The Vedic Agni and Scandinavian Fire Rituals

A Possible Connection

Anders Kaliff

To use ethnographic analogies is not the same as picking up ready-made interpretations from one cultural context and importing them into another. On the contrary, analogies are a powerful and necessary tool for any archaeological interpretation. If we as scientists are not aware of this we will most certainly use our own time and culture as an unconscious analogy: it is not possible to make interpretations, or even to think, without references outside oneself, and such references are nothing but analogies.

I will put forward the hypothesis that the Late Bronze Age society of Scandinavia had rituals resembling, and probably related to, the Vedic tradition. As in Vedic tradition, fire sacrifice seems to have been an important ritual practice in Scandinavia. The Vedic fire altars are built as a symbolic microcosmos, repeating the creation of the world, and the fire (*Agni*) is seen as a link between earth and the heavenly fire – the sun.

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PROLOGUE: MAN AND FIRE

The shaping of human culture is closely linked to the domestication of fire. The art of making fire has given humans the ability to survive in environments where it would not otherwise have been conceivable and has made it possible to cook food whose nutritional value could not otherwise have been fully utilized. This has formed us as people, shaping our conceptual world.

From my childhood I have vivid memories of the delight and excitement I felt at the campfire that was lit when the family went camping, or when we visited relatives in old houses with fireplaces. As a little boy I was captivated by fire. I could sit for ages, just looking into the flames, fascinated by the consuming power of the fire and mystified by what it could be. The flames seemed to be everything and nothing, a palpable substance and simultaneously something that could not exist without the firewood that it slowly consumed. I put small sticks into the flames to see how long they could last without catching fire, and I put

shavings and twigs beside the fire for the same reason. The hours flashed by. My parents and relatives finally had to pull me away. The fire enchanted me.

Later, as a student, I studied chemistry and acquired a scientific outlook on what fire is: a reaction of substances which occurs quickly and generates great heat. Fire is nothing in itself, just the result of a process. At the same time, I was convinced in my mind that this was not the whole truth. The description of its nature is shaped by the questions we ask. Despite the non-substance of fire, it is palpable – we see it and above all we feel it. The reaction between the substances can also spread to us, through the communicative essence of the fire. We are then consumed, just like the sticks in the fires of my childhood. It is therefore scarcely surprising that the enigmatic nature of fire has given it a divine character, that it has even been regarded as a divinity in itself. A child's wonder at fire, its heat and friendship, and the fascination with its destructive power, demonstrates a truth about the character of fire which no other explanations can completely brush aside.

As an archaeologist I have returned to my interest in fire. I have been particularly captivated by the significance of fire for eschatology and the form taken by burial rituals, but also its significance for cosmology as a whole and thus as a sacrificial medium. I have become increasingly convinced that the human fascination with fire has a shared origin at a fundamental level. This does not mean that the myths and rituals connected with fire have always found the same expression in different cultural contexts. Fire as a giver of life and a destroyer can scarcely be expressed in more powerful images than the description of the Vedic god Agni, a divinity who represents fire, who even is fire itself:

> Agni is brilliant, golden, has flaming hair and beard, three or seven tongues, his face is light, his eyes shine, he has sharp teeth, he makes a cracking noise, and leaves a black trail behind. He is fond of clarified butter, but he also eats wood and devours the forest. In fact, he eats everything. He is in particular a destroyer of demons and a slayer of enemies. (Staal 2001:73)

ANALOGIES, FOR BETTER OR WORSE

Among the possible analogies for interpretations of prehistoric Scandinavian ritual, the ancient Vedic culture has received an undeservedly small degree of attention. One probable reason for this is that Scandinavian archaeologists know little about the subject, and it may be felt that any such comparisons are unnecessarily exotic. I think that the latter is based on a misunderstanding. Vedic culture is actually a rewarding context for comparisons and a source of inspiration for interpretations, not least because the Vedic rituals constitute one of the best-documented early ritual systems in the world.

The documentation covers a tradition lasting more than 3000 years, from the second millennium BC to the present day. In observing the Vedic ritual we see a genuine tradition, arising at the same time as our Scandinavian Bronze Age, but

still partly alive. Another reason why Vedic religion can provide a good analogy is the general cosmological and mythological similarities that exist between it and ancient Scandinavian religion. Ancient Iranian religion, like Greek and Roman religion, likewise belongs to what is usually called Indo-European religion (e.g., de Vries 1956–1957; Eliade 1958; Dumézil 1962; Ström 1975; Lincoln 1986). I use the term "ancient Scandinavian religion" here as a label for the pre-Christian religion in southern Scandinavia, since it is a relatively precise term from the viewpoint of the history of religion (Hultgård 1991:162).

The problem of how we as archaeologists name and interpret an artefact or a phenomenon is deeply rooted in the question of where we have our reference points. Can an unconditioned interpretation exist at all? On a fundamental level, the answer must undoubtedly be no. As individuals we are always influenced by our surroundings, from our very first moment on earth. Even our most personal thoughts and emotions arise in relation to something, which of course does not make them any less our own. It is difficult, not to say impossible, to give a general answer as to what kind of analogy is best to use. It varies from case to case. It is easier to say what a bad analogy is. I would say that it is the absence of a conscious analogy.

If we do not consciously choose analogies, then we use our own premises and our own times as an analogy, without reflection. What else could we do? The problem is that this analogy is usually a bad one for archaeologists. The source criticism that exists here is unevenly distributed. We subject consciously chosen analogies to criticism, especially when they are taken from present-day (or older) "exotic" settings (ethnographic analogies), but we pay less attention to what the alternative is. The belief that unconditioned interpretations are possible rests on the illusion that our own power of deduction functions like a closed system, free from impressions from the surrounding world. For better or worse, we can never free ourselves from our own unconscious analogies, but we supplement them with consciously chosen analogies.

Carefully selected ethnographic analogies are therefore an invaluable instrument for interpreting archaeological contexts (cf. Parker-Pearson 2002:44; Kaliff & Oestigaard 2004). How to choose them is a complex question in itself. Some important criteria can be discerned, for example, social structure, technological level, natural environment, livelihood, geographical and/or temporal proximity, and religious ideas. In the text below I shall consider a specific ritual context, namely, fire sacrifices. The significance of such rituals is well documented in the Vedic tradition, and the archaeological material provides strong evidence that fire rituals also played an important part in prehistoric Scandinavian society.

My aim is to use the Vedic fire sacrifice as an analogy for an interpretation of fire rituals in Scandinavia in the Bronze Age and Early Iron Age. This analogy takes on an extra dimension because of the possible kinship of Vedic religion with its ancient Scandinavian counterpart. At the same time, I would stress right from the beginning that this relationship is not a premise for the major part of my

argument. Vedic culture can function well as a historical-ethnographic analogy for interpretations of Scandinavian conditions, even without any kinship. I first present the Vedic context briefly, with special emphasis on fundamental cosmological aspects, and with comments on the issue of the supposed affinity of the Indo-European religions and the criticism of this idea. I then present the Vedic fire sacrifice, after which I use it as an analogy for the Scandinavian evidence.

I deliberately use a long-term perspective. This is partly because the Scandinavian sites that are considered occur in both the Bronze Age and the Early Iron Age (*c.* 1700 BC – AD 400), in certain cases up to the end of the pre-Christian era (*c.* AD 1050), and partly because of the comparable ability of the Vedic ritual to survive for a very long time. This power of endurance is not primarily due to the rituals having been written down in handbooks for their performance; on the contrary, the knowledge was handed down orally. Writing a manual for ritual has often been considered impure and therefore inappropriate (Staal 2001:29–40). The fact that the rituals were nevertheless already written down in ancient times (from *c.* 1000 BC onwards) makes it possible to show the power of the oral tradition to survive, through comparisons with the performance of the rituals in later times, in settings which follow the local oral tradition.

A similar scenario is also realistic for prehistoric Scandinavia, with a ritual practice based on an orally transmitted tradition. A temporal perspective from the Bronze Age to the Late Iron Age is thus not unreasonable for the preservation of numerous rituals. An indication that ritual practices were also preserved for a long time in Scandinavia is the Old Norse evidence, committed to writing in the Late Iron Age/Early Middle Ages, showing a tradition where oral transmission and recitation were of great significance. Cultic conservatism is also regarded as a characteristic of ancient Scandinavian religion.

THE VEDIC ANALOGY IN ITS INDO-EUROPEAN CONTEXT

A question I have been asked by colleagues is why I as an archaeologist turn to Vedic India for analogies when there are geographically closer areas with good documentation of well-known ritual systems, for example, in the Mediterranean cultures. Why go all the way to "exotic" religions in southern Asia? It is worth commenting on this briefly. What is usually called the Vedic period in India, *c.* 1500–500 BC, should not be interpreted in images of today's Hinduism, which would be misleading. Of course Hinduism is a successor of Vedic religion but with added features, both from the earlier Indian high cultures and from later influences (cf. Flood 1998:23–50; Staal 2001:60). One can easily gain an erroneous impression of Vedic ritual as an analogy for the Scandinavian Bronze Age if one fails to bear this in mind.

Inspiration for some of the interpretations here has come from fieldwork in the Kathmandu valley in Nepal in the spring of 2002, which chiefly comprised comparative studies of the practice of cremation and rituals surrounding it but which also included questions concerning sacrifices (cf. Kaliff & Oestigaard 2004),

and from excavations of heaps of fire-cracked stone, stone settings, and hearth systems, along with other remains, from the Bronze Age and Early Iron Age in Sweden (e.g. Kaliff 1997, 1998, 1999, 2001). Important ideas for the interpretations below come from Frits Staal, one of the leading experts on Vedic fire sacrifices, and his work *Agni: The Vedic Ritual of the Fire Altar* (2001, first edition 1983). Staal's work is based on unique empirical material and is thus an almost inexhaustible source of inspiration for analogies. However, his work is not just interesting for knowledge of the Vedic sacrificial ritual but also for a general discussion of ritual theory.

The traditional image of how Vedic culture and religion emerged is that it was born out of the encounter between immigrating Indo-European tribes and earlier indigenous cultures in north-west India (or rather present-day Pakistan or eastern Afghanistan), *c.* 2000–1500 BC. Before *c.* 2000 BC there were semi-nomadic tribes speaking an Indo-European language on the steppes in a geographical area somewhere between Eastern Europe and Central Asia. Towards the end of the third millennium BC these Indo-European tribes began to spread to the west, south, and east. Some of the areas affected, including parts of the Near East and India, were then inhabited by sedentary peoples with a more advanced civilization, with whom the Indo-Europeans mixed. Indo-European languages were established in the conquered areas and ended up dominating in Europe, Iran, and India (Staal 2001:90; cf. Mallory 1989).

When these peoples made their entry into north-west India the former high cultures in the area, Harapp and Mohenjo-daro, were in decline, probably for quite other reasons than an Indo-European invasion. The Indo-Europeans therefore encountered the remains of a high culture which was probably far more advanced than their own. It is not surprising that they imported their language to the

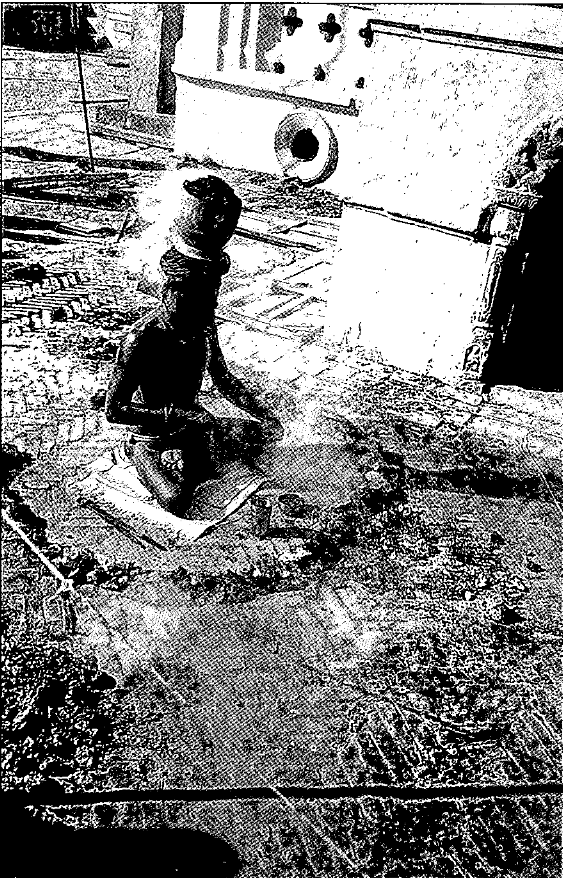


Fig. 1. Fire ritual performed as a purification ceremony. From the temple area of Pashupatinath, Nepal. (Photo: Anders Kaliff)

new area where they settled. What is perhaps surprising is that it had such an impact. This may have been associated with their advanced linguistic culture, with poetry and narrative technique connected to myth and ritual. Apart from the Vedic people's military strength, this would have given them a prominent religious position, also *vis-à-vis* other peoples. There are indications that it was at least in part a military conquest, for instance in the Vedic scriptures, the oldest of which were written down around 1200 BC (Staal 2001:92ff).

Most theories which claim that Indo-European language and culture were spread by migration assume that the diffusion went in two directions: one eastwards to India, one westwards to Europe. The shared area of origin is usually thought to lie somewhere on the Russian steppes or the Caucasus, possibly Anatolia. Even among scholars who support the idea of a migration of Indo-European tribes, opinions differ about the dating and the underlying mechanisms (for a summary see e.g. Mallory 1989). Just as there are linguistic similarities, there are also clear mythological parallels, which in turn reveal similar cosmological ideas. Similarities in cosmology are of great interest for my discussion below, since the meaning and form of the sacrificial acts can be linked to this.

The Eddic poem *Grímnismál* (40–41) describes how the cosmos – the earth, the mountains, the sky, humans, and gods – were created from the flesh of the giant Ymir. Snorri Sturluson retells the same myth in *Gylfaginning* (6–8). In the latter variant we hear how Ymir, the first living being, is killed by the first gods, Óðinn and his brothers Vili and Vé. The basic features of this creation myth occur among different peoples with an Indo-European language. A similar mythological tale is *Purusasūkta* ("The Hymn of Purusa") from the Rigveda (10.90). In this story too, the world is created when the gods cut up a cosmic giant, Purusa. It is also this narrative that is the archetype for the Vedic sacrifice. Apart from a cosmogonic part which agrees with *Grímnismál*, *Purusasūkta* also contains a sociogony, that is, an explanation for how the structure of society arose, with the different classes in the Vedic caste system: priests (*brahmin*), chieftains or soldiers (*ksatriya*), and tribal members or peasants (*vaiśya*) (Rigveda 10:90.12). The myth also occurs in a Slavic variant, recorded in Russian folktales in the nineteenth century. In this form the myth also contains an anthropogony, that is, a narrative about the creation of man. The agreements are not exact, but the whole picture is supplemented by other Norse and Old Indian myths. Bruce Lincoln regards these creation myths as one of the world's most successful ideological systems. They provided a mystification and a legitimation which laid the foundation for a stable, durable, but also extremely rigid and hierarchic social system, which survived with a very wide geographical spread (Lincoln 1986:3ff).

Although I see no significant reason to doubt the theory of a close connection between so-called Indo-European religions, I should deal briefly with the criticism of this view. The theory of the kinship of the Indo-European religions had one of its most famous representatives in the French scholar Georges Dumézil. The foundation of Dumézil's theories was that the Indo-Europeans had developed a

special social and cosmological ideology (*idéologie tripartite*), reflected, for example, in the Vedic caste system (e.g. Dumézil 1958, 1962). Dumézil's research has seen extensive criticism in recent years, mainly based on his ideological and political stance, with a streak of fascism (cf. Lincoln 1998; Arvidsson 2000). The criticism is not of a kind that Dumézil's interpretations can automatically be dismissed. This would require the premises of the actual interpretations to be totally wrong, which is not the case.

Part of the criticism that has been put forward proceeds from the fundamental idea of a shared Indo-European heritage being an intellectual construction, spiced with nationalist and racist overtones, which emerged in the nineteenth and early twentieth centuries. This idea has been mooted in recent times, for example, by the Swedish historian of religion Stefan Arvidsson (2000). I find his argumentation convincing only as regards the ideological interpretation, which is what Arvidsson himself stresses, too (Arvidsson 2000:254ff). When it comes to the basic issue of the Indo-European link, not much is new. The critique of Dumézil's interpretations put forward by the American historian of religion Bruce Lincoln (1998), one of today's leading experts on Indo-European myths and cosmology, has partly the same point of departure but also emphasizes the weaknesses in Dumézil's reasoning, which is more important. Lincoln's own work, however, simultaneously proceeds from parallels between myths and cosmology in different Indo-European contexts (cf. Lincoln 1986).

Also linked to the question of the kinship of the Indo-European religions is the question of affinities between ethnic groups with Indo-European languages. A renowned archaeologist who has criticized the interpretations of Indo-European migrations by both Dumézil and the archaeologist Marija Gimbutas (e.g., 1970 and 1984) is Colin Renfrew (1987). He believes that the Indo-European languages accompanied Neolithization and that fundamental similarities in ideology and social structure, as in Dumézil's *idéologie tripartite*, are instead due to parallel development. The model launched by August Schleicher in the nineteenth century, which is used to derive the different Indo-European languages from a shared proto-language, has also been criticized by linguists. The basis of the critique is that the model presupposes an isolated line of development and does not give sufficient consideration to the influence of external factors and complex interaction with other languages (Drobin 1991).

The critique mainly concerns the mechanisms behind the Indo-European links, not the occurrence of similar features in themselves. Languages, like ideas and traditions, can spread in completely different ways than through genetic affinities between people. Both kinship ties and migration simultaneously remain powerful mechanisms, even though they have been less popular interpretative models in the archaeological discourse in recent years, along with, for example, interpretations based on military conquest. These questions are too profound to be considered in the present article, however. I shall content myself with the above comments, which I hope clarify my views on the matter.

COSMOLOGY AND SACRIFICIAL RITUAL

I thus accept the view that there are related cosmological ideas in both prehistoric Scandinavian and Vedic tradition, regardless of the underlying mechanisms. We can scarcely expect any exact similarities in the form of the rituals, but more general resemblances are probable, proceeding from a shared cosmology. The probability of direct similarities increases as more fundamental and important ritual elements are studied. Central rituals can consist of burnt offerings and cremation, which occupy a highly central position in the Vedic tradition and whose form is based on cosmological ideas.

The homology of the creation myths is one such basic cosmological idea. This means that one entity is created using the matter in another entity. They are *alloforms*, that is, alternative guises of each other. Flesh and earth, for example, are considered to be of the same material substance and can thereby be transformed into each other. In the same way, bones – the hard part inside the soft flesh – are equated with the stones in the earth and with rocks and mountains, while hair is associated with plants. To put it another way, flesh and earth may be viewed as alternative forms in a continuous process, whereby one form is constantly being transmuted into another. The myth of a ritual death and division of a body is a narrative which can easily be transformed and rendered in sacrificial custom. According to Lincoln, sacrifices are the most salient of all Indo-European rituals, but with great variation in the modes of expression (Lincoln 1986:5ff, 41).

As regards animal sacrifice, the link to homology is evident. There are ritual manuals for the hymn texts of the Rigveda, so that the rites could be performed correctly. In the most important of these, *Aitareya Brāhmana*, there is an exact description of how the sacrificial animal was to be cut up, in complete agreement with the homology in the creation myth in the Rigveda (10:90:13–14). The Vedic sacrifice is performed as a repetition of the creation and has cosmogonic and/or sociogonic significance, which Lincoln says has correspondences among other Indo-European peoples. Tacitus (*Germania* 39), for example, ascribes this meaning to the sacrifices performed by the Germanic tribe of the Semnones (Lincoln 1986:50, 58 f.).

The worship of fire as a god (*Agni*) has a central position in Vedic religion, but there is also archaeological evidence that altars for burnt offerings occurred in the earlier Harappā culture (Chakrabarti 2001:44 f.). The fire sacrifice, in the form in which it occurs in Vedic India and later, thus probably arose from several traditions. At the same time, there is evidence that important features in the sacrificial ritual and the design of cultic apparatus, such as altars, agrees very well with what is found in other Indo-European contexts. The same applies to the central position of fire. According to the Vedic and the Old Iranian view, fire is an active substance everywhere in the cosmos. Fire is the fertile element in the cosmos – in the sky, in the storm, and on earth, and also in man and woman (Edsman 1987:343 f.).

A god himself, Agni is also the one who transmits the votive gifts to the gods. The name *Agni* is clearly Indo-European in character and can be compared with the appellatives *ignis* (Latin), *ogon'* (Russian), *ugnis* (Lithuanian), etc. Agni is thought to have been born out of the sticks in the fire drill (*araṇī*). He is also found in the sky, in lightning and the sun, but in water too, both in rain and in lakes and rivers. Agni is believed to be intimately connected with the domesticated sphere of life, with the home, the family, and the tribe, and thus also has a link to the clearance of land for pasture and cultivation (Staal 2001:73, 99; cf. Parmeshwaranand 2000:40–48).

Soma, like Agni, is a central divinity in Vedic religion. Soma is at once a god and a plant, especially the liquid/drink extracted from the plant. It originally referred to a hallucinogenic plant, although we do not know which one. Vedic ritualists have for a long time used substitutes for the real plant. It may originally have been fly agaric (*Amanita muscaria*), which is also used to attain ecstatic states in shamanistic rituals performed by Siberian peoples. In the Rigveda Soma is regarded as the elixir of life – a drink of immortality – and indispensable for both people and gods (Flood 1994:43; Parmeshwaranand 2000:611ff; Staal 2001:105ff and works cited there).

The Vedic rituals are performed at different levels of complexity and in different contexts, from everyday rituals to more extensive ceremonies which require a long time to prepare and several days to perform. The rituals have developed in two different directions and can be divided into two main categories: *gṛhya* or household/family rituals (which are *rites de passage*, that is, life-cycle rituals accompanying events such as birth, initiation, marriage, and death) and *śrauta*, that is, solemn public rites (*rites solennels*, which consist of rituals of much greater complexity). The *śrauta* rituals are the oldest and a number of them, of varying complexity, are documented in Vedic texts. The gods on which *śrauta* rituals focus are Agni and Soma. Vedic religion was closely associated with the rhythm of the day and the year, and *śrauta* comprises sacrifices at various transitional times: between day and night, at new moon and full moon, and when the seasons changed. Most of the ancient knowledge about *śrauta* comes from the *Śrauta Sūtras*, from the different parts of Vedic tradition that were formulated between the eighth and fourth centuries BC (Staal 2001:4, 35; Flood 1994:41ff).

The *śrauta* rituals are performed in an order running from the less complex to the most complex. They must be carried out in this order and can thereby be viewed as a kind of initiation. The simplest ritual consists of a fire sacrifice to Agni (*agnihotra*), performed in a ritual enclosure in the home of the person who wishes to make the sacrifice. The sacrificial ritual itself is performed by a priest. Three fires are needed: *gārhaptya*, the household fire; *āhavanīya*, the sacrificial fire; and *daksiṇāgni*, which is believed to give protection against evil. The fires are set on altars of clay. The altar for the household fire is round and is located in the western part of the enclosure, while the sacrificial altar is square and placed in the eastern part. The southern altar is semicircular. There can be additional fire

altars in expanded variants of the rituals, but these three always occur (Staal 2001:40–41; Tachikawa; Bahulkar & Kolhatkar 2001). The functions of the different altars have further symbolic links to the elements: *gārhaptya* symbolized earth and its fire; *āhavanīya* represented heaven and its four quarters; while *daksiṇāgni* symbolized the atmosphere as a medium between heaven and earth. The fire god Agni was believed to be present in all three of his different aspects, as earthly, heavenly, and aerial. Agni was the link between the earth and the heavenly fire – the sun. Between *gārhaptya* and *āhavanīya* is the site that can be regarded as the main altar (*vedi*), which usually consisted of a shallow pit where the sacrificial fires were lit (Edsman 1987:223).

The Old Iranian fire ritual is in many respects like the Vedic one, particularly as regards the form of the altars. Fires are installed on three altars following the same pattern as in Vedic ritual. In a manner that is similar to the Vedic and Old Iranian traditions, Rome had a circular altar for Vesta (*aedes rotunda*), but also *templa quadrata*. The Greeks had a round household altar on which they sacrificed

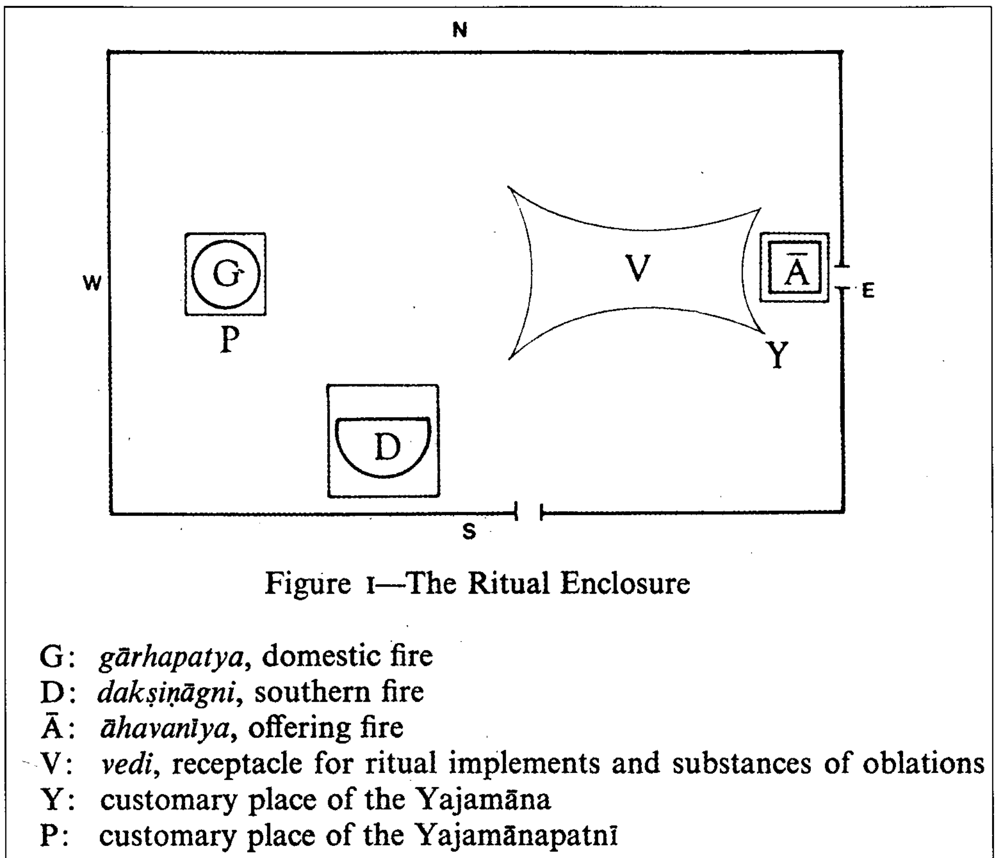


Fig. 2. Plan showing the positions of different altars in the fire sacrifice called agnihotra. *Y and P respectively mark the position of the man holding the sacrifice and that of his wife. (After Staal 2001, fig. 1)*

milk and honey, and a larger square one used for animal sacrifices (Staal 2001:93, 125ff).

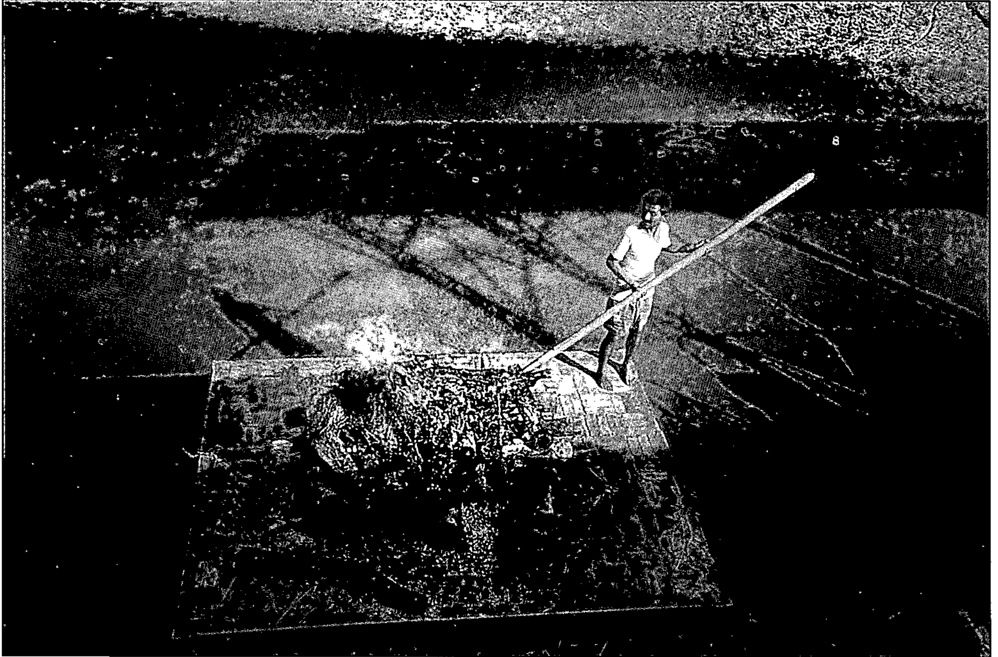
One of the most advanced Vedic sacrificial rituals is the *agnicayana* ("piling up of Agni"). For this ceremony a large altar is built of more than a thousand fired clay bricks in the form of a bird, which symbolizes Purusa, the cosmological sacrifice (often called Prajāpati, that is, "the lord of living creatures"). The performance of the ritual involves a recreation of the cosmos, but the precise meaning of the ritual is partly obscure. One fundamental meaning is that Agni is reborn on the sacrificial altar. It takes a whole year to erect the complicated altar with its cosmological meaning. The altar is the womb from which Agni is born. It is clear that the performance of *agnicayana* involves a complicated cosmological symbolism which can also be referred to the Vedic creation myth. The altar is built of clay bricks in five layers, which correspond to the parts of the body of the first mythological sacrifice: marrow, bones, flesh, skin, and hair. They also correspond to the cosmological levels of earth, atmosphere, and sky, together with two transitional zones. Material is taken from each part of creation to build the fire altar: earth and water for the bricks, grass (hair) to place on the altar, etc. After the completion of the sacrifice the whole altar is demolished and thereby restored to its origin (Lincoln 1986:60 f.; Staal 2001:67).

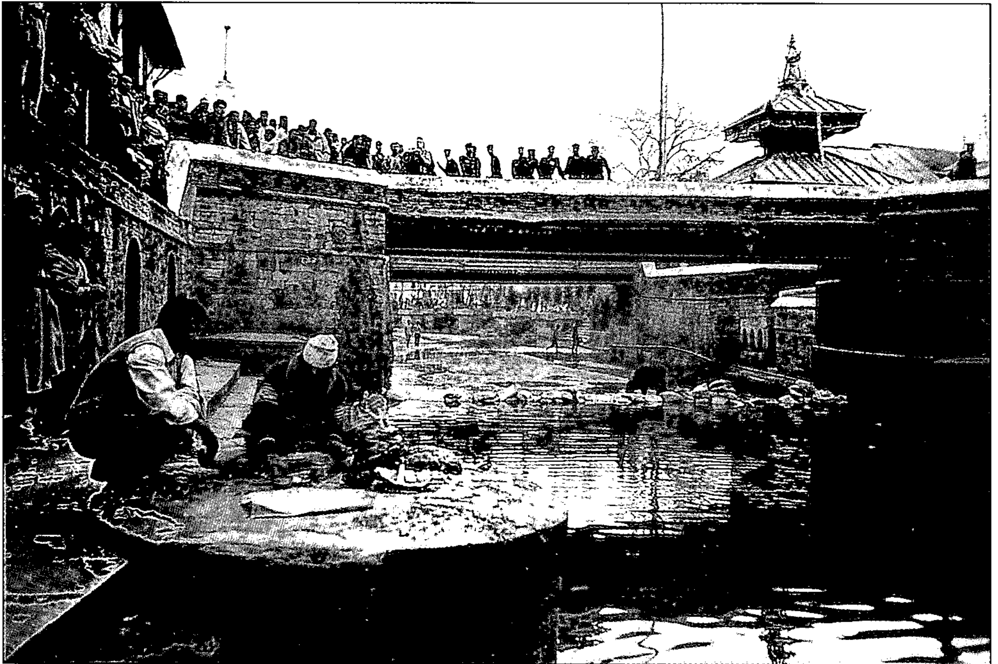
Before the altar is built, the ground is prepared through ritual ploughing and through a ritual symbolic burial. Five heads are buried on the site of the altar: from a human, a horse, a bull, a ram, and a goat. The burial of ritual objects in the ground, such as pots and animal skulls, and ritual ploughing and sowing of the soil as a preparation for the *agnicayana* altar, show how the combination of elements contributes to the act of creation (Staal 2001:65ff, 118).

TRACES OF SCANDINAVIAN FIRE RITUALS

The Vedic example shows the presence of advanced collective rites, requiring great efforts, resources, and time. They also leave significant traces, which can be detected by archaeological methods: altars, hearths, pits for ritual waste, postholes from the burnt-down ritual structures and buildings. Traces of fire sacrifices of varying complexity can also be detected in Scandinavian contexts, provided one allows the finds to be interpreted in such terms. A general feature resembling the Vedic sacrificial practice is the location of the ritual sites in the open air and their seemingly temporary character.

The question, then, is where in the archaeological material from Scandinavia we might be able to see traces of rituals of a similar degree of complexity as the *agnicayana*, but also of those corresponding to less conspicuous household and family rituals. For the former, what I find interesting is chiefly certain types of heaps of fire-cracked stones and stone settings, along with structures interpreted as cultic houses. As parallels to rituals of lesser complexity, the field of vision can be expanded to comprise a large number of hearths and soot pits of various





Figs. 3–4. In the Hindu burial ritual there are two basic shapes of altar: round and square. The square altar reflects the shape of the cremation platform and demonstrates the basic sacrificial function of the Vedic-Hindu cremation, while the round altar – corresponding to the house altar in the fire sacrifice – is used, among other things, for food offerings to the dead at the cremation sites. From Pashupatinath, Nepal. (Photo: Anders Kaliff)

kinds. Here I shall mainly discuss the former types of sites: heaps of fire-cracked stones and stone settings.

The structures which are interpreted as ritual buildings from the Bronze Age and which are of interest for interpretation as sites for fire sacrifices are of two kinds. One of these types of structure consists of the so-called cultic houses of stone-foundation type (Victor 2002), also known as Broby houses. Helena Victor thinks that the term "cultic house" is actually incorrect and that they are actually ritual enclosures with a distinct house symbolism, which primarily had a function for rituals associated with burial but also for more ambiguous rites (Victor 2002:186). Another interesting type of structure is the small post-hole structures from the Late Bronze Age and the start of the Early Iron Age, which are also interpreted as some type of cultic house (Kaliff 1995, 1997:55ff). These have only been noticed in the last 15 years, and today over 20 such structures are known from Sweden. In several cases, however, the interpretation of these structures as houses has been considered extremely tentative. One of the earliest structures to be documented, from Ullevi in Linköping, Östergötland, was initially interpreted as a possible altar (Karlenby *et al.* 1991). These structures are often right beside pits, bone deposits, fire-cracked stones, stone settings, and hearths, which corresponds well to the interpretation as remains of a sacrificial ritual similar to the Vedic one.

If one follows the Vedic pattern, it is reasonable that certain hearths also were of ritual significance, at least in part. It is highly plausible that sacrifices were made at the household hearth, which would be extremely difficult to prove archaeologically. Hearths are also found grouped in systems, which can hardly be given a general secular interpretation (e.g., Thörn 1996). There are, however, traces of more complex structures with no unambiguous explanation. I am thinking of the heaps of fire-cracked stone and the complexes of hearths, pits, and stone settings and/or buildings beside them.

A fundamental meaning of the Vedic fire rituals is that Agni arises on the altar, which happens when ritual fire is made by drilling wood against wood. It is also believed that Agni is born out of the fire drill (Staal 2001:41ff). This has parallels in the Swedish *nödeld* (needfire), a ritually purifying fire, originally meaning "rubbing fire" (Hellquist 1922:720). Lighting ritual seasonal fires in Scandinavian tradition, like the use of *nödeld* to cure sick livestock, was done with a fire drill, that is, through the friction of wood against wood. It was thought that this fire could drive out evil because the fire was born of the drilled wood (Edsman 1987:341).

A type of rock carving with a symbolism which I believe can be associated with the ritual transfer of fire is the cup mark (cf. Kaliff 1997:112 f.). Cup marks themselves can combine sun symbols, symbolic fire-drilling holes, stylized vulvas, symbols of fireplaces, etc. They can also be viewed as a passage into stone/earth as an element and as a passage for the birth of the fire from the stone. Oscar Almgren once interpreted certain rock-art elements by analogy with the Indian

yoni, ring-shaped symbols with a cup mark in the middle, which are very similar to Scandinavian motifs with a cup mark enclosed in a concentric circle. The *yoni* functions as a symbol both of the sun and of fertility (Almgren 1934:246).

Both cup marks and certain stone monuments can be regarded as being akin to implements for ritual fire. They then symbolize the generation of life and force, with the phallic implement (the stick for fire drilling) symbolizing an intermediary link between heaven and earth (i.e., a symbol of lightning, the thunderbolt). A basic way to make fire, apart from the friction of wood against wood, is by striking stone against stone, or metal against stone. The spark is then conspicuously born out of the stone. The experience of fire being born from wood and stone may be a reason underlying the belief that the different elements can be transformed into each other and that fire is inherent in other elements (cf. Kaliff 1997:106–116). Proceeding from this, I think it is reasonable to look for further indications of a doctrine of elements, corresponding to the Vedic homology, in Scandinavia as well. The sense that fire is concealed in other materials may have led to the notion that life consists of a limited number of elements from which everything is composed.

Such an idea and symbolism could be traced in the significance of stone as a ritual building material. Fire together with water cracks stone more effectively than fire alone. On the basis of a doctrine of elements it might be felt that the fire and water in combination release energy from stone and rock. That heaps of fire-cracked stones are linked to water as well as to fire is suggested by their topographical location and by the fact that a large amount of the stones in these heaps seem to have been cracked in water (cf. Runcis 1999). If water was poured on the heap of fire-cracked stones in prehistoric Scandinavian ritual, it might correspond to the symbolic liquid that was put on the altar in the *agnicayana*, through which it was believed that rain and fertility were generated. The significance of fire and liquid in combination is also indicated in the Scandinavian context, not just in the form of the cracked stone but also by the pottery finds. Some ceramic forms from the Scandinavian Bronze Age resemble those used for *soma* in the Vedic rituals. Certain types of pots found in Scandinavian Bronze Age contexts – in heaps of fire-cracked stones, in pits with probably ritual significance, and in more well-defined urn graves – were probably also specially manufactured for ritual purposes (cf. Carlsson 1995). Some of the pots are in all probability drinking bowls. At the same time, the pottery has a direct connection with fire, as does the burnt stone.

The large bird-shaped altar for the *agnicayana* is built of clay bricks. These are fired in kilns, as are the pots in which the fire is transported during the ceremony. Through the transformation of the clay in the fire Agni also becomes active in the material. The effect of the fire on the building material for the altar and on the liturgical implements in the form of the pots is a crucial and meaning-bearing element (Staal 2001:94, 130). From this point of view, the pots could have direct counterparts in Scandinavian tradition, whereas the altar structure has no such

obvious equivalent. Burnt stone, however, may contain a symbolic meaning corresponding to brick/pottery in this respect. A type of structure which, in my opinion, is one of the best candidates for an interpretation as remains of complex altar structures – the heaps of fire-cracked stones – is mostly made up of burnt stone, that is, material affected by fire. Heaps of fire-cracked stones are particularly common in central Sweden, and the majority are dated to the Bronze Age, although there is a certain spread over a longer time-span, from the Neolithic to the Late Iron Age. Both the dating interval and the morphological variation in the heaps of fire-cracked stones suggest that they are traces of various activities.

I have earlier (e.g. Kaliff 1994, 1997) suggested that certain heaps of fire-cracked stones may have been sacrificial sites, the origin of the *harg* that we find in the Norse evidence. The historian of religion Anders Hultgård has interpreted the description of a cattle sacrifice at a *harg* in the Eddic poem *Hyndluljóð* (10) as showing that it took place at a stone altar, the stones of which had been subjected to repeated sacrificial fires (Hultgård 1996:32). My hypothesis about heaps of fire-cracked stones as sacrificial sites means that the stone was cracked for ritual reasons as a deliberate process, by analogy with the way the dead body was decomposed by the fire on the cremation pyre. The intention would have been to release the life-force and the elements. Perhaps the fire-cracked stone covering the internal structure of the mound was displayed as a visible sign that the fire had been born out of the stone. If so, it would correspond to the Vedic notion that Agni is born on the fire altar. An alternative to this idea is that the stone was instead burnt to transform it in such a way that the fire became active in the material itself, which would correspond closely to the Vedic ritual.

The Swedish archaeologist Janis Runcis (1999) has analysed heaps of fire-cracked stone in eastern central Sweden from a structuralist point of view. He interprets their topographical location, as well as their structure and content, as consciously created symbolic relations to a mythic and ritual dimension. Runcis also notices a tripartite division, reflected, for example, in internal structures with layers of soot and stone kerbs. Although the theoretical point of departure and the interpretations differ from those in the present work (Runcis connects the heaps of fire-cracked stones to a religion with shamanistic features), he interprets the location and construction of the heaps as signs of a tripartite cosmological division, also linked to the social structure – an interesting reminder of Dumézil's tripartite Indo-European ideology (Runcis 1999:128–148).

When it comes to the relationship between hearths, certain stone settings, and heaps of fire-cracked stones as sites for fire sacrifices, the difference in construction and complexity can be compared with the increasing degree of complexity in the Vedic fire sacrifice. It may be a matter of a transfer of a more basic and relatively simple ritual to one with a higher level of complexity. Heaps of fire-cracked stones could then contain traces of several different stages in a sacrificial ritual which is itself a reflection of the relationship between sacrificial fire and household fire, following a pattern similar to that of the Vedic sacrifice with its variants on

the same theme (cf. Tachikawa, Bahulkar & Kolhatkar 2001).

There are also links between burial and sacrifice in the Vedic ritual, acts which also suggest analogies for interpretation. The human skull under the altar in the *agnicayana* is possibly a reminiscence of an original human sacrifice (*pursusamedha)*, which would then have been performed according to a ritual similar to the more well-known Vedic horse sacrifice (*aśvamedha*), that is, as a reflection of homology. The skull is placed under the altar in a pot, while other pots are placed on the altar in the shape of a human body. The cakes that serve as a substitute for an animal sacrifice are placed on potsherds, *kapala*, a term meaning skull bone (Staal 2001:118 f.). A similar homology can be detected in the occurrence of deposited animal bones in heaps of fire-cracked stones from both the Late Bronze Age and the Early Iron Age (e.g. Ullén 1995; Fagerlund 1998). What is usually interpreted as butchering material could be sacrifices with a cosmological meaning.

This can also be an analogy both for the over-representation of skull bones in certain Scandinavian stone settings and for the occurrence of single potsherds and hoards of potsherds, which are frequently found. With analogous symbolism, it is conceivable that these potsherd have the same meaning as the skull fragments. In the same way as a whole ceramic urn can be a symbol of the human head or body, the logical consequence is that potsherds and skull fragments can have the same symbolic meaning. The analogy with the skull fragments should not be misinterpreted as suggesting that I believe the bones at the cemeteries come from sacrificed people. The tentative interpretation is instead that the bones of the dead may have been deposited in a manner corresponding to the cutting up of the original body in the cosmological creation myth. It is still highly uncertain how often bones from the same individual were placed in different deposits on the same burial site. That it did happen has been proved in recent years, for example, in a stone setting from the Late Bronze Age, excavated at Linköping Airport in 2002 (Larsson & Sigvallius, personal comm.). This leads one's thoughts to the complexity of the Scandinavian cremation practice in general and the possibility of alternative interpretations by means of analogies.

ALTAR STRUCTURES AND BONE DEPOSITS

A risk in presenting new interpretations of known find categories is that they can easily be misinterpreted as attempts at a new general explanation. The fact that the interpretation of many "graves" from Scandinavian prehistory can be questioned, and should be problematized, does not mean a total questioning of the concept of grave as such. The statement that a stone setting is a grave has rarely needed to be proved, since it is usually by definition considered to be a grave. The claim that it is instead an altar must be proved, on the other hand; this is a justified demand and a perfectly acceptable form of source criticism. The same should apply to any interpretation. It would therefore be reasonable if stone settings were referred to by a neutral term (like stone setting) but without any implicit

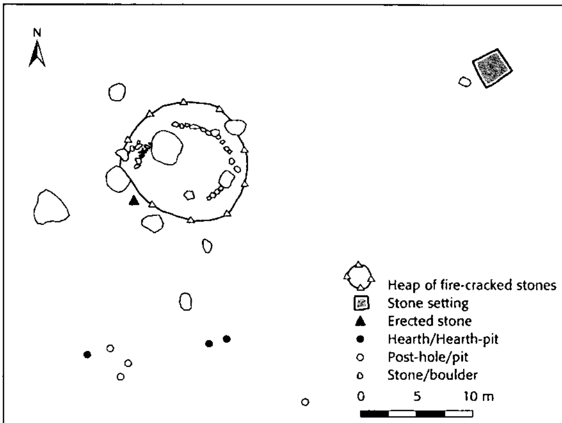


*Fig. 5. Plan of a site excavated at Sunneränge in Aneby Parish, Småland, in 2002. East of the heap of fire-cracked stones is a square stone setting, while to the west there is a standing stone (Eriksson 2003). Comparing this with the Vedic fire ritual, the following analogy would be possible: the round altar to the west (*gārhaptya*) could correspond to the heap of fire-cracked stones, while the square stone setting would be the equivalent of the* āhavanīya. *Alternatively, the standing stone is a counterpart to the* gārhaptya, *which would mean that the heap of fire-cracked stones is instead analogous to the* vedi. *However, there is no counterpart to the semicircular altar,* daksiṇāgni. *(After Eriksson 2003, fig. 3)*

interpretation (such as grave superstructure), until evidence for the function has been presented. In the following discussion I partly start with my own tentative interpretation of certain stone settings as traces of altars (e.g., Kaliff 1997:68–78; 1998).

Features regarded as graves comprise deposits of human bones in the ground, with or without a visible marker above ground. The amount of bones can vary – anything from one fragment to the complete expected quantity of bones from one person – without the definition as a grave being affected. On the other hand, numerous sites which would be designated as graves if only a single bone fragment were found contain no bones at all. As mentioned above, such sites are very common, as are those with only a few bones, often at the end of or outside stone settings.

The question why stone settings without bone finds, or with only one or two bone fragments, should be interpreted as grave markers is relevant. By grave marker I mean a structure which was primarily erected as a monument/marker to the remains of a dead person. What is there to say that it was not the other way around: that the bones were placed in the stone setting because it was of great significance? I am not claiming that this must always be more likely, but that the grave function is often just as uncertain. Furthermore, it is obvious that in many cultures there was a close association between graves and altars. There are examples from ancient Greece and Rome, where the altar could have the form of a burial mound. Originally sacrifices were made on real graves, but the shape was also adopted for altars proper (Edsman 1987:223). In the Vedic tradition cremation is conceived of as a sacrificial act, and it is performed according to a ritual based on the same cosmological principles (Olivelle 1987:389).

The interpretation of certain Scandinavian stone settings as altars has analogies in Vedic sacrificial customs. They occur in the geometrical shapes that can be observed in Vedic, Old Iranian, Greek, and Roman tradition (see above). Not only altars but also burial mounds from Vedic times can be either round or square.

The fact that a large number of prehistoric Scandinavian stone settings definitely also functioned as graves in the proper sense of the word need not contradict the function as altars. Both graves and altars are often built according to the same cosmological principles and their design is a symbolic image of the principles underlying life (Parker-Pearson & Richards 1994:12 f.; cf. Eliade 1958). The link between grave and altar can also be studied clearly in Vedic tradition, where the altar in the *agnicayana* in several ways has the function of a grave (Staal 2001:128).

Both Scandinavian burial rituals and sacrificial rituals can be interpreted on the basis of cosmological ideas involving homology. The meaning of depositing remains of the human body in the earth, like the burning of the remains, could correspond well to this. The death rituals, including cremation, mean that the body is dissolved and returns to its constituent parts. The difficult-to-interpret pits containing just one or a few bones, which are common in the Late Bronze Age and Early Iron Age, could be understood in this light. They can be compared with the deposition of *astu* in Vedic tradition, the little piece of the body that is taken from the dead person in the final phase of cremation and buried in the ground. It symbolizes the affinity of flesh with earth. The fact that it is a bit of flesh that is buried may explain the occurrence of seemingly totally empty pits, with a form similar to that of "grave caches", a not uncommon category of feature. It would then be highly reasonable that one or two bone fragments would accompany this piece of flesh, if it was removed in the final stage of cremation as in the Vedic ritual (cf. Kaliff & Oestigaard 2004: 97 ff; Oestigaard 2004: 31 ff). A more careful analysis of the possible occurrence of fatty acids or amino acids (proteins) in "findless pits" in cemeteries, could therefore be an interesting method to develop, provided the preservation conditions are adequate.

A SCANDINAVIAN AGNI?

While the occurrence of similar cosmological ideas behind the significance of fire rituals in prehistoric Scandinavian and Vedic culture cannot be proved, the analogy has a great explanatory potential, which I have only been able to touch on here.

A criticism that can be levelled against my way of working is, of course, the same that applies to all use of analogies: that one sees what one wants to see and omits the rest, whether consciously or unconsciously. In one sense this criticism is always relevant and justified. We can never completely get away from this problem where analogies are concerned. On the other hand, it is always present, since we use analogies, whether we wish to or not.

A crucial significance for fire as a divine medium, possibly similar to that of the Vedic Agni, seems at any rate to be reflected in the Scandinavian evidence from the Late Bronze Age and the Early Iron Age. I also believe that there are many indications of a cosmology comprising homology and a doctrine of elements. The different stages of the cremation ritual, fire sacrifices, and other ritual fires, and the deposition of artefacts and bone in the earth and in wetlands, may

indicate the complementary significance of the different elements. The ritual significance of pottery may also indicate the occurrence of a sacred drink of significance for the rituals. Even if we cannot know what people in Scandinavia called the gods that were associated with basic phenomena like fire and liquid, they may have great similarities to the Vedic Agni and Soma.

The fact that no gods with these attributes are prominent in the religion reflected in the later Norse evidence could be explained in terms of a development similar in principle to what we see in India. From having been a central divinity, Agni lost much of his significance in later Hinduism (Staal 2001:75). In Scandinavian tradition it is clear that fire as a ritual implement nevertheless continued to be important during the Iron Age and even historical times. The significance of ritual drinking is also well attested, both in the archaeological material from the Late Iron Age and in written sources. The later importance of fire is manifested not least in the tradition of seasonal fires lit to protect the crops and increase fertility, a custom that still lives on in the form of bonfires on May Eve and at Midsummer. These fires also have a close link to the progress of the sun, the annual cycle, and hence the changing existence of the elements.

These observations say nothing in themselves about whether there is a direct link between Vedic religion and the religion of Bronze Age Scandinavia. My personal opinion, however, is that there is an affinity. I base this view on the assembled similarities in cosmology, ritual, language, and archaeological evidence. In addition to this there is the archaeological picture of a Bronze Age society characterized by cultural exchange and long-distance contacts. The discussion of this, from a Scandinavian archaeological perspective, has hitherto centred on influences from the rest of Europe and cultures of the Eastern Mediterranean (e.g., Kristiansen 1998; Larsson 1999). I think it is rewarding also to return to the Indo-European issue, although there is no room here to penetrate this subject in depth. What is important here, of course, is not to fall into old traps in our interpretations; but we should also dare to see what is actually criticism of interpretations and what is criticism of ideology and abuse.

English revised by Laura Wrang.

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PERSONAL COMMENTS

Larsson, L.K. & Sigvallius, B. 2005