarchy is expressed in the association of males with the front room and in the roles men play in sacrifices at the central pillar.

Aspects of the Omotic symbolic universe are reflected in some of the activities we observed in Oskia Dencha. The wife of Chilacho makes pots. Her social identity is *mana*. She is born into that caste, her father was a smith and her mother was a potter. The rest of the family performs the same occupations. Compared to the more centralized kingdom of Dawro where the three tasks of pot-making, smelting and forging are associated with three different caste identities, the situation in Oskia Dencha is much simpler in the sense that the *mana* caste performs all of them. However similar ideological constructs legitimate the social separation between occupational specialists in the two areas. Throughout southern Ethiopia, sanctions on breach of food taboos are strongly emphasized in myths about lower castes (Pankhurst 1999) and beliefs about smelters transforming themselves into animals are widely shared. Hence people avoid drinking, eating, or having bodily contact with them such as shaking hands or having sexual relations with them.

The more complex caste organization in Dawro is related to difference in scale of the political systems of Dawro and Tsara. However the differentiation between forger caste and smelter caste in Dawro cannot be explained as caused by processes in the political economy. We shall argue that this differentiation has a basis in cognitive processes and that an analysis of these processes in Dawro may throw light on the 'cultural grammar' of Omotic people in general. *Gitamana* means big pot maker, and the task of smelting is conceptually associated with the task of pot making, not with the task of forging iron. In order to throw light on this we shall draw on perspectives developed by Lakoff and Johnson. "We are Physical beings, bounded and set off from the rest of the world by the surface of our skins, and we experience the rest of the world as outside us. Each of us is a container, with a bounding surface and an in-out orientation. We project our in-out orientation onto other physical objects that are bounded by surfaces" (Lakoff and Johnson 1980: 29).

The Tsara terms used for different smelting tools (*zeida* and *tsole*) indicate that the smelting process is metaphorically associated with sexual intercourse where the furnace is analogous to a woman. The furnace is perceived as the womb

of a woman. When they take out the iron bloom they say the woman (the furnace) has given birth, and the slag (*shane*) is seen as the after-birth (*gupe*). Through the smelting operation a new object is created. What was ore has through the smelting operation become bloom.

When we conceptualise changes from one state into another we conceptualise it in terms of the metaphor THE OBJECT COMES OUT OF THE SUBSTANCE (e.g. he made bloom out of the ore, he made spears out of the bloom). This metaphor “for CHANGE which is used as part of the concept of MAKING, emerge naturally from as fundamental a human experience as there is, namely birth. In birth, an object (the baby) comes out of a container (the mother). At the same time, the mother’s substance (her flesh and blood) is in the baby (the container object). The experience of birth (and also agricultural growth) provides a grounding for the general concept of CREATION, which has as its core the concept of MAKING a physical object but which extends to abstract entities as well”. (Lakoff and Johnson 1980: 74).

In Dawro conceptualisation of iron smelting and of pottery and the items connected with them have features that convincingly can be used to symbolise similarities as well as differences in other domains of experience. Both involve transformation of natural things (ore to iron, clay to pot) by the use of the same transformative agent – fire. The transformation of ore to iron does take place in a container - the furnace similar to another container - the pot. Both furnace and pot are constructed from clay but they differ in the sense that the furnace is sun-dried while the pot is burned. The two containers are also similar in the sense that they are vessels for transformation of natural items (ore and grain) to cultural items (iron and porridge or beer).

The metaphorical association between giving birth and making iron is manifested in the idea that both activities are polluting, and related to this are the avoidance of physical contact with women giving birth and with the *mana*. The container schema also underlies practices relating to avoidance of pollution in other contexts as well. The house is clearly considered a container of a fundamental social unit, namely the family, and as such there are clear concerns for protecting it from polluting influences from outsiders entering as well as from pollution emanating from insiders. When a woman in Dawro is giving birth she is thus brought out of the house to a specially erected hut (In Wolaita it was said she gave birth in the woman’s side of the house). Likewise a village is conceived in the container metaphor in the sense that one enters it and one leaves it - one is an insider or one is an outsider. This important social unit should also be protected from polluting influences, as manifest in the location of the polluting smelting activity outside village boundaries.

Ideas associated with smelting are thus closely related to general ideas about procreation, which we find to be a cross-cultural phenomenon (Cline 1937; Wise 1958; Willis, 1978; van der Merwe and Avery, 1987; Childs 1991; Collett 1993; Herbert 1993; 1993; Reid and MacLean 1995; Barndon 1996; Schmidt and Mapunda 1996; Rijal 1998; Haaland et al. 2002). The work cited above is mainly based on African material

however, our material from Asia indicates the same ideas (Rijal 1998 and Haaland et al. 2002).

In his fieldwork in Dawro, Data Dea found that it is not furnace or pot making as such that are polluting. Rather the issue has to do with fire, and its assumed power to affect fertility, prosperity and human life in general. The activity of firing the earth (*bita* in Ometo languages), is looked upon as unnatural and dangerous. It is widely believed that the *mana*’s firing of pots and the smith and smelters blowing of their bellows will burn or blow away the *anya* (spirit) of prosperity or blow away the fertility of the land as they express it. Particularly the noise made by bellows is said to disturb the spirit in the vicinity.

The female and the male domains of the *mana* and *gitamana* categories are on one hand, very different, but on the other hand bound together by earth and fire. In Dawro conceptualisations, it seems that it is the idea of pollution attached to transforming elements of the earth by fire which is the basis for setting smelter and potter apart from other castes as two closely linked castes, while another craft specialist, the forger (*wogatche*) who transform bloom (an object already de-linked from elements of the earth) to iron is not in a similar way polluting the earth. Nevertheless, he too is using fire and is considered anti-fertility. The smelter and the potter are considered similar kinds of identities at the bottom of the rank system contrasting with the highest ranked craft identity, the iron-forger (*wogatche*). This surprising contrast between smelter and forger is we believe in South-west Ethiopia based on a deep-lying metaphoric association between smelting and pot-making as activities involving polluting transformation of sacred earth.

The fertility of the earth is a fundamental concern in agricultural communities and this feature of the natural environment has in Omotic communities been symbolically emphasized in myths and rituals. In different Omotic communities a variety of myth explains how the ancestors emerged from the earth. The metaphoric linkages seem to be constructed on an analogy between the fertility of the earth and the fertility of women – women give birth to individual humans, the earth gave birth to humanity in general. This linkage is ritually manifested for example in purification rituals.

A myth from the kingdom of Kafa goes as follows: In the beginning of time the earth was pregnant and gave birth to different tribes, which emerged with their ready made specializations. First came Ado (Manjo) with a tuto (hunting net) on his shoulder. Then came Minjo (Gomaro or Kafa) with a milk jug in his hand; from him would come the cattle herders and the king. Finally came Matto with a drum, and he began there and then to offer a calf in sacrifice to *Yeri* (god), at the foot of a dio-tree, from whom would come priests. (Ceruli 1930: cited in Gezehagn 2001: 95).

In Dawro, the crucial concern was about who had the right to sacrifice (*shuka*) for the land. On various social levels this right expresses seniority within the group concerned. In these myths earth is clearly associated with origin. The metaphoric

linkage between earth and mother is fairly explicit in the idea that ancestors emerged from a hole (*olla*) in the Earth. This association is also manifested in traditional purification rituals. In case a high caste man transgressed the rules of restrictions on sexual intercourse with low caste women he has to undergo a purification ritual (*hulloqo* in Omoto languages) whereby he creeps naked through a tunnel (also called *olla*) dug in the earth after a ram or chicken has been sacrificed (*shuka*) at the opening and the blood sprinkled in the tunnel.

Fire is closely associated with production of food. To use fire to cook earth (smelt ore) is considered unnatural. Fire is furthermore associated with ambivalent meanings - on one hand, it is a beneficial component in the making of food, on the other it is regarded with aversion as a hostile and destructive force. Earth, however, is sacred and prayed to. The unnatural use of fire to “cook” earth in smelting iron (an inedible substance), and in the later stages to forge tools and weapons at the anvil, thus seems to be related to a religious opposition between earth and fire. Iron objects as products of mixing of earth and fire are also associated with ambivalent meanings, and set apart as something sacred. On the one hand, smelters and potters as the persons responsible for the mixing the two elements are placed in a polluted position. On the other hand iron objects are believed to have protective powers, e.g. it is believed that iron protects children, pregnant women, and pregnant animals from the evil eye (*qolla*). Likewise the iron ornaments worn by girls and women as aprons are believed to protect them against evil spirits. The connection between the ideas expressed in this symbolic universe and the structure of the institutional order of castes is fairly obvious.

Belief in the sacredness of earth and its association with ancestors and mystical powers is also manifest in the sacrificial events we observed in Oska Dencha. We should here note the categorical distinction made in Omotic communities between sacrifice of animals (*shuka*) and offering (*yarshua*) of food items and drinks. The prototypical form of *yarshua* is the pouring of some beer, coffee or other drinks on the ground before drinking, but *yarshua* will also include other non-animal items offered to the earth. Although we did not get any local exegesis on this kind of offering we will hypothesize that it probably reflects an old tradition among agricultural societies of offering the fruits of the earth back to the earth and the ancestors who emerged from it. Concerning *shuka* we hypothesize that it is derived from cultural traditions associated with East African pastoralism as well as from Biblical traditions transmitted through the institutions of the Coptic Church, particularly since the 1890s, after the Ethiopian Emperor Menelik had conquered south-west Ethiopia.

We observed how Chilacho before extracting the iron ore sat down to drink local liquor and how he poured some of it on the ground outside the pit, as an offering to the spirit of his ancestors as he expressed it. The underlying idea seems to be a kind of recognition of indebtedness to the earth from where his ancestors emerged. Whether this is an example supporting the idea of sacrifice as an act of expiation for sins

committed by disturbing the sacred earth we shall not speculate further on here.

Smelting is a precarious activity like giving birth. Both are conceived of as being threatened by mystical evil influences emanating from the social environment. In connection with the smelting we observed that Chilacho performed two sacrificial acts, the first when making the furnace and the second when the smelting started. In both events the killing of the animal was followed by the sprinkling of blood, in the first case outside the furnace and in the second case outside the pot bellows. There may be a universal condition, which makes blood sacrifice such a compelling metaphor in these protective rituals. As Green (2002: 40) has stated, blood can easily be seen as a liminal item connecting the living and the dead “between the earth-world and the supernatural”. The animals were not consumed among the people present at the furnace – the *mana* consumed it with caste members in his home. No higher Omotic caste would consume meat from animals sacrificed by a lower caste. However a lower caste might consume meat sacrificed by a higher caste, but then in a separate place. If Chilacho in the act of offering communicated with his ancestors, we have no indication that he conceived of this as similar to giving part of himself to the ancestors (Evans-Pritchard 1956: 279). The Maussian idea that the sacrificed animal is a kind of intermediary between men and ancestors seems more plausible (Mauss 1980). What is emphasised here is the request for help from the ancestors in order to ensure a successful smelt.

Conclusions

Obviously we are limited in how deeply, on the basis of observations made during a very short period of fieldwork, we can go in the analysis of the symbolic aspects of behaviour. Compared to archaeologists we did however have the advantage that we could actually observe activities which were of a symbolic nature. Furthermore, in our interpretation of symbols we had the advantage that one of us (Data Dea) was himself from an Omotic group – namely the Woleita.

We started with questions rising out of observations of concrete material objects involved in iron smelting. This took us to new questions growing out of observations of variations in the organisational framework of craft specialization. This again brought up puzzles about the symbolic legitimation of the institutional order. In our search for evidence that could help to solve these, we were brought to other forms of concrete material objects like house structures and settlement patterns. In our search for possible linkages between material objects, institutional order and a symbolic universe we have been inspired by different contributions from Berger and Luckmann’s sociology of knowledge, to Barth’s processual anthropology, and to Lakoff and Johnson’s perspectives on cognitive processes. Although we have had access to observations far richer than those available to archaeologists, we still strongly emphasize that our observations are also just fragmentary pieces of the rich socio-cultural ‘mosaic’ that the material objects belong to. We hope however that

we have made clear the analytical steps we have taken in developing our representation of the ‘mosaic’.

Although archaeologists are faced with even more formidable methodological problems in their attempts to reconstruct the socio-cultural ‘mosaic’ of the past we strongly advocate that they should not shun the task if they want to get out of the mind stifling typologies of arrowheads and pot-sherds, combined with false analogies between biological evolution and cultural innovation. No matter their female metaphoric linkages pots do not breed pots, and a pot type cannot evolve into another pot type, it is people who through imaginative work invent new forms of pots. It is the technological basis, the social context and the metaphoric structures affecting such innovations that archaeologists should imaginatively confront.

We have tried to explore image schemas structuring the relationships among elements of the symbolic universe we observed in connection with iron smelting, and have tried to show how metaphoric associations connected to objects and activities involved in this operation were structured by the container schema. We have furthermore tried to argue that a part-whole schema is made relevant in the way the symbolism of kingship legitimate the institutional structure of a hierarchical caste-based society. Metaphoric expressions of social hierarchy are significantly shaped by the up-down schema. This orientation metaphor arises from the way our body functions in the physical environment. As Lakoff and Johnson point out, this physical basis gives rise to metaphoric concepts like the following: “HAVING CONTROL OR FORCE IS UP; BEING SUBJECT TO CONTROL OR FORCE IS DOWN” or “HIGH STATUS IS UP; LOW STATUS IS DOWN”. (Lakoff and Johnson 1980: 15–6). In our observations this is materially manifested in the spatial arrangements of the settlement and of sites for sacrificial rituals. The settlement of the *mana* is placed at the outskirts and in a lower lying area of the village. In contrast to the higher caste who sacrifice on higher ground like mountain-tops, the *mana* sacrifice on a stone located in a low-lying area in the village to which they are attached.

The up-down schema is also manifest in seating arrangements for members of different castes, for example in the market place, and in the side members of different castes will take when they meet each other on a path; the higher caste person will take the higher ground. We have tried to place the observed events of iron smelting first into sociological contexts in order to understand the close association between craft and caste identity, and secondly into contexts of metaphorization in order to grasp aspects of the symbolic universe the activities were embedded in. The three of us brought different questions to the observations and to the analysis. Randi Haaland as an archaeologist, was concerned about the relationship between the ‘world’ of material objects and aspects of the institutional orders and symbolic universes. Data Dea, with his command of the Wolaita version of the Omotic cultural grammar and with his vast corpus of ethnographic observations from Dawro, provided the basis for interpreting these relationships. Gunnar Haaland with his background in comparative studies of social organization and

metaphorization, tried to relate the particular culture specific features of Omotic social organization and symbolic expressions to more universal aspects of the human condition.

Sociologically, this is exemplified in the hypothesis that caste is likely to emerge as a principle for the division of labour in early state formation. Coningham and Young (1999) state that they cannot interpret the archaeological material from the Harappan civilization as indicating division of labour based on caste. However the Harappan material seems to indicate a certain concentration of specific crafts in separate urban quarters. This is of course not evidence for caste. Our argument is based on general sociological reasoning about plausible connections between political centralization, economic redistribution, division of labour, craft specializations associated with total social identities, and ritual legitimation of the institutional frameworks in which political and economic activities are anchored. Symbolically this legitimation draws on embodied pre-conceptual image schemas like the Container schema, the Part-Whole schema, and the Up-Down schema.

Symbolic universes serve to legitimate institutional orders. However, many elements in specific symbolic universes do not stand in a one to one relationship to the structure of the institutional order. Family resemblances in forms of organization and family resemblances in symbolism may partly emerge through different processes, organizational family resemblances from processes in the political economy, while symbolic family resemblances in addition may be derived from cognitive processes independent of political economy.

The way humans construct social reality is not completely arbitrary but is significantly shaped by constraints inherent in human interaction – it seems to be ‘in the cards’ so to speak that when the ‘cards are distributed’ in a certain way as given by ecological, economic and political circumstances, people in culturally unrelated communities may ‘play the cards’ in ways which produce social forms exhibiting family resemblances, e.g. caste-like institutions in early states. The way people as social products understand and legitimate the social forms they created is shaped by metaphoric reasoning. Such reasoning arises, as Lakoff and Johnson have argued, partly from universal pre-conceptual bodily experiences (Lakoff and Johnson 1987: 269 – 270), and may consequently stimulate similar conceptual metaphors among different people.

We hope that our analysis can serve the archaeologist as a tool for thinking on the fragments of information stored in the archaeological record with regard to clues they may contain about the processes that shaped the cultural forms of the past. This use of anthropological analysis for interpretation of the past should not be confused with the procedure quite common in ethno-archaeology, namely, to postulate continuity of cultural tradition on the basis of similarity between non-functional features of objects observed today and similar features found in the archaeological record. As we saw the expression ‘awa talahia’ carries two very different meanings among Christians and

non-Christians in Omotic communities. The cultural form is the same, but for non-Christians the meaning is rooted in a symbolic universe of ancestor worship, while for Christians the meaning is rooted in the cosmological conflict between good and evil forces. Likewise with material symbolic expressions. The swastika and 'the star of David' (or *shatkon* as it is called in Sanskrit) are signs found in contexts which are widely separated in time and space, from the Dravidian Indus Civilization to present-day Hinduism and Buddhism, to Nazi Germany and to the flag of Israel. The meanings these signs have to people in these different contexts may like the meaning of the expression 'awa talahia' be completely different. In present-day Hinduism and Buddhism they are both auspicious signs used in rituals (except funerals) and do not at all stand for contrasting identities like they did in Nazi Germany. It should from these examples be obvious that similarity in the form of material signs may not represent similarity of meaning, i.e. continuity of a cultural tradition.

Acknowledgements

The fieldwork was funded by the Institute for Comparative Culture Research (Institutt for Sammenliknende Kulturforskning). We thank Wondemu Lema who took time off from his teaching job to join us on our visit to Oska Dencha and who provided us with many valuable suggestions during our fieldwork. We would also like to thank Alula Pankhurst at the department of Social Anthropology in Addis Ababa and Abdul Ghaffar Ahmad at the "Organisation for Social Science Research in Eastern Africa" in Addis Ababa for their assistance in organising the field visit. Donald Donham and Wendy James have in discussions provided insightful comments on our arguments.

References

- BARNDON, R. 1996. Mental and Material Aspects of Iron Working: A Cultural Comparative Perspective. (In) Pwiti, G. and R. Soper (eds.), *Aspects of African Archaeology*. pp. 761-772. Harare: University of Zimbabwe Publications.
- BARTH, F. 1960. The System of Social Stratification in Swat, North Pakistan. (In) Leach, E. (ed.), *Aspects of Caste in South India, Ceylon, and North-West Pakistan*. pp. 50-59. Cambridge: Cambridge University Press.
- BARTH, F. 1993. *Balinese Worlds*. Chicago: Chicago University Press.
- BERGER P. L. and T. LUCKMANN 1966. *The Foundations of Knowledge in everyday life*. London: Penguin.
- BERREMAN, G. 1979. *Caste and Other Inequities*. Ved Prakash Vatuk Folklore Institute: Kailash Puri.
- CHILDS, T. S. 1991. Style, Technology, and Iron Smelting Furnaces in Bantu Speaking Africa. *Journal of Anthropological Archaeology* 10: 332-59.
- CLINE, W. 1937. *Mining and Metallurgy in Negro Africa*. Menasha (WI): George Banta Publishing Co.
- COLLETT, D. 1993. Metaphors and Representation Associated with Precolonial Iron Smelting in Eastern and Southern Africa. (In) Shaw, T., Sinclair P, Andah, B. and Opo, A. (eds.), *The Archaeology of Africa. Food Metals and Towns*. pp. 499-511. London: Routledge.
- CONNINGHAM, R., and YOUNG, R. 1999. The Archaeological Visibility of Caste. An Introduction. (In) Insoll, T. (ed.), *Case Studies in Archaeology and World Religion*. Oxford: BAR International Series 755.
- DEA, D. 1997. Rural Livelihoods and Social Stratification among the Dawro, Southern Ethiopia. *M. A. Thesis*. Department of Social Anthropology. Addis Ababa University.
- DONHAM D. L. 1985. *Work and Power in the Maale of Ethiopia*. New York: Columbia University Press.
- DONHAM D. L. 1999. *History, Power, Ideology*. Berkeley: University of California Press.
- DUMONT, L. 1980. *Homo Hierarchus*. Chicago: University of Chicago Press.
- EVANS-PRITCHARD, E. E. 1956. *Nuer Religion*. Oxford: Clarendon Press.
- GEZAHEGN, P. 2003. Differentiation and Integration: Craft-workers and Manjo in the Social Stratification of Kafa, southwest Ethiopia. *M.A Thesis*, Department of Social Anthropology, University of Bergen.
- GREEN, M. A. 2002. *Dying for the Gods. Human Sacrifice in Iron Age Europe and Roman Britain*. Stroud: Tempus
- HAALAND, G., HAALAND, R., and RIJAL, S. 2002. The Social life of Iron. A Cross-cultural Study of Technological, Cognitive, and Political Aspects of Iron Symbolism. *Anthropos* 97: 35-54.
- HAALAND, G., HAALAND, R. and DEA, D. No Date. Furnace and Pot: Why the Iron Smelter is a Big Potmaker. A Case Study from South-western Ethiopia. *Manuscript*.
- HAALAND, R. 1980. Man's Role in the Changing Habitat of Mema during the Old Kingdom of Ghana. *Norwegian Archaeological Review* 28: 31-47.
- HAALAND, R. 1985. Iron Production, its Socio-cultural Context and Ecological Implications. (In) Haaland, R. and Shinnie, P. L. (eds.), *African Iron Working Ancient and Traditional*. pp. 50-72. Oslo: Universitets Forlaget.
- HABERLAND, E. 1959. *Altvolker Sud-Ethiopiens*. Band I. Stuttgart: W. Kholhammer Verlag.
- HABERLAND, E. 1964. Mundliche Berlieferungen über die Geschichte von Gofa (Süd Ethiopia) bis 1889. *Zeitschrift für Ethnologie*: 27-37.
- HABERLAND, E. 1978. Ethnogenesis and Expansion in South-west Ethiopia. With Special Reference to the Omotic-Speaking People. *Abbay* 9: 141-143.
- HALLPIKE, C. R. 1968. The Status of Craftsmen among the Konso of South-west Ethiopia. *Africa* 38: 258-269.
- HERBERT, E. 1993. *Iron, Gender and Power; Rituals of Transformations in African Societies*. Bloomington: Indiana University Press.
- HUBERT, H. and MAUSSE, M. 1964. *Sacrifice its Nature and Function*. Chicago: University of Chicago Press.
- LAKOFF, G. and M. JOHNSON. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- LAKOFF, G. and JOHNSON, M. 1987. *Women, Fire and Dangerous Things*. Chicago: University of Chicago Press.
- LEACH, E. 1954. *Political Systems of Highland Burma*. London: Athole Press.
- PANKHURST, A. 1999. Caste in Africa: The Evidence from South-western Ethiopia Reconsidered. *Africa* 69: 485 -507.
- MAUSS, M. 1990. *The Gift*. London: Routledge
- REID, A. and MACLEAN, R. 1995. Symbolism and the Social Context of Iron Production in Karagwe. *World Archaeology* 27: 144-161.

- RIJAL, S. 1998 The Traditional System of Iron-Working. The Technology, Social Context, and Rituals of Transformation. *M. Phil Thesis*, Dpartment of Archaeology, University of Bergen.
- SCHMIDT, P. L. and MAPUNDA, B. 1997. Ideology and the Archaeological Record in Africa: Interpreting Symbolism in Iron Smelting Technology. *Journal of Anthropological Archaeology* 16: 73-102.
- TUDEN, A. and PLOTNICOV, L. 1970. *Social Stratification in Africa*. New York: Free Press.
- van der MERWE, N. J. and AVERY, D. 1987. Science and Magic in African Technology: Traditional Iron Smelting in Malawi. *Africa* 57: 143-72.
- WILLIS, R. 1978. *A State in the Making: Myth, History and Social Transformation in Precolonial Ufipa*. Bloomington: Indiana University Press.
- WISE, R. 1958. Some Rituals among the Ufipa, *Tanzanian Notes and Record* 50: 106-11.